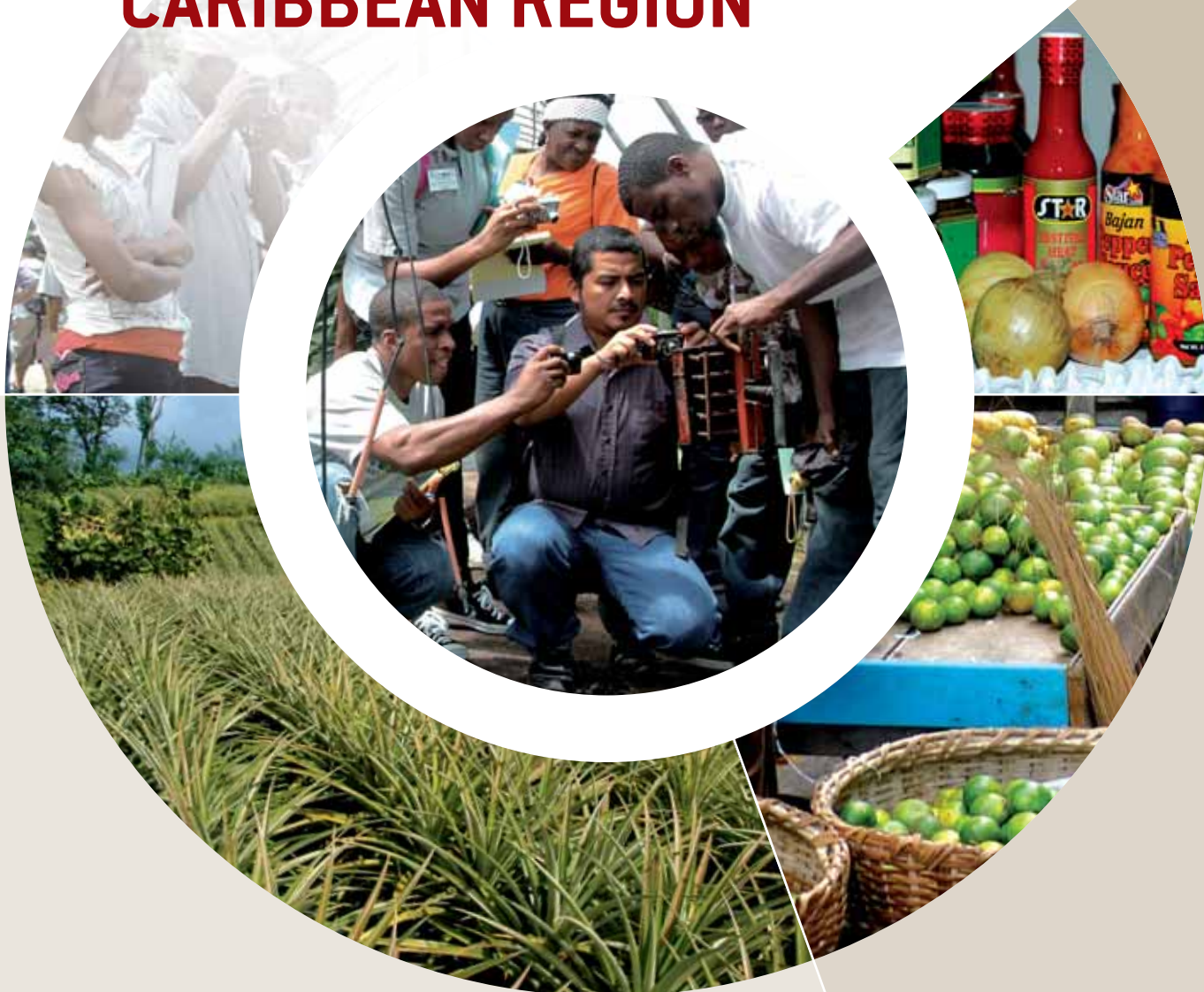


BEST PRACTICES AND LESSONS LEARNT FROM
THE DEVELOPMENT OF VALUE CHAINS

THE FOOD SECURITY THROUGH COMMERCIALIZATION OF AGRICULTURE PROGRAMME IN THE **CARIBBEAN REGION**



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CARIBBEAN REGION

Food and Agriculture Organization of the United Nations
Rome, 2013

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CONTENTS

ACKNOWLEDGEMENTS	iv
ACRONYMS	v
1 INTRODUCTION	1
1.1 RATIONALE TO IMPROVE FOOD SECURITY THROUGH COMMERCIALIZATION OF AGRICULTURE	3
1.2 STRATEGIES OF INTERVENTIONS	4
2 RESULTS AND IMPACTS OF THE PROJECT IN THE CARIBBEAN REGION	6
2.1 CONTEXT AND SPECIFIC OBJECTIVES OF THE PROJECT	6
2.2 RESULTS OF THE VALUE CHAIN COMPONENT	8
3 KEY FINDINGS OF THE ASSESSMENT ON FOOD SECURITY	30
3.1 IMPACT ON AVAILABILITY OF FOOD	30
3.2 IMPACT ON ACCESS TO FOOD	31
4 LESSONS LEARNED AND RECOMMENDED GOOD PRACTICES	32
4.1 CHOICE OF VALUE CHAINS AND COMMODITIES FOR UPGRADING IN THE CARIBBEAN	33
4.2 MARKETING AND PROCESSING CAPACITIES OF PRODUCER ORGANIZATIONS	34
4.3 INVOLVEMENT OF THE PRIVATE SECTOR	35
4.4 MARKET LINKAGES AND VALUE CHAIN COORDINATION AND COMMUNICATION	35
4.5 ROLE OF PUBLIC SECTOR AND SUPPORTIVE POLICIES	36
4.6 COLLABORATION WITH OTHER PROGRAMMES/PROJECTS TO LEVERAGE RESOURCES AND SUSTAINABILITY	36
4.7 APPROACH ON FOOD SECURITY AND IMPACT ASSESSMENT	37
5 CONCLUSION	38
REFERENCES	40



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ACRONYMS

AAACP	All Agricultural Commodities Programme
ACP	African Caribbean and Pacific
AGS	Rural Infrastructure and Agro-industries Division of FAO
BADMC	Barbados Agricultural Development and Marketing Cooperation
BAS	Barbados Agricultural Society
BDMC	Marketing Board in Barbados
BVFC	Bellevue Farmers Cooperative
CABA	Caribbean Agribusiness Association
CaFAN	Caribbean Farmers Network
CARDI	Caribbean Agriculture Research and Development Institute
CARICOM	Caribbean Community Secretariat
CARIFORUM	Caribbean Forum of African, Caribbean and Pacific (ACP) States
CARIRI	Caribbean Industrial Research Institute
CC	Coordinating Committee
CDE	Centre for the Development of Enterprise
CEO	Chief Executive Officer
CIDA	Caribbean International Development Agency
COTED	Council of Trade and Economic Development
CTA	Technical Centre for Agricultural and Rural Cooperation
DAPEX	Dominica Agricultural Producers and Exporters Ltd
DEXIA	Dominica Export Import Agency
DOAM	Dominica Organic Agriculture Movement
EU	European Union
EU AAACP	EU All Agricultural Commodities Programme
FAO	Food and Agriculture Organization
FSCA	Food Security through Commercialization of Agriculture
GTFS	Global Trust Fund for Food Security
ICTs	Information Communication Technologies

IICA	Inter-American Institute for Cooperation on Agriculture
JAPA	Jamaica Agro-Processors Association
JAS	Jamaica Agricultural Association
JEA	Jamaican Exporters Association
MNIB	Grenada Marketing & National Importing Board
MOA	Ministry of Agriculture
MSME	Micro, Small and Medium-Sized Enterprises
NDFD	National Development Foundation of Dominica
NIPPA	Nature Island Pineapple Producers Association
PCU	Project Coordination Unit
RADA	Rural Agricultural Development Authority
RFNSP	Regional Food and National Security Policy
RFNSAP	RFNSP Action Plan
TWG	Technical Working Group
TTABA	Trinidad and Tobago Agribusiness Association
UK	United Kingdom
USA	United States of America
USAID	United States Agency for International Development
USD	United States dollars
UWI	University of the West Indies
VCCC	Value Chain Coordinating Committee



CHAPTER 01

INTRODUCTION

The projects reviewed in this paper were funded by the Italian Special Contribution to the Global Trust Fund for Food Security (GTFS). The Italian funded food security programme aimed to enhance food security by following a common strategy to improve the commercialization of agricultural value chains. The main objective was to support transition of smallholder agricultural systems into more competitive and commercially dynamic ones and to improve the food security situation of smallholders, farmers and intermediaries. The food security programme was implemented in a number of regions and countries: in the Caribbean the countries directly benefitting from interventions were Barbados, Belize, Dominica and Jamaica; in Africa Malawi and Zambia as well as Gambia, Guinea, Guinea Bissau, Liberia, Mali, Senegal and Sierra Leone in West Africa. Later in 2011, additional projects were started in Central America and in some African Great Lake countries.

