# ORGANIC PRODUCTS IN CENTRAL AMERICA: CURRENT SUPPLY AND MARKETS

# **B**ELIZE



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#### **FOREWORD**

In recent years, in different international events, ranging from political summits to technical fora, discussions have centered around the sustainability of the technology-production model being applied in the countries. Increased awareness of its negative effects on both natural resources and the health of producers and consumers has led to the development of alternative technologies intended to reverse these trends and promote human development in harmony with the environment.

Central America has not been the exception. At the Twelfth Meeting of the Central American Agricultural Council (CAC), the Ministers of Agriculture, with a view to fostering sustainable development in the region, asked IICA to develop and promote a project aimed at encouraging organic production in the region, as an holistic option for the rural milieu.

IICA, through its Cooperation Agency in Costa Rica, welcomed this request and developed the project "Fostering Organic Production in Central America and Development Markets for Organic Products," which is intended to correct structural weaknesses that are hindering more rapid growth of this activity.

In the interest of developing markets for organic products, the project held a seminar-workshop entitled "Trade in Organic Products from Central America: Guidelines for Designing a Regional Strategy and Developing Local Markets." As a contribution to the event, and in order to help participants more easily identify problems and solutions, IICA, with financial support from institutions and organizations linked to organic production, prepared and presented a series of studies on the production and marketing of organic products in Belize, Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica and Panama, as well as a regional summary.

The present book is one outcome of this initiative. The information it contains, which served as an input for the seminar mentioned above, is presented to all those persons who, in one way or another, are associated with organic production, in the hope that it will help them to identify new proposals and make decisions aimed at promoting this type of production.

#### INTRODUCTION

In the 1950s, the need to produce more food for a growing world population led to the application of production technologies based on the use of synthetic chemicals, which promised greater productivity and profits. One result of their application was a rapid increase in the volume of food produced. Another was the accelerated deterioration of natural resources, threatening the sustainability of production and the health of consumers and producers.

Since then, people have become more aware of the negative effects of such technologies. As a result, in recent decades, alternative technologies have emerged that are intended to help satisfy the growing demand for food and, at the same time, keep negative effects to a minimum.

In this context, organic agriculture has taken on new importance. This type of production, based on respect for existing relations in nature, contributes to the conservation of natural resources, helps to safeguard the health of producers and consumers, and leads to the development of agricultural production systems in which ecological, economic and social concerns are addressed.

Even though food has been produced for thousands of years without using chemicals, during the first half of the twentieth century, a more "organic" type of agriculture emerged in Europe. It has since spread rapidly and grown in popularity throughout the world, especially in the 1990s, a decade in which the area under cultivation and volumes traded grew notably.

In Central America, the resurgence of this type of production began less than ten years ago and is taking place in a less than favorable environment. Despite the efforts being made in every country in the region to promote organic agriculture, there are important obstacles to be overcome, to wit:

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i) the lack of institutional and policy frameworks; ii) the lack of legal and technical-regulatory frameworks to govern the activity; iii) insufficient development of local markets and limited access to international markets; and iv) limited knowledge of production and markets, limiting the ability to plan or make decisions.

This document, which is part of a series of studies conducted in all the countries in the region, deals with the case of Belize. This document is part of a series of studies carried out in all the countries of the region. It deals with the situation in Belize and is divided into five chapters. The first chapter contains general information about the country, while the second describes the main public policies and bodies used to support this sub-sector and the financing situation. Chapter 3 explains the regulations in place and the status of the certification services; Chapter 4 looks at some bodies that support the productive process and characterizes the producers. The last chapter describes the local market and the status of access to external markets for national products.

