



Value Chain Analysis and Industry Strategy Development for Belizean Cacao

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This report is submitted by **International Development Consultants (IDC)** at **BELTRAIDE**'s request to undertake a value chain analysis and develop an industry strategy for Belizean cacao.

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Executive Summary

The Ministry of Trade, Investment Promotion, Private Sector Development and Consumer Protection (Ministry of Trade) has identified a need for consulting services to undertake a value chain analysis (VCA) and to develop an industry strategy for Belizean cacao in order to explore the potential for increasing exports of cacao to international markets and improving value addition of chocolate products in the domestic market. The Belize Trade and Investment Development Service (BELTRAIDE) contracted the IDC consulting team to undertake the assignment with a grant administered by the Caribbean Development Bank (CDB).

The specific objective of the Value Chain Analysis and Industry Strategy assignment is to identify ways for the Belizean cacao industry to expand exports by exploiting the market opportunities presented by the growing global demand for cacao, and especially the demand for Belize's fine flavoured organic cacao beans. A second objective is to evaluate the potential opportunities for value added chocolate products and related tourism activities. The assignment entailed a number of activities including a) assisting BELTRAIDE and the Ministries of Trade and Agriculture to analyze market supply and demand, b) preparing a VCA, c) validating the VCA, d) designing a strategy and implementation plan and e) recommending actions that Belize should undertake to develop the cacao sector.

The range of opportunities to be explored for the cacao sector included the following: a) increasing exports by assisting farmers to improve productivity, b) providing new sources of income by developing value added products, and c) creating linkages with the tourism sector.

This report is structured as follows: Part I presents the Background and Context including the relevant national development policies and strategies (agriculture, tourism, infrastructure and transport, and development partners) and current trends in the international and domestic cacao markets; Part II outlines the cacao value chain and the results of the VCA including constraints and opportunities; Part III presents the Industry Strategy; and Part IV summarizes the Conclusions and Recommendations.

The Government of Belize (GOBZ) has indicated a clear commitment to support the cacao industry, illustrated through a number of policies, development projects and statements in the National Export Strategy 2015-2019 and National Agriculture and Food Policy. The national vision for Belize, as articulated in the NES, emphasizes the need for "sustained international competitiveness in the export performance of value-added and niche products and services". Belize has decided to focus on three strategic areas:

- a) Adding value through new product development
- b) Creating value by entering new niche markets and effectively promoting the Belize brand
- c) Increasing sales for existing and new products and services through greater market promotion efforts.

Belize is a small open economy with economic ties to Central America and the Caribbean. Economic activity is primarily focused on agriculture, agro-processing and tourism. Over the past 15 years, economic activity has continued to shift away from agriculture, where the contribution to GDP has fallen while the service sector (particularly tourism) has remained the largest GDP contributor at approximately 54%. Looking ahead, the Central Bank of Belize (CBB) expects that the global economy will continue to improve and that this will support domestic economic activity through trade and investment.

Agriculture

In spite of its declining contribution to GDP, agriculture is still one of the main pillars of the Belizean economy and continues to form the base of the productive sector¹. This underscores the importance of creating linkages between agriculture, tourism and agro-processing. However, Belize is suffering from significant production constraints due to a range of factors. The government's sector strategies aimed at promoting agriculture have tended to focus on sugar, citrus and bananas. Until recently, little emphasis was placed on supporting marginal cash crops like cacao.

With a consistent demand for chocolate in the United States, Europe and other regions, the demand for cacao has grown over the years, which has sparked a renewed interest by the Ministry of Natural Resources and Agriculture (MNRA) in supporting the cacao sector. In addition, there is some interest in introducing cultivation in areas outside Toledo, to encourage the commercialization of the crop by private sector investors. Also, because Belize has become known for its high quality beans, BELTRAIDE is interested in exploring possibilities surrounding value addition by developing high quality end-products for use in the domestic tourism market. One area that will need further examination is the "aging farmer syndrome" that is plaguing subsistence farming all over the world. In southern Belize the average farmer is between 50 and 60 years old, and this age cohort makes up the majority of farmers in the area.

Tourism

In terms of GDP, tourism is by far the most important sector in Belize. The tourism industry started in the late 1980s and continues to experience growth. A major challenge facing the tourism sector is the need to diversify the product offering. Cultural services have been identified as a priority sector of focus to ensure that Belize diversifies its tourism product into niche areas. Belize has a rich cultural heritage on which to draw. In spite of some constraints in this sector, cacao is currently playing a role in the diversification process. Chocolate-making has been done by the Maya people for centuries, and Toledo is becoming recognized as the "home of cacao." Furthermore, popularity of locally-produced chocolate is increasing, with farm tours being arranged by a few innovative families. As such, cacao is a "made in Belize" product that can be further developed as part of Belize's experiential tourism and destination strategies. Cacao presents a particular opportunity to infuse the cultural experience in specific value chain segments, namely food and beverage, souvenirs, transportation and excursions. This fits within the NES strategy for tourism, where Maya sites and other cultural locations provide an opportunity to develop more robust cultural packages, building on services that are already being offered. Further diversification of the tourism market has to take into consideration the challenges identified by the NES for the growth of tourism.

There are a number of significant institutions, private companies, donor organizations and regulatory frameworks that could and should be governing, influencing and supporting the cacao industry, including the Toledo Cacao Growers Association (TCGA), MNRA, Belize Agricultural Health Authority (BAHA), Belize Bureau of Standards (BBS), BELTRAIDE, Development Finance Corporation (DFC), and Toledo Teachers Credit Union (TTCU). Access to finance has been identified as a key issue faced by the private sector, including exporters.