The purpose of this report is to review experiences, results and impacts and to describe the lessons learned from the implementation of the pilot project in the Caribbean.

In the Caribbean region, the project was implemented from November 2008 to October 2011. The first component focused on strengthening the policy, planning and service environment, which enables the agri-food production, value addition and marketing sectors to be dynamic, efficient and sustainable. The second component of the project focused on upgrading value



chains, building production and value addition skills for farmer organizations, strengthening service providers to support value chain coordination and linkages, enhancing partnerships and strategic market alliances, and improving the institutional framework for agribusiness and enterprise development. This particular report discusses the results of the second component of the project.

The report is based on secondary information sources such as project documents, progress and final reports, tripartite evaluation and evaluations from beneficiaries. It also describes the results and lessons learned that were discussed at the “Future Outlook Roundtable” workshop organized for the closure of the GTFS project in Trinidad and Tobago in August 2011. Other information was gathered by interviewing project beneficiaries and project staff in the Caribbean. Because of the limited availability of quantitative data, this report gives only an indication of qualitative results.

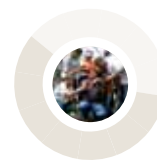
The first part of the report explains the rationale and objectives of the approach of improving food security through commercialization. The second part of the paper highlights results based on the four pillars of the project:

- support to farmer-based organizations;
- value addition and marketing;
- service provision for value chain development; and
- institutional frameworks.

The impact on food security in term of access and availability of food is also analysed. The last part of the report includes lessons learned and some recommendations for future support in the Caribbean region.

1.1 RATIONALE TO IMPROVE FOOD SECURITY THROUGH COMMERCIALIZATION OF AGRICULTURE

The concept of food security can be defined as “a situation that exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life” (World Food Summit, 1996). Based on this definition, dimensions of food security include availability, access to and utilization of food, as well as the stability of the food supply.



The “Food Security through Commercialization of Agriculture” project analysed in this report specifically aimed to address the availability of and access to food in the chosen regions. Consistent availability of food can be determined by the amount produced, processed and traded in domestic, regional and international markets. Access to food involves having the economic and physical means to obtain food. This ability is determined by income level and food prices, which are key factors for buying adequate quantities of food as well as agricultural inputs to increase production.

The projects took a value chain approach to reducing poverty and food insecurity. Indeed, the value chain concept “characterizes the interconnected, coordinated set of links and linkages that take place as products move along a continuum between primary production and the consumer” (project working definition). As described by the United States Agency for International Development (USAID), “the [value chain] methodology analyses and upgrades the components of value chains, based on the assumption that the economic performance and competitiveness of the entire chain largely depends on the interrelationships among these actors in the chain. The multi-dimensional, upgrading process has a positive impact on the chain and its actors and this extends to the wider society.”

The projects was intended to increase farm incomes, create new opportunities and employment, build skills among farmers, producer organizations and extension services, and stimulate market integration of smallholder farmers, processors and buyers.

1.2 STRATEGIES OF INTERVENTIONS

Intervention strategies were developed in the various national projects, based on a value chain analysis. These strategies addressed the identified problems in order to diversify and intensify production, improve post-harvest processing and marketing operations and strengthen producer associations through capacity-building activities. The projects also aimed at promoting partnerships within the chains selected and strengthening the enabling environment.

The main pillars of the Food Security through Commercialization of Agriculture (FSCA) projects can be summarized as follows:

- Support to Farmer-based Organizations, aimed at establishing sustainable farmer organizations as effective commercial mechanisms to increase production, value addition and marketing;



- Support to value addition and marketing to improve the quality and understanding of marketing standards for domestic and regional markets;
- Strengthening of service provision to support the value chains, private sector development and innovation, as well as coordination and linkages; and
- Support to institutional frameworks for improving market development and promotion and public-private partnerships (include regulatory reform proposals).

FIGURE 1. 4 PILLARS OF THE FSCA PROJECTS

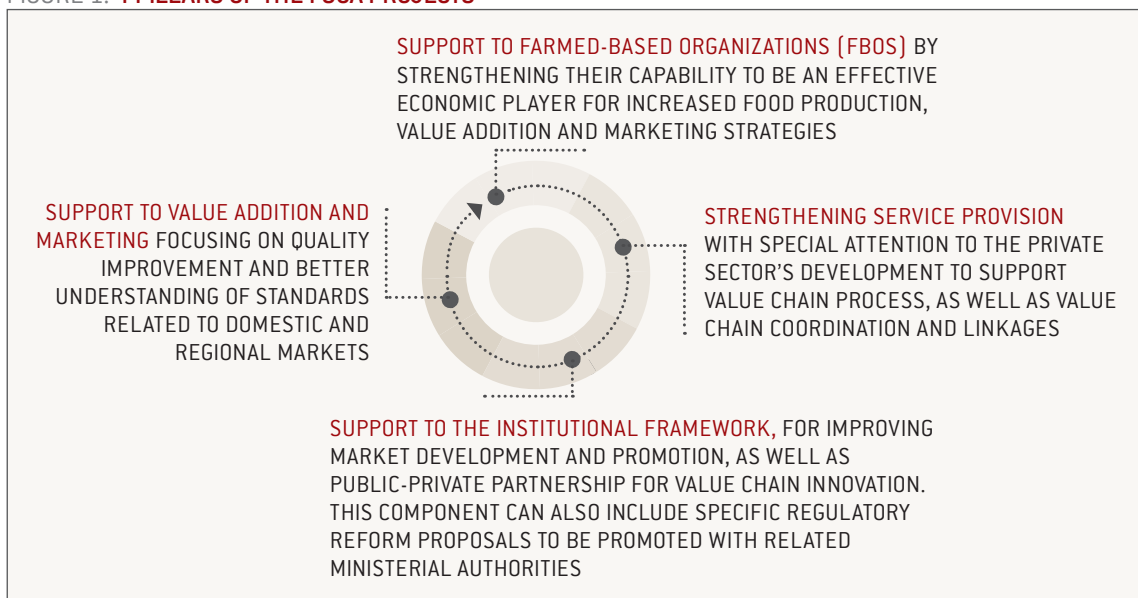


Diagram extracted from a presentation, F. Tartanac, 2011





CHAPTER 02

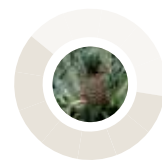
RESULTS AND IMPACTS OF THE PROJECT IN THE CARIBBEAN REGION

2.1 CONTEXT AND SPECIFIC OBJECTIVES OF THE PROJECT

The project document identified food and nutrition security in the Caribbean as a complex issue that is determined by a number of factors:

- Low productivity and production levels resulting from the inefficient use of inputs and poor farm management;
- Declining income from traditional commodities resulting from the loss of trade preferences;
- High dependency on imported food resulting from the inability to produce competitively;
- Increasing concerns about the growing incidence of food-related diseases such as obesity, hypertension and diabetes; and
- The increasing incidence of pockets of poverty in many countries due to high unemployment levels.

In the first phase of the project, the key issues related to food security in the region were identified as poverty and inequalities of income. Socio-economic factors affecting food security status included high unemployment rates, high food import bills and high external debt in some countries. Poor access to capital was also considered a critical factor in the region.



The first phase of the project identified issues affecting availability of food. These included limited knowledge in post-harvest technologies, lack of adequate storage facilities, and high prices and dependence on imported inputs. Issues affecting accessibility included poor road infrastructure and high transportation costs. Low income levels and high unemployment were identified as the main issues to be addressed.

The overall objective of the second phase of the “Promoting CARICOM/CARIFORUM Food Security” project was to improve the food security situation of smallholders, farmers and intermediaries. The project was grouped into five components with the aim to strengthen the policy, planning and service environment, which enables the agri-food production, value addition and marketing sectors to be dynamic, efficient and sustainable. For agricultural producers, lack of access to marketing infrastructure and services at reasonable costs was an important constraint.

The project was intended to strengthen the capacity of CARICOM/CARIFORUM Secretariat to support regional efforts in the Caribbean, to formulate, implement and monitor regional policies related to food security, and to support the establishment of effective institutional mechanisms at regional and national levels for increasing the overall value and quality of food products produced, traded and consumed. This last goal was to be achieved by expanding non-traditional agricultural production, enhancing the trading of fresh and processed products, developing agriculture based enterprises and promoting investments.

In summary, the project comprised:

- An institutional component seeking to improve the policy environment contributing to provide better trade and market opportunities; and
- A value chain component seeking to up-grade selected non-traditional commodity value chains, build capacities among producers organizations, foster partnerships and strategic alliances and establish institutional frameworks for agribusiness and enterprise development.