An Overview of Organic Production in Central America: the Current Status of Supply and Markets

#### I. COUNTRY PROFILE

Belize is an English speaking country located on the Caribbean coast of Central America, bounded on the north and northwest by Mexico and on the west and south by Guatemala. It's total land mass of approximately 25,000 km2 includes the mainland along with 450 tiny offshore islands located within the inner coastal waters. The country's climate is sub-tropical with annual temperatures ranging from 10-36° C. Belize, which is the only English-speaking country in Central America, received it's political independence from Great Britain on September 21, 1981 and boasts one of the most stable democracies in Latin America. Figures from the most recent census completed in 2000 estimates the country's population at 250,000.

The Belizean economy is highly dependent on industries based on agriculture, fisheries, natural resources and tourism. These products are major contributors to the national economy in terms of food security, poverty reduction, income and employment generation and foreign exchange earnings. Their contribution to the national economy resulted in increases in total domestic exports from US \$166.9 million in 1999 to US \$197.9 million in 2000. Real GDP growth was 6.4 %, GDP per capita was US \$2,921 and unemployment rate was 11.5% during this same period. The traditional agricultural exports of citrus, sugar and bananas and their products respectively contributed US \$59 million, US \$37 million and US \$31.9 million in foreign exchange earnings in 2000. During the same period foreign exchange earnings from marine products was US \$35.8 million. The sale of farmed shrimp accounted for US \$23.9 million of this total.

The strong economic performance experienced since 1985 has been fueled in part by rapid expansion in the traditional exports of sugar, citrus and bananas which accounted for 68 % of domestic exports in 2000. These products are being exported under preferential trade arrangements with the

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European Union, the United States and the Caribbean Community. The eminent threat of erosion of these preferential trade arrangements has forced the government of Belize to adopt an aggressive policy for diversification. This policy has stimulated tremendous growth in tourism, aquaculture and non-traditional agriculture exports over the past five years. Some of the non-traditional crops that have been developed to the export level include, papaya as fresh fruit, dehydrated mango, papaya, bananas and pineapple, coco yam, habanero pepper, red kidney beans and cow peas.

The tourism industry is one of the fastest growing sectors in Belize. This is a result of an aggressive campaign undertaken by the government in promoting Belize as an ideal destination for the ecotourists and others interested in the offshore fishing, diving, and snorkeling. Furthermore, the country's legacy within the heart of the Mayan empire completes a package rich with history, culture, and adventure. This exercise has resulted in record tourist arrivals of 166,743 and 172,292 in 1998 and 1999 respectively.

#### II. ORGANIC AGRICULTURE, A VIABLE OPTION FOR DIVERSIFICATION

The consumption of organically produced foods is a concept that has not been developed by the Belizean consumer. Belizeans are aware of the health hazards of pesticides on food and their potential damaging effects on human health and the environment. However, they have not been educated on fundamental concepts of organic agriculture and the potential for production of certified organic foods at the national level. This may be the main limitation for the development of a local market for organic products, which is yet to be explored.

However, organic agriculture is a viable option for diversification that has tremendous potential in Belize. This type of sustainable production practice is coherent with the Government's policy for preservation and sustainable management of the country's natural resources. Furthermore, the increase popularity and demand for organic products on the international market creates a niche market where the competitive advantage for selected products favors small economies such as Belize. Formal organic agriculture started in Belize in 1996 with the first shipment of dried and fermented cocoa beans from the Toledo district to the United Kingdom. Although the number of producers and volume of export has gradually increased the potential for this industry is far from being realized. More recently, production of organic citrus has started in the Toledo, Stann Creek and Cayo Districts. However, exportation of these products has not started as fields are still undergoing the required transition period. There is no established local market for organic products in Belize.

The Government of Belize through the agriculture department has made strong policy commitment to provide support for the development of organic agriculture in Belize. This support has translated into collaboration with the private sector and other support institutions for the formation of the Belize Organic Producers Association (BOPA) in 2000. The general objective of BOPA is to coordinate and foster the development of organic agriculture in Belize. The primary task that BOPA is currently undertaking is the formulation of the legislation for organic agriculture in Belize. Technical support for this initiative is being provided by the Inter-American Institute for Cooperation on Agriculture (IICA) and the Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ).