International and Domestic Trends in Cacao

¹ Estimated at 19,000 jobs

Belize's place in the international export market in relation to West African and Central American producers is hardly noticeable. The quantity of Belize's production is so small that it does not factor in the global export market. However, where Belize cannot compete on *quantity*, it can compete on *quality*.

Fine chocolate makers buy high quality cacao. For the "Bean-to-Bar" market, where fine chocolate makers in the US and Europe work directly with cacao producers in a sustainable, equitable trading environment. This arrangement ensures that chocolate makers get a higher quality product, and it ensures that the farmers get a better price for their cacao beans.

The organic cocoa trend started with Green and Black's buying high quality cacao from Belize and the demand for organic cocoa products is growing as consumers are increasingly concerned about the safety of their food supply, and as US consumers move away from what they perceive to be unhealthy confectionery products.

The growing chocolate industry is creating significant changes in market dynamics in Belize's cacao sector, which are precipitating changes in the agricultural sector and other sectors of the economy, such as tourism, as some innovative farmers begin to add value to traditional export products. Some farmers and their families have started adding value to their cacao beans, including making cocoa butter, chocolate, soap, wine, compost and tourism related products.

The Value Chain Analysis

The VCA outlines the functions of the main stakeholders, including input suppliers, small growers, buyers, export market channels, domestic value added processing and support services. Belize is in a unique position because in addition to the export market, there exists a budding local value added industry for local consumption that is targeting the growing tourist market. The methodology for analyzing Belize's cocoa value chain focused on the estimated income/revenue accruing to the various stakeholders – small growers, large farmers, traders, processors and exporters, based on the cocoa value chain.

VCA Results

Based on an examination of exports, niche markets, farmer income, local value added products and linkages to the tourism sector, the value chain analysis presents a number of scenarios and options for cacao production, the export sector and value added processing in Belize.

Exports

By focusing on the *quality* of certain cacao varieties, Belize can attract significantly higher prices in international markets. Following this export strategy means that Belize should continue to explore the various niche opportunities presented by fine chocolate buyers for the "bean-to-bar" market.

Domestic Production

In the past 4 years, price has been a major factor in the battle for cacao production in Belize. With the entrance of Maya Mountain Cacao (MMC) in 2010, the two main trading organizations (TCGA and MMC) have been waging a price war, offering farmers increasingly higher prices for beans. This has resulted in battles over loyalty, prices, organic certification, and a number of other fronts, essentially shaking up the cultural glue that has unified the Maya under TCGA since the early 1980s. The price war is also having an effect on farmer production and productivity. There are a number of ways Belize can exploit the current niche market opportunities to the benefit of farmers and other cacao stakeholders. Belize has a number of advantages that can be taken advantage of: proximity to

North America where the growing US market is doubling every year; easy shipping route; and the “Belize Blend” that offers fine flavour cacao.

Local Value Added Processing

Apart from exporting raw cacao beans, local chocolate processors contribute a significant amount of value added benefit to the domestic economy by generating a significant amount of employment and income. Also, the export of nibs for the superfood US market is starting.

Exports versus Local Processing

The comparison of the amount of revenue earned from the sale of cacao beans overseas versus that generated from processing them into chocolate bars for sale in Belize was revealing. There are significant added benefits to the local economy from processing beans into chocolate bars in Belize. Once the revenue from farm tours, accommodation, meals, etc. are added to the sale of local chocolate bars, the benefits accruing to the local economy becomes quite significant.

Chocolate Tourism: “Farm-to-Table” Tours

Even though farmers may get a higher percentage of the final value from the local processed chocolate, they receive the same price per pound for their beans whether they are used for the export or domestic market. However, this income increases exponentially when innovative farmers participate in the “farm-to-table” market by offering farm tours and chocolate making. The point is that Belize should not attempt to focus on the fiercely competitive export market when the country can develop destination strategies for farm tours, chocolate tourism, etc. The opening of a cruise terminal in Harvest Caye will provide a number of opportunities in southern Belize for chocolate sales, bus tours, and other tourism-related activities.

Opportunities and Constraints

The VCA revealed several opportunities and constraints in the Belize cacao industry.

Production

By focusing on higher value niche markets, farmers may be able to increase their income, particularly by increasing on-farm processing, quality, value addition and productivity. However, increasing production is the single most important constraint holding back the sector. It has been estimated that there is currently 500 MT of unmet demand (compared to 89 MT production in 2014), and this figure increases each time a new potential cacao buyer visits Belize.

Traders

Fine cacao receives a higher price. Given the higher price paid for quality cacao beans, TCGA and other buyers of Belize’s cacao beans should continue to supply niche markets in both international and domestic segments. Furthermore, the two main trading organizations (TCGA and MMC) should come to a business agreement, put an end to the price war and focus on improving quality and production.

Support

There has been no support offered by the Ministries of Agriculture or Trade. In the past, TCGA received excellent support from private sector companies with direct links to the market, such as Green & Black’s and with a recent IDB MIF project, which provided funding for the Executive Director, Accountant, Project Officer and Field Officers. MMC has had to use grants from partners, Kickstarter crowd funding and consulting projects to supplement the sale of beans. Both TCGA and MMC must double the volume of cacao beans to be self

sustaining. Government support with an over-arching entity to take the cost and responsibility of certification, research, testing, finance training and promotion of investment is necessary. Traders are exploring the options of establishing relationships with several buyers in the US and EU markets, as MMC has done with Dandelion and Valrhona and TCGA has done with Gone Green and Choco Del Sol.