The project supported the application and institutionalization of a value chain approach as a technique for understanding the environment within which value chain actors operate. The value chain approach was applied in order to identify key opportunities and constraints for developing crop value chains and enable the value chain stakeholders to develop intervention strategies that addressed competitiveness and sustainability issues with respect to the growth of smallholder incomes. It was expected that this would stimulate production driven by market demand and promote transparent discussion between stakeholders. The project provided considerable technical assistance and some processing equipments.



2.2 RESULTS OF THE VALUE CHAIN COMPONENT

2.2.1 Upgrading and strengthening development of commodity value chains

The purpose of the value chain component of the project was to strengthen five pilot commodity value chains in order to increase the overall value of the produce along the value chains and to take advantage of national, regional and international market opportunities. At the kickoff workshop, in May 2009, five value chains were identified, based on the recommendations of a study on market opportunities for fresh produce in the Caribbean and a needs assessment of potential value chain service providers. The chosen value chains were onion in Barbados, hot pepper in Belize, pineapple in Dominica, *ackee* in Jamaica and salad fruit (pineapple, melons, papaya) in St. Lucia.

A series of training courses were held and support was provided to establish Value Chain Coordinating Committees (VCCC), consisting of representatives of stakeholders from the farming community, buyers, governments and service providers for each value chain. At the regional level, key VCCC members were provided with further training opportunities through the Caribbean Agri-food Value Chain Upgrading Strategy and Action Planning Workshops.

The focal areas identified for upgrading value chains included:

- process upgrading (increasing the efficiency of internal processes – production, distribution, logistics);
- product upgrading (improving innovation and quality); and
- functional upgrading (shifting marketing and/or processing functions to farmer organizations).

The project also included developing linkages with new regional and international buyers as well as with the hospitality industry and food distributors. Value chain analysis trainings and business plans for value chain stakeholders were developed, and agro-processing and post-harvest management trainings were organized. Market visits and study tours were supported to understand the market requirements at regional and international levels.

A portfolio of value chains with various characteristics was selected in order to maximize the learning from the prototype chains as shown in the diagram below:

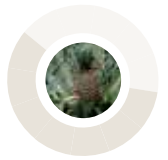
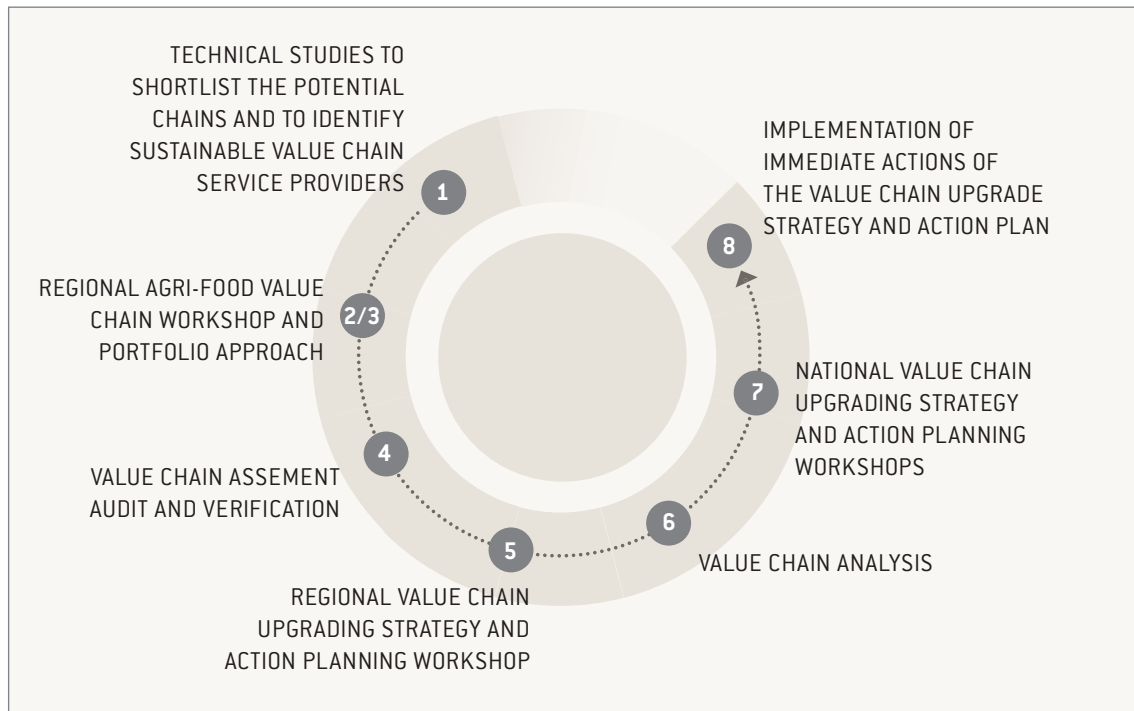


TABLE 1. **PORTFOLIO OF THE VALUE CHAINS SUPPORTED**
 [EXTRACTED FROM DIVERSE PROJECT REPORTS AND PRESENTATIONS]

COUNTRY	PRODUCT	STRATEGY	MARKET TARGETED	MARKETS/BUYERS	DRIVER OF THE VALUE CHAIN COMMITTEE
Barbados	Onions	Import substitution	Domestic	Super Centers/ Agro-processors	Barbados Agricultural Society (BAS)
Belize	Hot pepper	High-quality product	Export USA	Hot Mama's Belize Ltd	Ministry of Agriculture
Dominica	Pineapple	Fresh and processed	Regional markets	DEXIA, Bello Ltd	Nature Island Pineapple Producers Association (NIPPA)
Jamaica	Ackee	Processed	Export to USA, UK	Jamaica Exporters Association (JEA)	Jamaica Agro-Processors Association (JAPA)
Saint Lucia	Salad fruit	High-quality fresh fruit for retail & hotels	Domestic	Consolidated Foods Ltd, Sandals Resorts	Bellevue Farmers Cooperative (BVFC)

FIGURE 2. **VALUE CHAIN IDENTIFICATION AND UPGRADING PROCESS IN THE CARIBBEAN**





The value chain approach and interim results were presented at the Caribbean Week of Agriculture in 2010 and 2011. Agribusiness and value chain management training for farmer organizations was led by The Food and Agriculture Organization of the United Nations (FAO) and organized in collaboration with the Caribbean Association of Farmers Network (CaFAN). CaFAN also received support to provide value chain advisory services and implement communication instruments for disseminating the value chain approach and lessons learned from the project. The collaboration with CaFAN was achieved in partnership with another FAO-implemented project in the region, the European Union All-ACP Agriculture Commodities Programme (EU AAACP). This helped to disseminate the results to other countries and allowed more stakeholders to benefit from the work. The activities and results in each of the five countries are presented in the following pages.



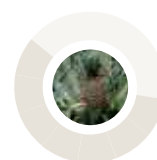
From left to right:
Harvesting and
drying onions in
Barbados.
© BAS, 2010

The onion value chain in Barbados

In Barbados, the objective was to substitute imports of onions (amounting to about USD 1 million per annum) with local onions, in order to generate employment, income and agricultural diversification. The onion Value Chain Coordinating Committee¹ was led by the Barbados Agricultural Society (BAS), a farmer-based organization.

Value chain analysis was conducted which highlighted the potential opportunities and bottlenecks of this specific value chain. Capacity-building activities in production and post-harvest management were carried out to improve the quality and consistency of local

1 Comprising a national agriculture association (BAS), an agro-processor (C&G Star Ltd), a buyer (Super Centres), an input supplier (Eastern Caribbean Fertilizer), the Barbados Agricultural Development and Marketing Corporation (BADMC), and the Ministry of Agriculture.



onions available in the local market. According to stakeholders of the VCCC, varietal selection, access to inputs, soil testing exercises and an audit of the onion production base combined to increase both production and productivity.

Improving the drying process for onions was a key step to decrease post-harvest losses. New technologies were introduced and prototype on-farm drying and storage facilities were established.

An information system for market data was created and promotional activities raised awareness on the use of local onions. In addition, branding and labeling were developed, promoting the unique taste of local onions.

The upgrading initiatives included regular meetings convened by the VCCC with the BAS as the secretariat. The Barbados Agricultural Development and Marketing Cooperation (BADMC) established mechanisms for disseminating information and for monitoring and evaluation in order to plan and coordinate production and marketing. The onion VCCC provided a forum for regular dialogue between key stakeholders and provided information and physical support services to farmers and buyers. It created confidence that could stimulate investment in production; as a result, major buyers – e.g. processors of value-added onion products, distributors and supermarkets – are now committed to purchase the produce when available. Another outlet was identified for selling lower-grade onions to processors.