The medium and long-term prospect for organic agriculture in Belize is quite favorable especially in the area of tropical fruits. The Agriculture Department is aware of advances that have been made in other Central American countries with regards to production, commercialization and marketing of organic products. They are relying heavily on support from organizations such as IICA and the Tropical Agricultural Research and Higher Education Center (CATIE) for technical assistance and transfer of appropriate technology from these and other countries in the region.

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#### Public policy on organic agriculture

The Ministry of Agriculture, Fisheries and Cooperatives (MAFC) is the principal institution responsible for agricultural planning and executing the government's agricultural policy in the country. It's infrastructure and human resources available to conduct research, extension, organization and training to farmers have been committed to support the organic agriculture program in Belize. An important step taken by the MAFC to support the organic agriculture program was the recent appointment of a National Coordinator. The appointment was made by Minister of Agriculture, with an effort to foster the development of the organic agriculture program in Belize. This is complimented by the leadership role in this program by Private sector organizations such as the Citrus Research and Extension Institute (CREI), Janus Foundation and the Toledo Cacao Growers Association (TCGA). These institutions play an active role in BOPA and other initiatives to support the development of an organic agriculture program in Belize.

Also, the Government has recently established two statutory bodies that will be providing support necessary for establishment and functioning of the organic agriculture program. These are the Belize Agricultural Health Authority, which will be responsible for the sanitary and phytosanitary issues and the Belize Trade and Investments Promotion Service, which will be responsible for export promotion along with the identification and development of export markets.

#### Financing

The lack of availability of affordable financing is one of the major constraints to the development of Belize's agriculture sector. This has been a recurring problem that has challenged local financial institutions and governments. There has not been a satisfactory solution and the effort to remedy this situation continues through the development of special funding programs, which specifically target the small farmers.

The primary institutions that provide funding for the agriculture sector are the Development Finance Corporation (DFC) and the Small Farmers and Business Bank LTD (SFBB). Other institutions that provide small amounts of funding for agricultural activities includes the Belize Enterprise for Sustainable Technology (BEST), National Development Foundation Belize (NDFB), Credit Unions and Cooperatives, and Commercial Banks.

The DFC was established in 1963 by a group of local businessmen with support from the government. The Corporation was reactivated in 1973, when it was taken over fully by the government because of poor performance. Its principal objective is to provide financial support to the economy, through the development of agriculture, industry, tourism and public utilities. Details of the loans that DFC provided to the agriculture sector in 1999 and 2000, are listed in Table 1. This clearly indicates that DFC is the largest provider of agricultural loans in Belize. In 2000 they provided US \$6.5 million in loans to 1,698 individuals at an interest rate of 13% on the declining balance. Grace periods of one to four years are provided dependent on the type of crop or operation. DFC loan requirements are: sound management; secured markets; 15-30% contribution by the borrower; financial viability of project and security or collateral from borrower. Other

Table 1. Loans approved to the agriculture sector in 1999 and 2000 by principal agencies that provides financing to this sector

Institution		1999	2000				
	No	Values US \$ (millions)	% of Total Ioans	No	Values US \$ (millions)	% of Total Ioans	Interest rate
DFC SFBB	987 159	6.2 0.6	20.5 11.2	1,698 359	6.5 1.0	8.5 18.0	13% 10%

Source: Development Finance Corporation Small Farmers and Business Bank, 2001.

requirements are that the borrower must be Belizean between the ages of 18 to 65 years.