Growers

As with all commodities, growers have had to increase volumes or add value to keep up with inflation. Growers in Belize will have to increase productivity and add value in order to make a living wage.

Local processing

Younger farmers are leaving the sector, but some innovative ones are developing farm tours, chocolate making, and other tourism related activities. Given the higher levels of income from processing chocolate and farm tours, local operators should continue to add to Belize's tourism destination strategies.

Trade Policy

Belize's trade policies tend to focus on exports, and in the case of cacao, tourism can be seen as a form of export – where instead of shipping cacao products overseas, tourists are willing to travel to Belize to experience cultural tourism, and bring in foreign exchange.

Support Institutions

The cacao industry is at an early stage of development and will require support from all of BELTRAIDE's strategic areas. The sector requires exponential growth to meet international and domestic demand, so there is potential to attract investors who are interested in cacao production. Support is also needed for SME development and in the creation of linkages between tourism and agriculture. Policies and incentives best suited to the sector will affect trade, agriculture, tourism and health and MNRA and BELTRAIDE would serve well as the over-arching organizations to bring together the ministries and grower associations, chocolate-makers, marketers and investors. In this sense, MNRA and BELTRAIDE can bring together public and private sector stakeholders to oversee the cacao sector.

Industry Strategy

The Industry Strategy identifies ways to capitalize on the opportunities in the short term, and remove the constraints in the medium to long term.

The development of a vibrant Cacao Industry Strategy promises to generate important economic benefits for farmers, small businesses and tourism-related enterprises. One of the overarching considerations for this assignment was that benefits should accrue to Maya farmers and small businesses in southern Belize. This was used as a guiding principle when formulating the Strategy, which is based on the need to develop a two-pronged approach for the development of the sector, one involving a sustainable development approach and another involving a private sector-driven approach. In addition, one of the main outcomes from the VCA was that local value addition contributes significantly more to the economy than exporting raw beans.

The Industry Strategy is based on the opportunities and constraints identified in the VCA. The strengths, weaknesses, opportunities and threats related to Belize's cacao value chain from the VCA were used as a guide in the development of the Industry Strategy. The intention of the Strategy is to identify ways to capitalize on the opportunities and overcome the constraints.

Although developed by the Maya centuries ago, cacao has become an international

commodity that is part of a \$100 billion global chocolate industry in which large manufacturers based in Europe and the United States capture the vast majority of profits. Demand for this commodity is expected to grow over 30 percent in the next five years as countries like China, India, and Brazil start eating more chocolate. Demand for Belize's cacao is increasing. Traders are coming to Belize with increasing regularity to buy beans for a variety of chocolate, health food and superfood markets in the US and Europe. In addition, value added processing of cacao and cacao by-products in Belize significantly increases the income-generating capacity of smallholder farmers and local chocolate producers in the domestic economy, where chocolate processors contributed BZ\$1.9 million in 2013.

Three main strategic elements emerged out of the opportunities in the VCA, and these formed the basis of the Industry Strategy: a) export of quality cacao to the “bean-to-bar” and superfood markets in the US and Europe, b) value addition comprised of processing chocolate and other cacao value added products for sale in the domestic tourism market, and c) linkages to tourism sector, primarily in the form of cacao farm tours and chocolate making activities. A number of constraints hindering progress towards these opportunities were also identified in the VCA. The Industry Strategy is focused on alleviating these constraints by focusing on four strategic objectives: a) Increasing quantity, b) Improving quality c) Diversifying products and d) improving governance.

The intention of the Strategy is to identify the need for support services and infrastructure required for the development of the two main pillars of activity: one focused on a private sector-led approach, and the other to identify the inputs for a series of sustainable development projects.

Pillar I: Private sector led approach: This will involve increasing production through investment in large and small commercial farms.

Pillar II: Sustainable development approach: This will provide support to the Maya farmers in southern Belize to enable them to increase production, productivity and acreage. This will involve designing a number of development projects around farming, clustering, fermenting and drying and support for chocolate processors and other value added activities.

Effective implementation of the Strategy will require an institutional structure that ensures actions on the strategy are coordinated with the National Agriculture and Food Policy and the National Export Strategy as well as related activity in the private sector and development projects underway in the Belize agriculture and tourism sectors.

An over-arching entity is needed that can take on the responsibility for the development of the cacao sector in a rapid growth period and link the growers ultimately with the stakeholders that can add the most value to their produce – the traders, processors and tourism sector. For this to happen, there is a need to align objectives, commitment of resources, and sharing of best practices among the two main support organizations (TCGA and MMC). There is a need for a transformation among these organizations to focus on helping farmers to become more productive.

The complexity of the development of the cacao sector will require cooperation across several government ministries: Trade, Agriculture, Tourism, Health, Education and Human Development. Although the focus is primarily on the agriculture and trade sectors, it is recommended that MNRA and BELTRAIDE take the lead in close association with representatives from Trade and Tourism.

Market Analysis

The VCA identified three key strategic markets for Belize's cacao, each of which will require

unique approaches, marketing strategies and tactics to exploit: a) the export market for fine cacao, b) the market for value added cacao products, and c) the local tourism market for cacao themed tours.