TABLE 2. ONION VALUE CHAIN UPGRADING STRATEGY IN BARBADOS

COMPONENT	OBJECTIVE	STRATEGIC ACTIVITIES SUPPORTED
Market	To increase the sale of onions	<ol style="list-style-type: none"> 1. Understand the market 2. Expose value chain members to respective components of the chain 3. Improve transparency 4. Improve industry coordination
Post-harvest handling	To improve the quality of local onions available to the market	<ol style="list-style-type: none"> 1. Improve shelf life of local onions by developing standards 2. Design drying and storage facility 3. Procure field crates and onion bags
Production	To increase onion yield and consistency of supply	<ol style="list-style-type: none"> 1. Introduce new varieties (conduct trials and soil testing) 2. Strengthen capacity of farmers (training, manuals, information)
Input supply	To access affordable, timely and effective input supplies	<ol style="list-style-type: none"> 1. Create demonstration plots to show best practices 2. Collaborate with suppliers for bulk purchases
Value chain organization	To effectively manage the value chain	<ol style="list-style-type: none"> 1. Establish Secretariat 2. Disseminate information 3. Hold regular meetings 4. Monitor and evaluate



A public-private partnership was established, known as the National Onion Production and Marketing Committee. This committee was charged not only with guiding economic actions for value chain actors and providing a platform for the sustainability of the value chain work but also with crafting an enabling environment for onion value chains, including trade policy, institutional framework and sector incentives. It provided policy/institutional support for the industry and coordinated the trade policy regarding imports of onions in order to increase the market for domestic onions. Stakeholders at the final workshop on lessons learned agreed to double the acreage (to 200 acres) under cultivation by small farmers in 2012. Stakeholders indicated that they plan to continue working through the VCCC after the closure of the GTFS.

The hot pepper value chain in Belize

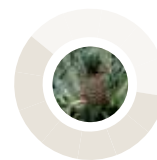
The upgrading strategy and action plan for the hot pepper value chain in Belize covered improving productivity at farm level, upgrading processing technologies for farmer groups, strengthening district farmer organizations and fostering access to new markets for processed hot pepper.

The hot pepper Value Chain Coordinating Committee² organized various study tours for processors and commissioned a market and cost analysis for hot pepper mash. Technical support was provided through a number of crop trials and research varieties. At farmer level, extension support work was organized through farmer groups in three locations and a hot pepper production manual was produced. Business plans, exercises and trainings in agribusiness offered to district level farmer groups helped to strengthen the capacities of farmer organizations. The establishment of a drying centre available to farmer organizations was also initiated.

As a result of the complementary interventions pursued by the VCCC, new farmers became involved in the production of hot pepper and they were able to decrease their losses and optimize their expenditures. In addition, better relationships and improved dialogue were observed between producers and processors, because farmers had increased their knowledge of buyers' requirements regarding quantity and quality.

Through market research and attendance at agriculture fairs, new market opportunities for hot pepper were identified, such as supplying mash instead of fresh peppers to processors in CARICOM countries and to international markets. The processors received several requests at the Fiery Foods Show for hotter pepper products. Buyers asked about the possibility

² Consisting of personnel from the Ministry of Agriculture and other chain actors, including four farmer groups (Belize, Orange Walk, Stan Creek and Kayo Districts), the Koble Foundation producers, a processor (Hot Mama's), a buyer/exporter, the Department of Cooperatives and CARDI.



Range of hot pepper products, Hot Mama's Belize Limited.
© FAO/H.Bammann

"... You could say that I have received a renewal of my interest and goal for the pepper industry here in Belize. I will do what I can to push forward the necessary changes to make a successful value chain ..."

Wilana, Hot Mama's Belize Limited, Value Chain Workshop, Barbados, October 2009.

of co-packing and the availability of peppers on a year-round basis and there have been follow-up exchanges to request product information and prices. The successful conclusion of these exchanges called for an increased supply of hot pepper for the production of pepper mash. It is now necessary to engage in new product development work with new varieties and processing technologies in order to provide even hotter pepper products.

Widening the composition of the VCCC to include buyers (including processors), exporters, input suppliers and service providers led to greater collaboration and better coordination of the value chain. The major remaining challenges are to identify a private sector value chain driver (a role currently filled by the Ministry of Agriculture) and to attract private sector investment.



The pineapple value chain in Dominica

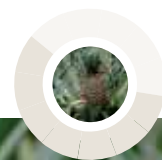
The decline of the banana industry in Dominica highlighted a need for diversification to increase incomes of farmers and alleviate poverty in agriculture-based communities. Pineapples had a good market and were high in demand but the inconsistency of supply was a major constraint. The country had been producing pineapple for fresh consumption, local hotels and supermarkets; 20 percent of production was purchased domestically and the remaining 80 percent was exported to neighbouring islands.

To upgrade this value chain and respond to market opportunities, a pineapple VCCC³ was set up, led by the Nature Island Pineapple Producers Association (NIPPA). The strategy was to identify market linkages in regional markets, address production and post-harvest losses, and develop a series of trainings and other activities aimed at strengthening the organizational capacities of NIPPA. In addition, a business plan and an audit on pineapple production in Dominica were developed. At farmer level, training was delivered on improved farming practices, record-keeping and post-harvest handling.

As a result, NIPPA has seen improvement in the organization's overall capacity to provide services to its farmers, and membership has seen a tremendous boost – from the initial 15 members to over 60 current members – as well as the involvement of youth in the organization. NIPPA was able to designate a consistent service provider, Dominica Agricultural Producers and Exporters Ltd (DAPEX), which guaranteed the availability of inputs at preferred prices (i.e. equipment, plastic foil, mulch, fertilizer) and would handle post-harvest operations on behalf of NIPPA. DAPEX or DEXIA would jointly market the pineapples. DEXIA's core business to date has been the export of bananas to the United Kingdom (UK). NIPPA was released from the responsibility of marketing and could focus on its core activity of coordinating production.

NIPPA perceived that production levels increased and cost efficiency improved, so the organization planned to establish a central collection point at the DEXIA packing house, with the objective to sell collectively through DEXIA. The product was differentiated by means of branding and quality was improved through improved post-harvest handling and packaging. NIPPA entered into a strategic alliance with the processing company “Bello” (a processing company) for processing grade C fruits.

3 Comprising the Nature Island Pineapple Producers Association (NIPPA), an agro-processing company “Bello”, the Hucksters Association, the Dominica Organic Agriculture Movement (DOAM), the Ministry of Agriculture, Dominica Export Import Agency (DEXIA), and the National Development Foundation of Dominica (NDFD).



*NIPPA pineapples
in Dominica.*
© FAO/H. Bammann

The product was already well-known and well-received in the regional market, and this influenced hotels and supermarkets in the neighbouring islands (i.e. Guadeloupe and Martinique) to increase imports of pineapples from Dominica. Contract negotiations for regional sales were undertaken; resuming export to Barbados was considered a priority.

A key success factor would be the consistent supplies of quality pineapples; something which has proven to be difficult in the past. There were serious enquiries from buyers willing to buy Dominican pineapples in Barbados, Barbuda, St. Kitts and Nevis, and NIPPA met with representatives from key hotels, supermarkets, wholesalers and distributors. However, potential buyers wanted assurance that the supply would be reliable, competitively priced and of excellent quality. Buyers also preferred to purchase through local distributors rather than importing directly themselves. Following the market tour, NIPPA decided to improve the grading, sizing, packaging and pricing of pineapples and to begin using branded export boxes and neck labels. Discussions with distributors have begun and weekly marine transportation links to the potential target markets have been identified.



The Ministry of Agriculture provided a rent-free office space for NIPPA to continue its work as a dialogue platform and established a secretariat to support the pineapple value chain. Moreover, NIPPA joined the CaFAN network in 2010. According to the stakeholders, the VCCC provided a platform for greater sharing of information, collaboration and exchanges between the public and private sector.

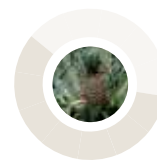
Many lessons have been learned through developing the pineapple value chain upgrading strategy. This strategy has demonstrated the usefulness of the value chain approach for pineapple farmers and the importance of proper analysis and market-buyer exchange visits to facilitate direct interfacing with partners.

“The benefits and lessons learned from the project include a market potential for between 15 000 and 20 000 lbs of pineapple per week to the Eastern Caribbean, the adoption of the value chain concept as a tool for aligning production and marketing, and coordination of the value chain and building strong relationships and networking between DEXIA, Ministry of Agriculture, especially the Extension Services and farmers. The number of members of NIPPA has increased from 15 to 63, transforming the organization into a vibrant farmers’ organization.”

Dr. Vivian Moise, Vice President of NIPPA.

The ackee value chain in Jamaica

Ackee has been one of the largest Jamaican non-traditional exports. It is mostly sold in processed form to the United States of America (USA), the UK and Canada. At the community level, farmer/pickers are mainly single mothers who are highly dependent on the ackee industry. The model of commercialization is slightly different from other crops because workers move around picking mature fruit mainly from wild and backyard orchards and then paying land-owners after selling the fruit to small processors. Unripe and inedible parts of the fruit contain hypoglycin, which is toxic for human consumption, and major quality issues existed, along with a high rejection rate.