The SFBB was established in 1998 by the government, with the mission to assist small, viable, and genuine productive business entrepreneurs, and farmers by providing them with loans from US \$350 to a maximum of US \$25,000. Table 1 shows that the lending portfolio of the bank to the agriculture sector increased from US \$0.6 million in 1999 to US \$1.0 million in 2000. The number of borrowers respectively increased from 159 to 359 within the same time period. The interest rate of 10% with minimum required terms makes the financing more affordable to borrowers in comparison to DFC. The general criteria for loans are that applicants are expected to be credit worthy, be of sound and good character, and demonstrate ability to meet repayment of the loan. Although the bank does not require tangible collateral or a third party guarantee to make a final decision, an attempt is generally made to acquire them because of the high-risk nature of these loans. Grace periods range from 3 months to 1 year, depending on the type of crop, seasonality and cash flow. Payment is usually done via deductions from deliveries made to the purchaser.

The major limitations for accessing funds from the DFC are the high interest rate and inflexible requirement for the loans. Most farmers do not have secure land tenure and are therefore unable to access these funds. Some of these limitations are solved by the SFBB, however, their limited staffing and limited finances prevents them from reaching the prospective borrowers countrywide.

The members of the TCGA are one of the primary groups of producers that are unable to access credit as a result of insecure land tenure system. Less than three percent of these producers have acquired loans to help cover the cost of their operations. However, they have been able to access grants from Hidden Charitable Trust (US \$20,000 over 3 years), Grocers Cooperatives of the UK (US \$3,000) and The Ministry of Agriculture (US \$2,000 in 2000).

The farmers who are interested in organic citrus production are better able to access financing through loan schemes created by the Citrus Growers Association. The Creole Mestizo and Garifuna farmers involved in this program have more secure land tenure and are therefore able to access funds from a wider range of institutions. The large producers like Del Oro Belize LTD, Mayan King and the Janus Foundation are able to secure their own financing without much assistance from secondary institutions.

#### **III. CERTIFICATION AND LEGAL FRAMEWORK**

Two international certification agencies are currently performing certification of organic grown products in Belize, these are the Soil Association of the United Kingdom and QC&I based in Germany. Soil Association started operating in Belize in 1990 and provides inspection and certification services to cacao growers in the Stann Creek and Toledo Districts. The fundamental concept of their operations is to ensure that crops and livestock are produced utilizing practices that are sustainable and environmentally friendly. The use of inorganic fertilizers and pesticides is strictly prohibited. Their methodology involves field inspection in a random sample of 10% of farms within the production area annually. During field visits interviews and visual inspections, on rare occasion soil samples are collected for analysis. An international technician generally conducts the inspection and the cost to the TCGA is US \$12,000 per year. Green and Black Company of the United Kingdom purchases the fermented and dried cocoa beans. Soil Association has been the sole certification agent for organic grown cocoa in Belize.

QC&I GmbH, a German based certification agency, started operating in Belize in 2000 when it formed an alliance, QC&I Belize Ltd., with the local chapter of Janus Foundation (a Swiss Foundation) for certification of citrus, papaya, cattle, herbs, honey and coconuts cultivated by Janus in the Cayo District. In the agreement between these two institutions local technicians

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would be hired and trained by QC&I to conduct inspections while final certification would come from QC&I in Germany. Each producer would be responsible for marketing and commercialization of their products. QC&I have started negotiations with other fruit producers to potentially become the certification agency for their products. This option could significantly reduce the total cost of certification of organic products in Belize since QC&I intend to use local inspectors.

Belize does not have a legislation that outlines the rules and regulations for organic agriculture at the national level. In recognition of this short-coming, the MAFC and BOPA have made it their number one priority to formulate a legal framework for organic agriculture in Belize. The first step in this process has been the appointment of a sub-committee within BOPA to review existing legislation from the European Union, Codex Alimentarius, and Costa Rica. This committee is receiving technical assistance from IICA and GTZ for formulating a document for the legal framework for organic agriculture in Belize.