For each market, the product and target markets are identified, along with a profile of the core consumer. For example, the vast majority of international customers for Belize's fine flavoured cacao products are in the middle to high-end of the market in North America and Europe. These consumers value high quality products, which are produced sustainably and ethically. They value high quality ingredients, the visual and sensual appeal of good quality packaging, and the health attributes of dark chocolate and natural foods.

There are two distinct target segments for Belize's value added products: a) the local market, mainly up-market Belizean consumers who value the high quality of local chocolate and related value added products, and b) the local tourism market which is comprised of thousands of tourists that visit Belize every year looking for an experience of Belize's culture and country. There are two main sub-groups in the tourism market: 1) the cruise ship tourist and 2) the stay-over visitor.

The target market for cacao farm tours include self-described cultural enthusiasts, eco and agro tourists, 'foodies', students, journalists, food bloggers, among others. The cruise ship segment brings a greater number of visitors but the overnight visitor spends far more.

Key elements of the various marketing strategies are outlined indicating recommended marketing tactics and activities. For example, for the bean-to-bar market, as significant numbers of bean-to-bar buyers are already approaching Belizean producers to source organic cacao beans, these buyers will require a less aggressive marketing and sales approach. However, it will be important to continue to strengthen linkages with these buyers and to stimulate ongoing demand from this market segment. Belizean farmers/producer groups will need to court "bean to bar" buyers/traders to encourage them to buy Belizean cacao beans for their products rather than go to a competing source country.

The required activities to be undertaken to exploit each market as well as the support required from key organizations are indicated in the Implementation Plan and preliminary budget for each phase.

The Strategy will be monitored by a Cacao Oversight Authority and an Executive Committee under the directive of BELTRAIDE and MNRA.

There are a series of projects outlined to achieve the industry goals and chart the roadmap forward. The Cacao Development Programme for continued cacao growth in Belize that includes support for Maya growers, support for farm clusters organization and the TCGA building a business arm, as well as support for craft chocolate makers and joint research in cacao varieties. The "Every'ting Cacao" marketing strategy will form part of the diversification policy for the industry with product development, market testing, and innovation each year and tying in with the "Unique Belize" theme by the BTB. The "Unique Cacao" tourism linkages for tourism product development, marketing action plan, feasibility and business plan for a starter model chocolate factory and tour operation, as well as tourism products for cruise ship and stay-over tourism segments.

Acronyms

BAHA	Belize Agricultural Health Authority
BBS	Belize Bureau of Standards
BELTRAIDE	Belize Trade and Investment Development Service
BSO	Business support organization
BTB	Belize Tourist Board
BSI	British Standards Institution
CATIE	Centro Agronómico Tropical de Investigación y Enseñanza
CARDI	Caribbean Agricultural Research & Development Institute
CBB	Central Bank of Belize
CDB	Caribbean Development Bank
COR	Canadian Organic Regime
DFC	Development Finance Corporation
DFID	UK Department for International Development
EU	European Union
FAO	Food and Agriculture Organization
FCCA	Florida-Caribbean Cruise Association
GDP	Gross Domestic Product
GOBZ	Government of Belize
HACCP	Hazard Analysis & Critical Control Points
HVMs	High-value markets
ICCO	International Cocoa Organization
IDB	Inter-American Development Bank
IDC	International Development Consultants
IICA	Inter-American Institute for the Cooperation on Agriculture
ILO	International Labour Organization
ISO	International Organization for Standardization
MIF	Multilateral Investment Fund
MMC	Maya Mountain Cacao
MNRA	Ministry of Natural Resources and Agriculture
MSME	Micro, small and medium enterprises
MT	Metric ton
MTBCAAS	Making Tourism Benefit Communities Adjacent to Archaeological Sites
NAAC	National Assessment & Accreditation Council
NCL	Norwegian Cruise Lines
NES	Revised National Export Strategy 2015-2019
NGO	Non-government organization
NICH	National Institute of Culture and History
NOP	National Organic Programme
SRC	Scientific Research Council
SWOT	Strengths, weaknesses, opportunities, threats
TCGA	Toledo Cacao Growers Association
TIES	International Ecotourism Society
ToR	Terms of reference
US	United States of America
VCA	Value Chain Analysis
VEMS	Visitor Expenditure, Motivation and Satisfaction
WTO	World Tourism Organization

Forward

This document is the result of a consultancy assignment financed by the Caribbean Development Bank involving the mapping of the cacao VCA and development of an Industry Strategy. To facilitate the assignment, BELTRAIDE arranged consultations with various stakeholders along the cacao value chain, including the Toledo Cacao Grower's Association (TCGA), government ministries as well as international organizations (IICA, IDB).

The Value Chain Analysis and Industry Strategy assignment represents the first step in the process of developing the cacao sector. The next step will involve a more detailed design stage, where specific development projects are designed, investors are attracted, and an overall governance structure is established. These next steps will take many months and even years to accomplish, as each initiative will require careful planning and design to ensure the right stakeholders are included, targets and incentives are established, etc.

For the past 30 years there has been no overall policy or planning framework within which the cacao sector fits. The Ministry of Agriculture has not provided any support, and other government services such as BELTRAIDE and BTB have provided sporadic support primarily through donor funded projects². For 30 years TCGA has been the leading organization providing the necessary support to Maya small farmers. Apart from a few targeted development projects, the bulk of support has been provided through market-linked initiatives involving Hershey, Green and Blacks, and recently "bean-to-bar" buyers in the US and European export markets.