Raw fruits and Juliana processed cans, Tijule Company.
© FAO/ H.Bammann

“We don’t get a higher price but we are learning, we are supplying better quality produce and we reduced losses, so we are getting a higher income,” a processor association representative said. Ninety-five farmers received trainings and the use of crates contributed to decrease post-harvest losses and reduce conflicts linked to quality between farmers and processors. “The organizations are now monitoring themselves and, with the use of identity cards, the quality controls are much better.”

The *ackee* VCCC consists of chain actors, including *ackee* producer associations (three at the beginning) and others⁴ and is driven by the Jamaica Agro Processors Association (JAPA) in collaboration with the Jamaican Exporters Association (JEA). The upgrading strategy and action plan aims at strengthening three *ackee* associations (of 90 members each) and improving their relationships with agro-processors. In terms of post-harvest handling, skills were developed for recognizing indices of maturity of the fruit. Use of standardized crates, food safety standards, record-keeping and traceability were promoted. To guarantee that only trained suppliers would operate, Ministry of Health food handler permits were delivered and supplier operating procedures promoted. Association membership cards were issued to reduce the levels of praedial larceny (theft). Business plans were developed, which improved business management, product development and market research of the three associations. The Ministry of Agriculture and Fisheries offered each of the associations 30 acres of land to develop association orchards.

4 Including CABA, JAS, MSME Alliance, the Ministry of Agriculture, RADA, IICA and FAO.



As a result, *ackee* suppliers gained a better understanding of their roles in ensuring that the fruit delivered met the food safety export standard of the Bureau of Standards. They learned how to harvest and handle *ackee* to reduce post-harvest losses in order to increase quality, volumes and supplier incomes. Post-harvest losses have decreased considerably, resulting in higher incomes. The suppliers learned how to expand their small *ackee* plots along more commercial approaches; production and quality has consequently increased. One processor also noted a more consistent and better quality supply of *ackee* and improvement in adherence to contracts by suppliers.

As future priorities, the *ackee* VCCC identified better production planning and new product development to enhance value addition, activities which should increase processing yield through better utilization of B grade product. According to the stakeholders, the VCCC provided a platform for greater sharing of information and collaboration between economic stakeholders and stated an intention to establish an *ackee* industry management committee, to include processors and supplier/farmer organizations and some public sector service providers.

JAPA has decided to scale up and promote the value chain experience to other processors of *ackee* and to other commodity farmer groups (e.g. spinach, breadfruit, juices). In order to support further value chain work, JAPA is establishing a public-private partnership, the *Ackee* Industry Management Group, which will consist of processors, *ackee* associations, and key public sector organizations. Finally, a draft up scaling work plan was crafted for submission to the Centre for the Development of Enterprise (CDE). CDE expressed interest in further supporting work begun by the GTFS project.

The salad fruit value chain in St. Lucia

The project in St. Lucia supported the fruit salad value chain (papaya, melon and pineapple) after considering demand from the hospitality sector, the need for diversification from the banana sector and its decreasing prices, and the potential for import substitution of fresh produce. The major challenge to the sector was inconsistency of the product in terms of quantity and quality.

The Bellevue Farmers Cooperative (with 251 members), the VCCC driver, sought to increase production of papaya by 50 percent, melon by 30 percent and pineapple by 20 percent and to negotiate favourable prices. The main buyers included Consolidated Foods Limited (Mega J and Super J Supermarkets) and local hotel chains, such as Sandals Resorts.

The upgrading strategy looked at developing technical plots, sourcing better quality seeds and providing assistance to meet the requirements of organic certification.



Field exercise during the regional agribusiness training course, St Lucia.
© FAO/H. Bammann

A Farmers' Field School was successfully implemented and demonstration plots and use of crates were established. A central packing house was also established which allowed for better quality control and productivity of pineapples has greatly increased.

Key success factors were the development of fruit maturity indices supported by the Caribbean Agriculture Research and Development Institute (CARDI) and the adoption of labour- saving farming methods. The investment in storage chillers at cooperative or community level led to extended shelf life and improved quality of salad fruits. Women's groups received funding to establish processing centres and a potential market for fruit bowls in the supermarkets should be pursued, as it shows promising initial results.

Based on the information received at the trade shows visited, Bellevue conducted a survey to identify the needs and preferences of consumers. Production and marketing were differentiated; organic products were targeted towards hotels and traditional production towards other markets. Capacity-building activities in management and accounting skills for members of the Bellevue Cooperative were also implemented.



According to the Bellevue Cooperative, the project has resulted in increased production and productivity of the value chain commodities, with higher quality and food safety. By coordinating the supplies through the cooperative and developing appropriate contracts, linkages with buyers and market access were strengthened. An important lesson learned throughout this process has been the value of collaboration between all four farmers' cooperatives and the other value chain actors, especially supermarket buyers.

2.2.2 **Strengthening producer organizations, production skills and agro-processing**

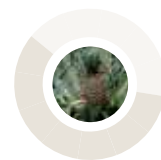
The main purpose of this intervention strategy was to strengthen the capacity of producer organizations and to improve the productivity and competitiveness of production and post-harvest processing and marketing operations, as demonstrated in the countries where NIPPA, BAS and Bellevue were farmer organizations that drove upgrading of the value chains. This strengthening was achieved by providing technical assistance in collaboration with CARDI and by building capacities in production/processing and commercialization; the workshops organized reached hundreds of farmers.

The assessment of capacities of various organizations to provide different types of services was considered an important step in determining the type of support to be provided by either the public or private sector. For instance, the salad fruit value chain listed the need to gain specific assistance from the Ministry of Agriculture as the focal point for strengthening organizational capacity of producer organizations in St. Lucia.

Production, post-harvest and agro-processing

Once markets had been identified, improving productivity, assuring a seasonally consistent supply of the product and managing shortages became crucial concerns. Capacity building in production techniques, planning and record-keeping was provided, along with developing a database for each organization. In some cases, improving productivity required changing the systems of production (e.g. wild-grown versus orchard for *ackee* production). Another need identified was to adapt crop varieties to specific markets (e.g. the hospitality industry), while improving the supply base remained a high priority to be addressed at farm level.

Access to quality, affordable inputs on credit appeared to be an important issue to resolve in order to sustain productivity growth at the farm level and reduce the unit costs of production.



Sustained productivity growth was critical to drive down the unit costs of production, thus improving competitiveness and maintaining market share.

The objective was to reduce post-harvest losses by the application of new and affordable technologies (crate usage for *ackee*, onion dryers, etc.). Trainings and workshops were implemented and, as a result, the quality and safety of products increased, productivity of agro-processors improved and profits increased. All value chains underscored the importance of quality control to market competitiveness at all levels of the value chain. A further result was gained by using rejects and waste to offer a wider range of products – for instance, in Dominica by utilizing the skin and grade C pineapple for juices.

Marketing and organizational skills

To strengthen marketing skills and entrepreneurship of producer organizations, business plans were developed and capacity building in marketing was supported. Farmers better understood the requirements of markets as a result of the business plan exercise. Some farmer organizations required support to adapt their business plans as they were at different stages of development. Logistics were also considered and some new arrangements found – for instance, to use the established shipping lines used for.

New farmers and processors were brought into the process and farmers' clubs were established. Strengthening capacities of farmer organizations led to increased membership rates and a more professional image. In Belize, three associations were supported and guided in their process to become registered and formalized. The use of a group plan for cell phone networking in Jamaica was cited as a best practice for effective communication at reasonable cost. This strategy could be adopted by other value chains in the region and should be pursued by VCCCs for use in communication among the membership. Accounting systems and a product database were also set up.

During the course of the project, an increase in sales of pineapple and *ackee* was observed. Regional exchanges were initiated for a number of crops – e.g. trial shipments of roots and tubers from Dominica to St Vincent and from Grenada to Trinidad were facilitated and processed products from Barbados were sent to supermarkets in Grenada.



Representative of CaFAN during the market tour in the United Kingdom.
© L. Enoka, 2011



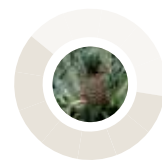
2.2.3 Strengthening partnerships and strategic market alliances

The main purpose of this intervention was to strengthen the partnerships and strategic market alliances between actors of the value chains supported by the project and with existing buyers and markets.

Value Chain Coordinating Committees

Committees were set up to coordinate implementation of the upgrading strategies for the value chains. This resulted in an increased awareness of the value chain concept and increased participation in building capacities of farmer organizations. When possible agriculture extension officers were invited to participate in VCCCs and at national level activities; they were encouraged to apply value chain thinking and consider market requirements in their advisory work to farmers.