#### IV. SUPPORT TO PRODUCTION, COMMERCIALIZATION AND MARKETING

The organic agriculture program in Belize has received tremendous support from IICA, the Regional Unit for Technical Cooperation (RUTA) and GTZ. IICA and RUTA were active in stimulating interest in organic agriculture and the establishment of BOPA. IICA and GTZ are now providing technical assistance for formulation of legislation for organic agriculture in Belize. This initiative has also received strong private sector support from the Janus Foundation and CREI. In addition, IICA is coordinating a regional program on Procedures for Production and Commercialization of Organic Products in Central America.

The Janus Foundation has established a special program for farmers located near their center of operation in the Cayo District. This involves the

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provision of training and education workshops for interested farmers on different aspects of organic farming. Janus also provides consultancy and certification services.

CREI is actively involved in a program of promotion, development and conversion of traditional citrus farms to organic production. This is being conducted with a selected group of growers through grant funds received from the IDB to support agricultural diversification in the citrus belt. These funds are being used to explore production practices which includes, the formulation of organic fertilizers, use of cover crops and integration of livestock with selected crops.

The support detailed above is expected to provide immediate and long-term benefits to development of the organic agriculture program in Belize. On the short-term the legislation for organic agriculture should be completed by 2001. It is also expected that more than one certification agency would be operational in Belize before the end of this year, which would significantly reduce the cost of certification services. Furthermore, the regional initiative of IICA will facilitate the process of information sharing which should benefit Belize through access to technology developed and validated by neighboring countries in the region. Finally, the limitations identified in the report on the status of organic agriculture in Belize should help in the development of a national strategy for organic agriculture, which will focus on production, certification, marketing and an aggressive public awareness campaign for development of a local market.

It is anticipated that BOPA will play a key role in development and execution of this program. Efforts will be made to increase and broaden the level of representation in BOPA and to formally register this organization as a legal body that will facilitate and coordinate the development of the organic agriculture program at the national level.

#### Characterization of producers

The producers of organic products in Belize can be categorized into three main groups. The primary producers are members of the TCGA and the Janus Foundation. The TCGA is currently the sole producer and exporter of a certified organic product in Belize. This group was organized and formally registered in 1986 with assistance from the Toledo Agricultural Marketing Project (TAMP) for production of conventional cacao beans for sale to Hershey which had a thriving cacao farm located on the Hummingbird Highway. The TCGA switched to organic production by default a few years later when Hershey terminated it's operations in Belize.

The TCGA producers consist of a mixed group of 172 Maya and Ketchi farmers from 15 villages in southern Stann Creek and Toledo Districts. These groups are indigenous to Central and South America and are considered to be descendants of the great Maya. They are traditionally "milpa" (slash and burn shifting cultivation) farmers who are gradually being exposed to a sedentary type of farming system. Under the slash and burn system farmers would identify a suitable parcel of farmland annually. The vegetation from this parcel of land would be cut during the dry season (February–May) and burned in the latter part of the dry season. This land would then be planted with corn, beans or rice immediately after the first rain showers at the beginning of the rainy season (May-June). This land would then be abandoned at the end of the harvest period (September-October) and left to fallow for approximately 10 to 20 years. This fallow period is gradually being reduced as pressure for land use increases.

The Maya and Ketchi farmers live in isolated rural communities and the farms are managed by the household which traditionally includes the farmer, his wife and the older children. Their farming practice is subsistent-type farming that has remained relatively unchanged over the years. Except for rice, which is generally considered a cash crop, they cultivate small amounts of corn, beans, vegetables, fruit trees, root crops and some chick-

ens and pigs primarily for home consumption. Traditionally, the life of the Maya and Ketchi has been sustained by production from their farms. They have generally been self sufficient in most of their staple foods. The cash earned from sale of surplus products is used to purchase family needs and foods that they are unable to produce. The farming practices are passed on from one generation to another and there was not much need for formal education beyond the primary school level. However, this is gradually changing as these groups are integrating more with other culture. The current generation is now moving away from the rural farm life to explore higher education and other entrepreneurial activities and different career options in the Towns and Cities.