Out of the small successes generated by this tiny sector, a number of small chocolate processors have sprung up, operated by both local Maya farmers and foreign owned businesses. These small processors have been learning to make chocolate on their own, with limited support from NGOs. Similarly with the linkages developed for the tourism sector, these have gone largely unrecognized by the BTB or Ministry of Tourism.

One of the objectives of this VCA and Industry Strategy assignment is to provide the framework for the development of the sector to take place. The government is in the process of drafting two important policy documents that could provide a framework for the development of the cacao sector, the NES and Agriculture Policy. The success of the venture will be directly related to the leadership, management and dedication that the government, communities and private sector partners devote to implementing the recommendations.

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- BELTRAIDE, particularly Ms Ruby Pascascio
- Officials at the Ministries of Trade and Agriculture, particularly Mr Michael Singh and Mr José Alpuche
- Key stakeholders in the cacao sector in Belize, including farmers, TCGA, MMC, chocolate makers, IICA, IDB, Belize Bureau of Standards and DFC.

Input from these individuals and stakeholders are essential for the successful completion of the assignment.

² For years, the main constraints to agricultural production in Toledo have been poor marketing, lack of transport infrastructure, inadequate services and the unavailability of inputs, and the Ministry of Agriculture has not been able to provide adequate Extension Officers or advisory services
http://www.ifad.org/evaluation/public_html/eksyst/doc/prj/region/pl/belize/r172blbe.htm

PART I – Introduction, Background and Context

1.0 INTRODUCTION

The Government of Belize (GOBZ) has recognized the potential of increasing exports of cacao to international markets and improving value addition of chocolate products in the domestic market. In this respect, the Ministry of Trade, Investment Promotion, Private Sector Development and Consumer Protection (hereafter Ministry of Trade) has identified a need for consulting services to undertake a value chain analysis and to develop an industry strategy for Belizean cacao. On behalf of the Belize Trade and Investment Development Service (BELTRAIDE), a consulting team consisting of Stuart Black, Fiona Black, Juan Cho, Virginia Burke, Karin Wilson Edmonds and Judy Karwacki was contracted to undertake the assignment using a grant from the Caribbean Aid for Trade and Regional Integration Trust Fund (CARTFund), financed by the UK Department for International Development (DFID) and administered the Caribbean Development Bank (CDB). The VCA assignment is part of a larger project financed by the CDB, “Strengthening the Capacity of Belize Trade and Investment Development Services”.

The underlying purpose of the Value Chain Analysis and Industry Strategy assignment is to identify ways for the cacao industry in Belize to position itself competitively and expand exports by exploiting the market opportunities presented by the growing international demand for cacao, and in particular the demand for Belizean’s special variety of fine flavoured organic cacao beans. An additional objective is to evaluate the potential opportunities for value added chocolate products and related tourism activities and to design a strategy for the development of the cacao industry. As such, the consultants will assist BELTRAIDE and the Ministries of Trade and Agriculture to analyze market supply and demand, prepare a value chain analysis, design a strategy and implementation plan and recommend actions that the country should undertake to develop the cacao sector.

Following meetings with BELTRAIDE and the Ministry of Trade, it became clear that the government is interested in exploring a range of opportunities for the cacao sector including the following:

- Increasing exports by assisting farmers to improve productivity
- Providing new sources of income by developing value added products
- Creating linkages between the agriculture and tourism sectors.

Structure of the Report

Part I presents the **Background and Context**, with section 2 examining the government’s national development policies and strategies that are relevant to the cacao sector (agriculture, tourism, infrastructure and transport, and development partners); and section 3 presenting the current trends in the international and domestic markets for cacao. **Part II** outlines the cacao value chain for Belize with section 4 presenting the results of the **Value Chain Analysis** and section 5 examining the constraints and opportunities in each link of the value chain that will act as a guide for the Industry Strategy. **Part III** presents the **Industry Strategy**, and **Part IV** summarizes the **Conclusions and Recommendations**.

2.0 POLICIES AND STRATEGIES

This section describes the national and sector policies and strategies, the state of infrastructure and transport, relevant institutions and regulatory frameworks, and the activities of development partners involved in the cacao industry.

The Government of Belize (GOBZ) has indicated a clear commitment to support the cacao

industry. This is illustrated in a number of policies, development projects and statements in the Revised National Export Strategy 2015-2019 (NES). The national vision for Belize, as articulated in the NES, emphasizes the need for “sustained international competitiveness in the export performance of value-added and niche products and services”. The NES highlights the measures required to stimulate expansion of exports, build the capacity of exporters and support institutions to penetrate and diversify markets and products in order to create wealth and eradicate poverty. In order to improve the competitiveness of Belizean products such that the country can become a part of global supply chains in existing markets, the NES intends to focus on analysis of key issues in priority sectors with maximum growth and development potential.

In order to analyze the key issues, the NES proposes undertaking Value Chain Analyses of key products and services, and to identify and develop new sectors that “create, capture and retain higher value-addition”. In this regard, the NES is intending to undertake ongoing reviews and adjustments of the various value chains in a strategic manner by focusing on seven prioritized sectors outlined in a “Strategic Integrated Management Framework Matrix for Agriculture”. Three of these sectors are directly relevant to the Cacao VCA study:

- 1) Agriculture with a focus on specific crops with high export demand
- 2) Agro-processing
- 7) Tourism services (including tourist-related services incorporating art, music and culture)

Given the low level of competitiveness of these priority sectors (small market share, low level of technology, low level of innovation, high energy cost, high freight cost, etc.), Belize has decided to focus on three strategic areas:

- a) Adding value through new product development
- b) Creating value by entering new niche markets and effectively promoting the Belize brand;
- c) Increasing sales for existing and new products and services through greater market promotion efforts.