Regular meetings were held at least monthly and two persons were assigned to drive the activities for continuity and sustainability of the project. In Barbados, coordination within the



onion value chain and consolidation of the committee occurred slowly as the private sector members in the chain were experiencing significant time constraints on attending meetings and attending to other value chain activities. In Belize, the Ministry of Agriculture provided the coordination, due to the reluctance by other chain actors to take up the role of chain driver.

Establishment of a national VCCC – with a secretariat that lobbied on key issues – created a monitoring and feedback system, allowing for dialogue that could ensure a sustained flow of information along the value chain. Collaboration and information sharing were essential and contributed to building trust among value chain members.

Relationships with buyers and contractual agreements

The value chain component of the project was perceived as successful in facilitating market contacts and agreements between farmers, producer organizations and buyers. At the start of the project, farmers and processors communicated a reluctance to enter into contractual agreements and cited numerous past examples of unfulfilled contracts and non-payments but these improved relationships have now been formalized into written contracts. For instance, NIPPA signed a contract with the processor Bello in Dominica, BAS with a supermarket in Barbados, Bellevue entered into an agreement with Mega J and BVFC and in Jamaica one of the *ackee* associations entered an agreement with the processor Tijule Ltd; in Belize, individual contracts were signed with the processing company Hot Mama.

These contracts challenge producers to increase production and productivity to meet demand, and buyers must ensure that their marketing contracts are met and farmers are paid on time at agreed prices. The stakeholders identified a need for some form of bridging finance to support the existing deferred payment systems. In some cases receivable periods could be 30-35 days on average in the local and export markets, and could extend to 60 days, especially when dealing with hotels.

Establishing premiums or penalties in contracts may represent one potential option to contribute to improved quality. The project described here initiated the process but more capacity building is needed to meet standards and contractual obligations in order to compete in very competitive markets, particularly at regional and international levels. Improving contracting instruments between producers, collectors, processors and exporters was a cross-cutting issue for effective coordination of production, marketing, processing and export. It was of particular importance for farmers and farmer organizations as they appeared to be most vulnerable to the inherent risks within the value chains with respect to price, quality and potential market failure.

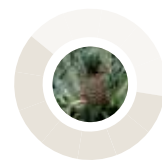


*A farmers day
organized by
CaFAN in Grenada.*
© FAO/H. Bammann

Regional coordination by the Caribbean Farmer Network (CaFAN)

CaFAN was the regional partner providing value chain services to its members. With the support of the EU AAACP project, CaFAN's capacities were strengthened and a platform for regional information exchanges and networking in support of value chain development was established. CaFAN's representatives were trained to train members of national organizations, a system which was considered cost-efficient and more sustainable having them trained by outside trainers. The GTFS project developed and launched the "Eat Caribbean" portal, blog and radio talk show programme, which was then handed over to CaFAN and was a highlight of the project.

The project contributed to the growth of the CaFAN network and to its wider recognition and acceptance in the region. A highlight of the project was the decision of CARICOM to involve CaFAN as the representative of smallholder farmers. Furthermore, CaFAN was included in the follow-up projects at regional level (CARDI, IICA, CIDA and CTA). CaFAN's follow-up strategy is based on the value chain approach and its production and marketing plan were endorsed by its members.



2.2.4 Strengthening institutional frameworks for agribusiness and enterprise development

Information exchange

The project developed a strong communication strategy among regional stakeholders in the agricultural sector, which included preparation of a series of policy briefs (including one on the value chain approach) and a newsletter for dissemination. Complementary value chain information was spread weekly through the “Eat Caribbean” website. In addition, a weekly regional value chain radio show was streamed over the internet, hosted by CaFAN with downloadable podcasts at <http://cafanvaluechains.podbean.com/>. It contributed to exchanges among value chains at regional level and the facilitation role was handed over to CaFAN. It was hoped that the information exchanged would further advance the work at country level of CaFAN affiliated associations and the work on value chains in general.

Private standards development

In order to export to the European and American markets, the *ackee* VCCC had called for better understanding of issues of sanitary and phytosanitary standards in dealing with the US Department of Agriculture, as well as private standards instituted by individual firms in the US and EU markets. The training by the Bureau of Standards was considered to be successful, although more needs to be done to avoid restricting the ability to pursue some lucrative market opportunities.

Public-private partnerships and sustainable services provision

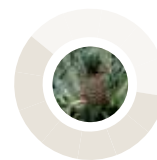
A significant result of the project was the improved linkages and partnerships between private sector and public agencies. Several examples were seen of the involvement of Ministries of Agriculture in providing services with respect to extension and agronomical advisory services (demonstration plots, farmer field schools, data collection, provision of inputs, etc.) The Marketing Board in Barbados (BDMC) and DEXIA in Dominica provided marketing support, while the Caribbean Industrial Research Institute (CARIRI) provided processing and product development support in Belize. In Jamaica, the Bureau of Standards and RADA provided trainings to *ackee* producers.



Project partners
at the Caribbean
Week of
Agriculture in
Grenada.
© FAO/H. Bammann

The workshop on lessons learned categorized the major public sector service providers for the five value chains as follows:

- Government ministries and agencies for policy formulation, technical assistance and advice;
- CARIRI for product development and processing;
- Development banks for financing and business development;
- CARDI for research trials, technological innovation, planting materials;
- UWI for training and research; and
- TTABA as a value chain driver, processor, chair of industry committees, contract farming and technical adviser.



This project delivered a tangible change in the regional mindset, resulting in more private sector involvement in projects and more support from the public sector to value chains as well as improved collaboration among value chain actors.

Linkages to the policy component aiming to improve the enabling environment

The preparation of a study called “Analysis of the Enabling Environment for Value Chain Development in selected CARICOM States” looked at the relationship between the enabling environment and the development of agribusiness value chains. One observation emerging from this policy analysis report was the regional diversity of fiscal policy measures. These diverse measures included differing tariff or tax rates, input subsidies and interest rates, all of which have distortional effects on value chains and can influence their ability to compete.

As described in the evaluation report, this project has been instrumental in supporting the formulation of a Regional Food and Nutrition Security Policy (RFNSP) and the RFNS Action Plan (RFNSAP), establishing partnerships with Caribbean analytical organizations, producing several policy briefs and studies, and pioneering the establishment of a Technical Working Group (TWG), based on stakeholder consultations. This TWG guided the formulation of the RFNSP and validation of the RFNSAP and is being strengthened as a model for further policy initiatives.

Policy officers and public sector institutions that were involved in the CARICOM TWG on Food and Nutrition Security gave priority to value chain development and small farmer organizations. CaFAN and the Caribbean Agribusiness Association (CABA) were included in policy development at the level of TWG and COTED, the Council of Trade and Economic Development. In the countries where a value chain approach was implemented, the approach was included in strategic planning in programmes and at policy level. Several other member states and development agencies expressed interest in developing programmes to introduce or expand use of the value chain approach in their agricultural development programmes and realignment of other programmes. Trinidad and Tobago started a training programme to introduce the approach into their extension service.

The evaluation report of the project stated that the ongoing challenge is to ensure that these models of success are not short-lived, that the RFNSP and RFNSPAP are translated into national policies and action programmes, and that the institutions set up to enhance national value chains (which are still mostly in their early stages) will receive support and guidance in the future.



STATEMENTS FROM THE LESSONS LEARNED WORKSHOP AND FUTURE OUTLOOK ROUNDTABLE



GTFS beneficiary group in October 2009 in Barbados.
© FAO/GTFS Project, 2009

Ms Glendine Greaves, CEO of C&G Star Trading Limited of Barbados, speaking on behalf of the five VCCCs of the GTFS Value Chain Project, stated that chain actors are now better empowered and positioned to continue the development of the chains in a structured, sustainable and competitive manner.

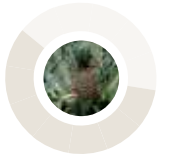
Mr James Paul from Barbados suggested that future projects are required to build agribusiness capability using a complementary approach of comparative advantage projects alongside food security and nutrition security programmes.

The Honourable Vasant Bharath, Minister of Food Production, Land and Marine Affairs, Trinidad and Tobago, hailed the value chain approach as the key to the development and achievement of food and nutrition security in the region.

According to Mr Enoka, marketing advisor for the project, the importance of establishing buyer/consumer linkages was reinforced as a means of determining the nature and size of the demand and the value for the chain to share among chain actors,

providing feedback to the chain and a springboard for new ideas and innovation.

CARDI remarked, "The project provided a platform and a model to address the challenges of linkages between early warning systems, disaster management and food security management in the region. It provided a basis for validation of the work of institutions and agencies and alignment of work programmes among agencies. The project also identified the critical areas of training required along the value chain for key chain actors and stakeholders."