The total land area cultivated with organic cacao is 175 acres, which is approximately one acre per farmer. Each farmer is individually responsible for management, harvesting, fermentation and drying of his cocoa crop along with subsequent transportation for delivery to the storage depot in Punta Gorda. The cacao beans are stored in bags that hold approximately 136 pounds. The cacao beans become the responsibility of the TCGA when delivered to the storage depot where it is inspected and stored prior to transportation to the port for export. The Fair Trade Foundation of London negotiates the final price received by the farmers from the purchaser, Green and Black. Both parties have negotiated a five years guarantee for 100 metric tons of organic cacao beans per year from Belize. Green and Black pay the salary for a technician who is attached full time to work with the TCGA and serves as their local representative.

Another group of primary producers are some citrus growers and the Janus Foundation Belize. This is a group of approximately 50 farmers who plans to establish 350 acres of organic citrus in the Stann Creek and Toledo Districts. All these farmers fall under the umbrella of the Citrus Growers Association. Their motivation to explore organic citrus production was stimulated by a US \$150,000 grant that Citrus Growers Association (CGA) received from the IDB on January 2000 to support diversification in the cit-

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rus industry. Their period of conversion from conventional to organic citrus production started in the same year. Their focus is on the production of organic oranges for which they are exploring markets with three local processors.

The other producers interested in organic citrus production are large producers. One of these is Mayan King limited who plans to convert a couple hundred acres of citrus to organic while the other, Del Oro Belize Limited, have initiated the process to convert approximately 2000 acres to organic citrus. Both producers started the conversion process this year and will be responsible for processing and marketing of their products. Del Oro is the largest producer and processor of citrus in Belize. The majority of the shares in Del Oro is owned by the Commonwealth Development Corporation (CDC) while a small amount (approximately 10%) is owned by the CGA. The CGA represents the interest of all growers and negotiates annual prices with Del Oro through an executive body. There are frequent tensions between both parties on topics of pricing, harvesting schedules and delivery of fruits to the processing plants. Growers are traditionally paid in accordance with the weight of the fruit delivered to the factory, however, a new system is being put in place where they will be paid in accordance with the quality of the fruit delivered to the factory.

The final producer within the primary category involved with organic agriculture in Belize is the Janus Foundation, located in the Cayo District. Janus is second to TCGA in advancement of conversion and certification of their products. Janus started operating in Belize in 1998. The objectives of Janus regarding organic agriculture is to: (a) promote organic agriculture through research projects, consultancy and certification services; (b) develop an export line to Europe for organic products; (c) help in preparation of Belizean legislation for organic agriculture; (d) support submission of Belize's application at the EU to be listed as an equivalent country; and (e) establish training and education workshops to small farmers on different

aspects of organic farming. Their total holdings comprising of 2000 acres of land is certified for organic production. The primary products they are currently producing include 150 acres of oranges, 5 acres of papaya, and 350 head of cattle. Other products include coconuts, herbs and honey. Their long-term plans are to expand production to 40 acres of papaya, 500 bee hives, 5 acres of guava and 20 acres of habanero peppers. They are making their own arrangements to market their products in Europe. Janus is already certified for citrus and have started the certification process with QC&I for the other products. They are now working on the development of good quality products before a first export shipment is made.

The common denominator for all these producers classified as primary producers is that they already have formal certification as organic producers or are in the process of conversion from inorganic to organic production. Some are already exporting an organic product while others are exploring export markets abroad.

The second major category or secondary producers of organic products in Belize are a mixed group of farmers of different ethnic origins scattered all over the country. They cultivate a wide range of crops, which include cashew, pineapples, papaya, aguacate and several species of tropical fruits. These farmers do not have formal certification as organic producers but can be informally classified as organic because they do not use any pesticides or inorganic fertilizers on their crops. Although the majority of them have not been formally exposed to the concept of organic farming they can be targeted for development of new organic commodities. There are a number of producers within this group who have expressed strong interest in organic agriculture. Since they are informal organic producers they would only need to go through the process of formal certification. Some are large-scale producers that are capable of identifying financing and market for their products. However, the majority is small farmers scattered throughout the country. This group would require assistance in organizing themselves to receive help for financing and marketing for their products.