This includes developing targeted and sector-specific, country-specific, market penetration programmes such as trade shows and trade missions. In the agriculture sector, the key options include adding value through efficient production, improvements in quality standards and support services to exports. In tourism, the focus is on diversifying the products to offer more services, including niche markets and a higher quality tourist product in the south of Belize.

The cacao sector VCA and Industry Strategy study has been commissioned because it fits within the strategic development context of the NES, and is designed to explore new opportunities for value addition and increased exports. The underlying strategic consideration of the NES is to “maximize the direct contribution to overall economic and social development through increased employment, reduced level of poverty, and increased national income.” In this respect, the VCA/Industry Strategy assignment is designed to contribute to the development of rural areas, especially in the south and west, where poverty rates are highest and where degradation of natural resources and the environment is more pronounced.

The following is a summary of the issues highlighted in the NES that are relevant to the cacao VCA and Industry Strategy:

- Weak new product development
- Export development to focus on ‘low hanging fruit’
- Private sector involvement to be encouraged
- Brand Belize to be promoted
- Emphasis on promotion and protection of Maya and other cultures

- Focus on tourism as an export market
- Focus on the Diaspora as an export market
- Incentives such as duty relief to be utilized
- Human capacity development needs strengthening
- Improved commitment to policy implementation
- Continued commitment to environmental best practices 'Greening'
- Shortage of craft items for tourists to be addressed
- Soil and climate conditions for agriculture are limited
- Shipping facilities to be improved for competitiveness

In addition to the above, the VCA study intends to undertake an in-depth analysis of the value chain by gender in order to ensure the support structures in the Industry Strategy are designed to benefit both men and women. A general description of the roles of men and women is included on page 19, and the Industry Strategy emphasizes the development of many product diversification opportunities that can benefit and empower women. It should be noted that according to an ILO study on women in 106 countries, Belize did well at 41% women in management (Jamaica was first at 59.3%)³.

2.1 Overview of the Economy

This section provides an overview of the economy, demonstrating the importance of agriculture and cacao. Belize is a small open economy with economic ties to Central America and the Caribbean. Economic activity is primarily focused on agriculture, agro-processing and tourism. Over the past 15 years, economic activity has continued to shift away from agriculture where its contribution to GDP has fallen from 17% in 2003 to 13% in 2012, while the service sector (particularly tourism) has remained the largest GDP contributor at approximately 54%.

After relatively strong growth prior to 2007, the Belize economy experienced a significant slow-down in performance due in large part to the global and financial crisis, which impacted the key sectors of agriculture, tourism, construction and transportation. A recent IMF report on the Belizean economy showed that GDP growth plummeted to 0.7 percent in 2013, from 4 percent in 2012, mainly due to declines in domestic oil production and weak agricultural output, especially sugarcane and citrus.⁴

Looking ahead, the Central Bank of Belize (CBB) expects that the global economy will continue to improve and that this will support domestic economic activity through trade and investment. Growth in GDP is projected to range between 2.0% and 2.5%, underpinned by the sustained momentum of the services sector and a return to modest growth in the agriculture sector. Tourism is expected to continue to be the main driver of growth with stay-over visitors projected to grow by 5.0% due to the stronger economic performances of Belize's main source markets, and cruise ship disembarkations are expected to increase by approximately 3.0%. Statistics released by the World Tourism Organization (WTO) indicate that 2013 was a record year in international tourism with visitor arrivals up by 5.0% to 1.1 billion worldwide. Central America and the Caribbean saw increases of 4.2% and 2.8%, respectively, and further growth is expected in 2014, as the global economic recovery continues to strengthen.⁵

³ <http://www.washingtonpost.com/blogs/wonkblog/wp/2015/01/13/the-three-countries-where-your-boss-is-more-likely-to-be-a-woman/>

⁴ IMF Executive Board Concludes 2014 Article IV Consultation with Belize Press Release No. 14/415 Sep 4, 2014

⁵ Central Bank of Belize Annual Report 2013

2.2 Agriculture Sector and Cacao

This section outlines the importance of agriculture to the Belizean economy, and the role played by cacao farming in the South.

In spite of its declining contribution to GDP, agriculture is still one of the main pillars of the Belizean economy as it is responsible for providing more than 18% of formal employment and continues to form the base of the productive sector⁶. In addition, the bulk of manufacturing activity (20.7% of GDP) is based on input from the primary agricultural sub-sectors, e.g. sugar, citrus concentrate, animal feed, jams, jellies, chips, juices, milk, ice cream and sausages. The World Bank estimates that agriculture is the most important economic sector in Belize in terms of income generation, employment, food security and poverty alleviation⁷. This is particularly true in the rural areas, where agriculture provides over 70% of informal employment and where the population is directly dependent on farming. For example, the Toledo District has 25% of all farms in Belize and the highest concentration of small farms (77% below 20 acres). This underscores the importance of creating linkages between agriculture, tourism and agro-processing.

Agricultural production systems in Belize can be categorized into three main sub-groups as follows:

- A fairly well organized traditional export sector for sugar, banana, citrus and marine products
- A more traditional (Milpa), small-scale farm sector, producing food mainly for local consumption
- A large scale commercial sector.

Traditionally, the primary focus has been on the export of sugar, citrus and bananas. Table 1 shows the contribution of these 3 commodities to the overall economy, and the relatively insignificant contribution provided by cacao.