Starbroek Market, Georgetown, Guyana.
© FAO/ H. Bammann



CHAPTER 03

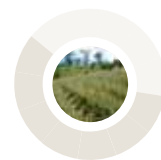
KEY FINDINGS OF THE ASSESSMENT ON FOOD SECURITY

Due to short project duration and a lack of beneficiary assessment and quantitative data on direct impacts on food security, this section is mainly based on qualitative indicators and perceptions of stakeholders.

3.1 IMPACT ON AVAILABILITY OF FOOD

The project contributed to addressing the low productivity and production levels in the Caribbean which are some of the factors causing food insecurity in the region. Adoption of improved, affordable production techniques led to an intensification of production and, in some cases, to changes of production systems. The use of a production planning database helped to secure the consistency of supplies, and shortages were also better managed. This was of particular importance because sustaining production growth was critical in order to drive down costs of production and improve competitiveness.

The project contributed to enhancing the quality of produce and to reducing post-harvest losses and market rejection rates. For example, in some cases, adoption of innovative and low-cost post-harvesting techniques extended the shelf life of produce. The establishment, by producer organizations, of processing centres and central collection points ensured



better quality control and the application of food safety standards. Indications were that the productivity of agro-processors increased. Public-private partnerships were also established for processing low quality fruits to decrease overall post-harvest losses.

Farmer organizations enhanced their credibility with respect to partnerships and strategic market alliances; as a result, buyers (especially supermarkets and exporters) committed to buying more produce from those organizations. A significant switch in thinking occurred, as farmers' previous reluctance to enter into supply contracts was transformed into an understanding of the benefits of long-term relationships and recognition of buyers' requirements.

The project initiated mechanisms for improved coordination and information flows between stakeholders and it is hoped that this will lead to greater efficiencies in value chains. Those mechanisms which are contributing to a better coordination of value chains for the domestic or regional market could lead to reducing the dependency on imported food, another important factor of food insecurity in the context of small Caribbean islands.

3.2 IMPACT ON ACCESS TO FOOD

The major issue affecting access to food in the Caribbean was the lack of income, particularly in rural areas and in pockets of poverty. The implementation of the market-led approach resulted in some positive impacts, laying some foundations for further development, and the interactive approach chosen by the project ensured significant buy-in from most of the relevant actors and institutions. At policy level, the project was successful in developing a regional perspective on food and nutrition security issues.

Drafting of strategic business plans, along with capacity-building activities, allowed farmer organizations to function more professionally and to deliver improved services to their members. Indications were that implementing labour-saving systems and optimizing expenditures (e.g. bulking inputs), had decreased the costs of production. The bargaining powers of farmer organizations increased in some cases and they were able to negotiate better conditions, which in turn led to increased memberships in the organizations and new farmers, perceiving potential profits, became involved in production.

Choosing to develop non-traditional value chains with market opportunities and possible value addition contributed to ensure the involvement of stakeholders along the value chains. An excellent example was the Jamaican *ackee* value chain, in which smallholders – especially women – have increased their income.



CHAPTER 04

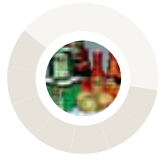
LESSONS LEARNED AND RECOMMENDED GOOD PRACTICES

Lessons learned were drawn from implementation of the field projects that chose to promote commercialization of agriculture as an entry point to improving food security. The lessons learned arise principally from the final workshop in the Caribbean region.

The lessons learned can be clustered into five main subjects:

- choice of value chains and commodities for upgrading;
- marketing and processing capacities of producer organizations;
- involvement of the private sector;
- market linkages and value chain coordination and communication;
- role of the public sector and supportive policies.

The presentation of good practices are clustered under two subjects: the need for collaboration amongst projects and donor initiatives, and the need for setting up a baseline for impact assessment.



4.1 CHOICE OF VALUE CHAINS AND COMMODITIES FOR UPGRADING IN THE CARIBBEAN

The project stimulated a shift of thinking for national organizations (e.g. farmers, agribusiness companies, development agencies, private sector agencies and ministries) in countries in which value chain programmes were implemented. These programmes were intended to serve as models for aligning production and marketing based on market demand and the need for building strong relationships and networking.

At national level, the lessons learned with respect to value chain selection were described as follows:

- Value chain analysis was seen as a means to determine and verify the market opportunities and competitiveness of the value chain;
- The need for selection of credible buyers was highlighted; this may be a more important criterion than commodity;
- The assessment of organizational capacities was considered an important step for determining the type of support to be provided by either the public or private sector;
- Business service providers were perceived as key to the development of value chains for small farmers. While technical service providers in agriculture are well established in the Caribbean, experienced business/organizational development service providers are less prevalent and the project helped address this imbalance;
- The success of the upgrading strategies was mainly due to the quality and continuous management of the key value chain drivers.

Project managers felt that more focus needed to be placed on value chain analysis, especially economic analysis (production costs, marketing costs and margins), both as a basis for refining the upgrading strategy and to establish a basis for assessing and monitoring competitiveness and stakeholder profit margins. It was recommended that there be follow-up activity to ensure that the value chain work can be further supported as the value chains are at uneven stages in their development.



4.2 **MARKETING AND PROCESSING CAPACITIES OF PRODUCER ORGANIZATIONS**

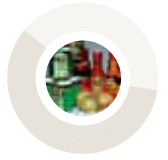
Managerial and entrepreneurship capacity to deal with markets increased for stakeholders along the value chain, as did associations with agribusiness. The more professional farmer organizations were better equipped to ask for specific and adapted support from service providers and extension divisions.

The members of CaFAN reported at the final workshop of the farmer organizations that the market-led, bottom-up approach was appreciated, given the needs of various farmer organizations. This approach promoted greater governance, transparency and professionalism of both the farmer organizations and CaFAN. Participatory tools – i.e. participatory meetings and training involving all stakeholders – and workshops were used to discuss priorities. The stakeholders underscored the importance of strengthening the capacities of members of the farmer organizations and extending this support to all value chain actors to allow them to deal with the evolving environments in which value chains operate.

However, farmer groups pointed out that they continued to lack basic data regarding supply/demand situations and standardized quality criteria from processors. Also, because consistency of supply remains of critical importance, it was recommended that help be provided to build cost effective management skills for setting up and maintaining a database for farmers to monitor production and better coordinate market supplies. Such databases have been found to be effective instruments for farmer organizations.

Furthermore, it was concluded that objectives need to be clearly prioritized, based on a strategic plan, to avoid duplication and losses by producers and processors. Any decision to divert from core project objectives should be soundly based on market appraisal and the needs of individual producer groups.

Consensus was reached at the lessons learned workshop that effective farmer associations were important components of successful value chains, facilitating the delivery of advisory support services and reducing costs through economies of scale. Furthermore, through project support, producer organizations have increased their capacity for lobbying and become more involved in policy planning at regional level.



4.3 INVOLVEMENT OF THE PRIVATE SECTOR

In the Caribbean region, the private sector identified the following priority areas:

- Developing a policy environment and mechanisms for tariff protection;
- Making agribusiness policies and action plans operational;
- Retooling small producers and small businesses;
- Promoting involvement of youth by teaching them to see agriculture as a viable, profitable sector;
- Implementing strategies for comparative advantage (such as large-scale production in Guyana); and
- Forming clusters of producers.

The private sector is clearly willing to be involved. However, this in itself is insufficient and greater innovation in approach is needed. For example, private sector participants highlighted the need for greater innovation in the provision of financial products that could reduce the risks of investment. Examples could include low interest rate loans, “grace” periods for loan repayment and “underwriting” of loans by participating banks. There was also an identified need for assistance in preparing business plans that conform to the standards required by financial institutions and donor agencies.

4.4 MARKET LINKAGES AND VALUE CHAIN COORDINATION AND COMMUNICATION

Identification of markets was highlighted by the project beneficiaries as a decisive step in helping to specify quantity and quality standards and being able to respond in a timely way to market demand.

To make value chains work, it is important to understand the concepts of dialogue, transparency, information exchange, accountability and good management. It was suggested that developing trust, ensuring reliability and consistency of supply, and establishing transparent price setting are key elements to ensure participation of all chain actors. Experiences in the project highlighted the continual need for effective coordination to deal with evolving situations and improve productivity throughout the value chain in order to remain competitive.

Exchanges across value chains were cited by several actors as being valuable and useful to their work. The project’s effort to distil, discuss and disseminate lessons on value chain experiences was a timely and potentially valuable contribution to value chain development.



As a consequence, and for the value chains supported by the project, the credibility of the Caribbean region as a source of agricultural produce was enhanced.

4.5 ROLE OF PUBLIC SECTOR AND SUPPORTIVE POLICIES

Ministries played a facilitating role and were involved in discussions about initiatives for value chain development. However, use of public sector agencies as direct delivery agents was considered by the stakeholders to often lead to increased uncertainty and risk for value chain members. It appears that clarifying the roles of these agencies and minimizing the effects of ad hoc government actions will need to be addressed in the future.