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The final group or tertiary organic producers are the Maya and Ketchi farmers referenced earlier as milpa farmers. They traditionally produce corn, rice, beans, root crops and vegetables primarily for home consumption. Inorganic fertilizers and pesticides are not used and seeds used are selected from varieties that have been passed on from one generation to the next. Furthermore, farm plots are generally located deep in the mountains and far away from farms that practice conventional farming practices. Organic agriculture was not introduced to these farmers as a farming option it is their way of life.

#### Description of the single certified organic product: cacao beans

The single certified organic product produced in Belize is cacao beans. This commodity is produced by the TCGA and exported to the United Kingdom. Their annual production of dried cacao beans between 1996 and 2000. The highest annual production to date was recorded in 2000, approximately 30 metric tons which is far below a guaranteed quota of 100 metric tons per year. This volume of cacao beans was produced on 175 acres of land.

The producers consist of a group of 172 small farmers scattered over 15 villages were formally registered as the TCGA in 1986. The TCGA is managed by an elected executive which consist of a Chairman, Vice-Chairman, Secretary, Assistant Secretary, Treasurer, Assistant Treasurer and one Councilor. Based on their constitution, the executive serves for a two-year period and is elected by the general membership at annual general meetings. The TCGA has two permanent employees, an administrative officer and a technical officer. The purchaser (Green and Black) pays the salary for the technical officer, while the salary for the administrative officer is paid from grants received from external donors. The TCGA operates from a small office in Punta Gorda, owned by the Government, and provided for the use of the TCGA at no cost. The Government also provides the warehouse used by the Association for storage of their cacao beans.

The primary source of revenue to cover the cost of daily operations of the TCGA is derived from a cess levied on the producers. This cess is a charge of US \$0.20 per bag (135 pounds) of cacao beans delivered to the warehouse. The cess generated is also used to cover the cost of transportation of the cacao beans from the warehouse to the port at the time of shipment.

The majority of TCGA producers operate under an ancient and insecure land tenure system. Approximately ninety percent of the producers are farming on reservations. This is a communal system where the Government sets aside large parcels of land for agricultural use by certain ethnic groups. Members of the group are allowed to roam freely and cultivate the crop of their choice on the land. However, they have no legal documentation that allows them to claim ownership of the land. Another three percent of the producers are squatters on the land they are farming. This means that they just randomly identify a parcel of land (private or Government owned) suitable for their purposes and start planting the crops of their choice. They have no legal right to be on the land and could be subject to eviction at any time. The final seven percent of producers have their farming operations on lease lands. This means that they have legal documentation for occupation that could lead to eventual purchase and ownership of the land if the producer complies with the terms and conditions of the lease agreement.

#### V. MARKETS

#### Internal sales of organic products

There is no organized established local market for certified organic products in Belize. However, some producers have informally claimed the name organic for some of their products. The results of interviews conducted with managers of the largest supermarket and hotel chains that caters for the local and tourist markets confirmed that organic products have not being sold or used in preparation of meals in their respective

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establishments. In most instances they were not certain about the true definition of organic products. However, they all agreed that there was a good potential for a local market if consumers were educated about the health benefits of consuming organic foods.

The tourism market may initially offer the best potential for marketing of organic products in Belize. In general foreign tourists are more educated about the benefits of organic foods because the marketing of such products are more developed in their home countries. Therefore, hotels and restaurants that cater to tourists could be initially targeted with organic grown fruits and vegetables. This can be initiated through promotion of these products by the relevant establishments. This growth of this market would be parallel with the growth of the tourist industry.