Table 1: Exports of Sugar, Citrus Bananas vs. Cacao (US\$ millions)

Commodity	2011	2012	2013	2014
Traditional Exports	345.0	413.7	428.1	
Sugar	90.1	107.6	107.4	
Citrus Juices	95.1	123.3	87.4	
Bananas	67.9	92.6	97.8	
Non-traditional	67.5	71.5	77.1	
Cacao			0.1	0.1
Petroleum	292.1	186.3	140.2	
Total Exports	704.5	671.8	645.6	

Sources: SIB, BSI, CPBL and CBB, Central Bank of Belize, Annual Report 2013

The Focus of Agriculture Policy

The overall goal of Belize's Agriculture Policy is "to engender a conducive environment for the development of an agriculture and food sector that is competitive, diversified and sustainable, that enhances food security and nutrition, and contributes to the achievement of the socio-economic development goals of Belize."⁸

The specific objectives of the policy are to:

⁶ Estimated at 19,000 jobs

⁷ Central Bank of Belize Annual Report 2013, and Agriculture Policy, Dec 2014

⁸ Draft Agriculture Policy, December 2014

- Raise the level of competitiveness of Belizean agriculture and the food sector for increased growth, foreign exchange earnings/savings and employment, ensuring the inclusion of small scale family farmers, through increased production and productivity in sector
- Promote greater efforts at inter-sectoral linkages, especially with manufacturing, tourism and health, by encouraging and supporting research on value addition and post-harvest handling

In addition, the policy contains provisions that will:

- Ensure greater efficiency in the structure and institutional management of the agriculture and food sector through well-defined roles of regulatory, standards and promotional bodies and enhance collaboration between key players in the industry
- Establish clear public policy, trade and investment incentives for production, processing, utilization, marketing of agriculture and food products
- Ensure growth and development in the agriculture and food sector through increased production and improved productivity, food and nutrition security; improve farmer's/processor's income; create employment and attract private sector participation in the industry
- Ensure expanded market access and trade in domestic and external markets
- Facilitate the delivery of quality, safe and accessible products to consumers while at the same time ensuring sustainable use of natural resources.

While the policy will focus on a comprehensive set of components (pillars) needed to achieve the goal of competitive and sustainable growth in the agriculture sector, in the short-term a business strategy will be developed as a driver for economic growth and to support implementation of the main Pillars – 1 (Production, Productivity and Competitiveness Enhancement), 2 (Market Development, Access and Penetration) and 4 (Promotion of Sustainable Management Systems and Risk Management). The business strategy will focus on the development of actionable proposals for addressing issues associated with the enabling environment (e.g. incentives, taxation, infrastructure, enforcement of standards etc.) and identifying appropriate tools (e.g. public-private partnerships (PPPs), contract farming, clustering, business incubators for small and medium enterprises, etc.) that can be employed through targeted interventions to achieve quality, consistency of supply and competitive pricing for key agricultural commodity chains. The policy will also identify clear areas where public goods need to be provided to achieve this (e.g. farm to market roads, access to electricity, basic irrigation infrastructure etc.), where PPPs may be appropriate (e.g. market infrastructure, extension services, research & development) and other areas which will fall under the exclusive domain of the private sector (e.g. input supply, transport & logistics, agro-processing, packaging etc.).⁹ Infrastructure and transport are major constraints affecting increased production and investment in southern Belize. The government plans to develop an investment prospectus at a later date that will be linked to opportunities identified in the business strategy, which will require significant investment from the private sector. The policy also makes special provision for a “social pillar” that aims to improve food and nutrition security and rural livelihoods (Pillar 3), which will apply to the small farms in southern Belize. The strategic objectives in this pillar include: Increasing production and promoting diversification, promoting livelihood options for those with insecure access to food and nutrition, increasing the participation of youth and women through empowerment programs and promoting linkages of small producers to market.

The Cacao Sector

In the past, the government's sector strategies aimed at promoting agriculture have tended to focus on sugar, citrus and bananas. The priorities of the Ministry of Agriculture are focused

⁹ Draft Agriculture Policy, December 2014

on food security and other interventions influenced by FAO and other international development partners such as IICA, which tend to emphasize vegetable market gardening, schools and backyard gardens. Until recently, little emphasis was placed on supporting marginal cash crops like cacao. With a consistent demand for chocolate in the United States, Europe and other regions, the demand for cacao has seen growth over the years, which has sparked a renewed interest by MNRA in supporting the cacao sector. Statements by government officials indicate that the cacao sector is becoming a priority to MNRA, particularly in the area of research and development and nurseries. In addition, there is some interest in introducing cultivation in areas outside the South, to mitigate the effects of bad weather and disease, and to encourage the commercialization of the crop by private sector investors. Also, because Belize has become known for its high quality beans, BELTRAIDE is interested in exploring possibilities surrounding value addition by developing high quality end-products for use in the domestic tourism market.

Potential Areas for Growing Cacao

In the south, agriculture is the primary driver of economic activity, accounting for 42% of employment, compared with 16% nationally. Here, cacao production is provided by over 1000 small farmers growing, fermenting and drying cocoa beans. The number of farms and total area producing cacao in 2006 and 2014 is outlined in Table 2. The area reported as cacao fields in 2006 was 550 acres on farm area of 2,471 acres and the yield was approximately 45 MT¹⁰. The yield per acre was better on the large conventional farm (Hummingbird Citrus Ltd. HCL) at 165 lb/acre whereas the organic farms in Toledo were yielding 124 lb/acre. At that time, all indications were that production was going to double by 2010 with the planting of 500,000 additional cocoa trees and productivity was expected to reach 250 lb/acre.