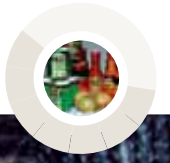
Government ministries and agencies attending the final workshop identified their priorities as follows:

- Developing a clear business policy and establishing an enabling environment to facilitate implementation of business models and business initiatives by value chain actors;
- Establishing mechanisms to promote dialogue with stakeholders;
- Providing public goods/infrastructures;
- Restructuring and reforming ministries to realign to a new value chain, market-led business model;
- Establishing agribusiness investment units in ministries;
- Providing opportunities for bilateral meetings and consultations; and
- Establishing regional mechanisms to foster and coordinate the value chain business initiatives.

4.6 COLLABORATION WITH OTHER PROGRAMMES/PROJECTS TO LEVERAGE RESOURCES AND SUSTAINABILITY

The business model approach used by the EU AAACP project for farmer organizations in the Caribbean and the support offered by CaFAN were particularly successful, complementary strategies for strengthening the weakest links in the value chain. Similar strategies were also applied to some degree in the other GTFS projects in Africa and it would be interesting to compare the impacts created.

Collaboration and synergies between the GTFS project and the AAACP project allowed for greater impact and provided opportunities to take national programmes to another level. In the Caribbean the work benefitted from collaboration with CARDI, IICA, CTA and also CDE.



4.7 APPROACH ON FOOD SECURITY AND IMPACT ASSESSMENT

The project had at least some impact in terms of improving food security within the time frame allocated. There is evidence that beneficiaries of the project showed higher tangible levels of food security, especially when the implementation period of the project exceeded two years.

It has been noted that a proper impact assessment on food security calls for a concise definition and methodology for measuring food security. One recommendation for new projects would be to conduct baseline studies that included indicators which could be used to assess achievement of the outcomes and impacts of the projects on food security.

*Chief Coordinator
of CaFAN on a
study visit to
Europe*

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CHAPTER 05

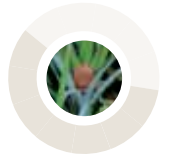
CONCLUSION

The field project “Food Security through Commercialization of Agriculture,” funded by the Italian Trust Fund for Food Security and Food Safety, implemented a number of activities which had various impacts in the Caribbean region.

At direct beneficiary level, one of the most notable effects was the enhanced capacities of local producer organizations in organizational management, post-harvest and value addition activities and marketing. The identification of relevant sources of information (e.g. best practices in farming, information on markets) and dissemination of that information were crucial steps in the process.

Capacity-building activities promoted more professional farmer organizations, which then delivered improved services to their members. For instance, in Dominica, NIPPA negotiated lower prices for inputs by buying in bulk for its members and found a competitive service provider to handle post-harvest operations on its behalf. As a result, the access to markets for smallholder farmers was improved.

In addition, business partnerships were strengthened, as indicated by the various formal and informal contractual agreements (e.g. NIPPA, BAS, Bellevue, farmer organizations in Jamaica and Hot Mama’s in Belize). The attention given to supporting service providers, including agricultural extension agencies, input suppliers, technology and storage providers, was instrumental in upgrading the value chains. The improved relationships with buyers and service providers contributed to increased efficiency along the value chains.



Better communication among chain actors, particularly with respect to supplies, allowed for an improved response to market requirements. The participatory process was crucial in facilitating better understanding and analysis of issues along the chain through dialogue, building confidence and trust among actors in order to make the relationships work. Stakeholders appreciated the concept of the VCCCs.

Nonetheless, need for further capacity building was expressed by beneficiaries – specifically in production techniques, processing, value addition and marketing, to ensure the consistency of supply. Improvement in logistics and reduction of post-harvest losses as well as labeling and branding were identified as essential to reduce inefficiencies along the value chain and to access modern markets. Additionally, further capacity building in contractual arrangements to formalize links was deemed necessary to continue to build long-term business relationships. In the case of Dominica, the reduced transaction costs and the understanding of marketing contributed to improved competitiveness and market linkages.

The project has had a positive impact on incomes and living standards of smallholder farmers as a result of the higher profitability and greater efficiency in marketing systems. Fundamental to the approach was the market-led focus, to better understand and respond to the needs of buyers and consumers. By choosing to develop non-traditional commodity value chains with novel market opportunities, greater value addition and higher margins were achieved by stakeholders along those value chains. It was also important to determine market strategies depending on the market opportunities (e.g. import substitution in St. Vincent and Barbados, regional integration for Dominican pineapple, or exports for *ackee* and hot pepper).

In conclusion, through the market-oriented and commercial approach applied by the FSCA project, farmers, processors and service providers were encouraged to work together along vertically aligned value chains in order to supply existing and new markets. The approach assisted the value chain stakeholders in identifying innovations to their farm and processing operations, being more efficient and improving the competitiveness of their respective value chains. Higher and more regular market sales and supplies to markets contributed to improve and stabilize enterprise profits as well as incomes for farm families – a powerful approach which has the potential to contribute to the sustainable improvement of rural livelihoods. However, for future projects or programmes introducing rather new working approaches, such as FSCA, planners need to consider a minimum of five years to institutionalize the approach.



REFERENCES

- Bammann, H. 2007. *Participatory value chain analysis for improved farmer incomes, employment opportunities and food security*. Pacific Economic Bulletin, 22(3), October 2007, Asia Pacific Press (available at http://www.fao.org/ag/ag/ivc/les-themes-cle-des-filieres-integrees/detail/fr/?tx_txininputformivc_pi1%5BshowUid%5D=16&tuid=16).
- Bauerochse, R. 2009. *Value chains promotion guideline*, GTZ, Berlin (available at <http://www.gtz.de/en/dokumente/en-value-chains-2-businessdevelopment-service-providers.pdf>).
- Downing, J. 2010. *The role of value chains in pro-poor private sector development*, USAID, (available at http://www.value-chains.org/dyn/bds/docs/497/Downing_LinkingSmallFirms.pdf)
- FAO. 2010. *The state of food insecurity in the world*. The State of Food Insecurity in the World Series (available at www.fao.org/publications/sofi/en).
- Morgan, M. 2008. *What are we doing away? Deconstructing the terms that inform the field of market development*. University of Bath, UK (available at <http://www.economicsunplugged.com/myfiles/mpvc.pdf>).
- Stamm, A. & von Drachenfels, C. 2011. *Value chain development: Approaches and activities by seven UN agencies and opportunities for interagency cooperation*. Participating UN agencies.
- Vazquez, P., Acosta Avila, S. & Tartanac, F. 2006. *Business partnerships in agrifood chains: Experiences in Latin America*, FAO RLC, Santiago, Chile.
- USAID. 2011. *Integrating food security and value chain approach*. MicroLinks, Micro enterprise learning, information and knowledge sharing (available at <http://microlinks.kdid.org/good-practice-center/value-chain-wiki/integrating-food-security-and-value-chain-approach>).
- USAID. 2011. *Value chain development wiki*. MicroLinks, Micro enterprise learning, information and knowledge sharing (available at <http://microlinks.kdid.org/good-practice-center/value-chain-wiki/>).
- USAID. 2004. *Atelier méthodologique sur le concept de la sécurité alimentaire*, Commissariat à la Sécurité Alimentaire CSA-APCAM-MSU-USAID, Bamako (available at http://www.aec.msu.edu/fs2/mali_fd_strtgy/conference/Atelier_sur_concept_securite_fin_compress_new_logo.pdf).

Project documents used for this report:

- Tartanac F. 2010. *Concept note on food security through commercialization*, Field projects funded by the Italian Trust Fund for Food Security and Food Safety.
- Project document “Promoting CARICOM/CARIFORUM Food Security: Phase II” GTFS/RLA/141/ITA”.
- Progress reports submitted by the project coordinator during the implementation period.
- Back-to-office reports from missions submitted by the officers in the implementation timeframe.
- Draft of lessons learned future outlook roundtable report, August 2011.
- Mid-term tripartite evaluation.
- Evaluation report of “Promoting CARICOM/CARIFORUM Food Security: Phase II”.
- An analysis of the policy environment supporting agrifood and value chain development in selected CARICOM states, by Rose-Richards, S. 2011.
- Value chain business model assessments and value chain upgrading plans (various) Caribbean agrifood value chain kick-off workshop report, 2009.
- National level training reports on Food Security and Vulnerability analysis in the national value chains.
- Final national value chain reports.
- Working documents, i.e. minutes, e-mails and other documents.
- PowerPoint presentations of the project by H. Bammann and R. Best.
- Toolkit for small-scale farmer participation in value chains.
- Radio talk show “Eat Caribbean,” podcast and weblog promoting sustainable agribusiness value chains in the CARICOM/CARIFORUM (available at <http://cafanvaluechains.podbean.com/>).



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