Another groups that can be targeted with organic food products are patients or individuals with special dietary needs. These could be individuals with diabetes, high blood pressure, and other conditions that require special dietary needs. The marketing of organic products to these individuals can be made through dieticians, physicians and organized groups or associations.

#### International marketing

All organic grown cacao beans produced in Belize is purchased by Green and Black and exported to the United Kingdom. Each producer is responsible for fermentation and drying of their cacao beans and it's delivery to the warehouse in Punta Gorda. The technical officer executes the grading and inspection system utilized by the TCGA. This system focuses on proper fermentation and drying procedures so that uniformity and high quality standards are maintained. Under the system cacao beans below a minimum rate of fermentation of 75% is not accepted. Once the beans are delivered at the warehouse, 20 beans per bag are randomly selected for inspection. The bag is accepted if at least 15 of the 20 beans meet the min-

imum fermentation and drying criteria. The beans are stored in the warehouse until a sufficient volume is accumulated for shipment (approximately 15 metric tons).

When a shipment volume is accumulated the TCGA management makes all the shipping arrangements. A truck is usually hired to transport the cacao beans from Punta Gorda to the port facilities in Belize City, a distance of approximately 200 miles. A management staff of the TCGA always accompanies the shipment of cacao beans from the warehouse to the port. The cacao beans become the responsibility of the purchaser after it is loaded into containers at the port. The TCGA is responsible for the cost of transportation from the warehouse to the port and the purchaser is responsible for the cost of transportation from the port in Belize City to the final destination.

The price received by the TCGA for their cacao beans is negotiated by Fair Trade Foundation in London. The current price received by the TCGA is US\$1 950 per metric ton. The TCGA is satisfied with the price negotiation arrangements in place and the final price received for their product, which is well above the international market price of US\$650 per metric ton. Furthermore, the TCGA has a five-year guarantee on this price for a quota up to 100 metric tons per year.

Some of the long-term plans of the TCGA include the expansion of total acreage under production, improvement in management practices and introduction of improved varieties. They are convinced that yields could be improved from 375 to approximately 500-800 pounds per acre if these adjustments are made. They are currently requesting training in farm record keeping for their members along with farmer to farmer visit to Talamanca, Costa Rica to get first hand experience on organic cacao production practices. However, one of their primary concerns remains the high cost for certification of their product. They are quite willing to explore the possibilities for lower certification costs from other certification agencies in the region.

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## **GLOSSARY**

BEST	Belize Enterprise for Sustainable Technology
3OPA	Belize Organic Producers Association
CATIE	Tropical Agricultural Research and Higher Education Center
CDC	Commonwealth Development Corporation
CGA	Citrus Growers Association
CREI	Citrus Research and Extension Institute
DFC	Development Finance Corporation
GDP	Gross Domestic Product
GTZ	Deutsche Gesellschaft für Technische Zusammenarbeit
ICA	Inter-American Institute for Agricultural Cooperation
MAFC	Ministry of Agriculture, Fisheries and Cooperatives
NDFB	National Development Foundation Belize
RUTA	Regional Unit for Technical Cooperation
SFBB	Small Farmers and Business Bank LTD
ГАМР	Toledo Agricultural Marketing Project
$\Gamma CG$	Toledo Cacao Growers Association

ANNEX 1. ORGANIC PRODUCTS IN BELIZE.		
Products	Land	Producer/Enterprise
Cocca* Orange Orange Papaya Cattle Hot pepper Guayaba Honey Cashew, papaya, coconuts,	70 ha 800 ha 60 ha 2 ha 350 heads 8 ha 2ha 500 beehives Without record	Toledo Cacao Growers Association Del Oro Belize limited Janus Fundation Anus Fundation Roducers from different ethnics (indigenous and garifunas)
* Only certified product destinated to Great Britain. Source: IICA 2001.	ritain.	

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