Table 2: Farm Size and Area under Cocoa Cultivation (2006 and 2014)

Category	District	Farms #	Min.	Max.	Mean	Total acres 2006	Total acres 2014
			acres	acres	acres		
Farm Size	Stann Creek	11	5	60	32.1	353	
	Toledo	37	2	64	27.3	983	
	Cayo	2	35	1100	567.5	1135	
Totals		51				2,471	
Cocoa Fields	Stann Creek	11	1	8	3.4	37	200
	Toledo	37	1	10	2.9	111	1400
	Cayo	2	2	400	201	402	100
Totals		51				550	1700

Source: Towards a sustainable Cacao sector in Belize, CATIE, March 2008 and stakeholder meetings

In 2014, TCGA reported that their farmers had a total of 1,537 acres in certified organic production, with an additional 92 acres pending certification, while large farms in Cayo have 400 acres in resuscitated cacao trees and 130 acres being planted. In 2014, a total of 89 MT was harvested from 1,700 acres in production. Current production level is stated as 200 lb/acre but data indicates it is 115 lb/acre and it is clear that production has not reached the level projected for 2013 (250 lb/acre)¹¹.

Potential for new acreage planted in cacao trees and increased yield from the established trees through pruning is underway. The international interest in cacao has new investors committing to planting 2,000 acres in Stann Creek. A project around Trio in Stann Creek in the Golden Stream Corridor Preserve is benefiting the forest as well as a migrant group of 35 Maya with the planting of 140 acres in cacao. Discussions with Maya communities and new investors in Cayo show promise of increased area in cacao where the soil fertility and rainfall

¹⁰ CATIE Towards a Sustainable Cacao Sector in Belize, 2008

¹¹ It is not clear whether the TCGA farmers reported farm area or cacao fields in their report

is high. All this is along with the expectations of the TCGA that acreage in cacao will increase by 30% each year for the next 5 years.

Table 2A: Potential Cacao Production

	Present	2 Years	5 Years	10 Years
Area	2014	2016	2019	2024
Total acres	1700	2960	6800	11000
Toledo	1400	2240	3500	4000
Stann Creek	200	320	2500	4000
Cayo	100	400	800	3000
Yield (lb/acre)	115	250	300	450
Total (,000 lb)	196	740	2040	4950
Total (MT)	89.3	336	927	2250

However, a drastic shift is needed in the production system in order to reach TCGA's target (400% increase) and the optimum level (600% increase). Currently, the two primary cacao extension support institutions (TCGA and MCC) have systems in place to improve production, but until these come on stream, farmers appear to be relying on price increases instead of increasing productivity.

In Table 2A the projections in increased acreage in cacao take the total area to 6,800 acres in 2019 and 11,000 acres in 2024. Investors are expected to push for high yields that require increased management of cacao trees and soil. To bring Belize's cacao yields up to the average in the Americas of 450 lb/acre can take 5-10 years of improved pruning practices along with soil testing and application of soil amendments to improve fertility.

Table 3 shows the production of cacao from 2004 through 2014 by TCGA and MMC. It is interesting to note that production has been fluctuating just as it had done in the years prior to the 2006 study. The yield for 2014 was 89 MT, 50% greater than 2006. The cyclical nature of cacao production is expected to continue.

Table 3: Cacao Production by TCGA and MMC (2004 – 2014)

Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	
Lbs (000)	71.0	50.0	98.0	50.0	106.0	81.0	61.0	59.0	119.0	57.3	99.2	TCGA
MT	32.2	22.7	44.5	22.7	48.0	36.8	27.7	26.8	54	26	45	
Lbs (000)								10.8	30.8	30	95.5	MMC
MT								4.9	13.9	13.6	43.3	
Total MT	32.2	22.7	44.5	22.7	48.0	36.8	27.7	31.7	67.9	39.6	89.3	

Source: Belize Cacao Industry Profile; TCGA and MMC figures

With the recent investment in the large cacao fields of Cayo (the former Hershey Farm) and the opening up of farms in West Cayo, there is considerable potential to increase the area and yield of cacao. However, in order to make an accurate estimate of the increase in production and productivity, it needs to be understood what became of the 500,000 cacao trees planted in 2006.

Soil Types and Land Use

Belize has a strong reliance on agriculture yet only 36% of the land is suited to farming. A 2009 CARDI report on Soil Conservation and Slope Cultivation documented the different types of land use and soil in Belize (see Table 19 and 20 in Annex 4). The land area is divided into high income potential (4%), good financial success (12%) and success subject to skilled management (20%) and the remainder is considered marginal or mostly steep land.¹² The grey

¹² A Manual of Soil Conservation and Slope Cultivation, Simpson L.A., CARDI, 2009

and brown soils of the Toledo beds are well suited to cacao production due to their fertility. The high rainfall of the area (>4,000 mm) can be detrimental and cause soil leaching but the canopy of cacao trees protects the soil from erosion and leaching. The young soils on river alluvium are the most fertile in the northern half of Belize but the rainfall (1,700 mm) is not adequate for cacao and the soil is already put to productive use with sugar cane, corn and rice. Clays of the limestone uplands and foothills in Cayo and Stann Creek are used predominantly in citrus farming and may be suited to cacao if the rainfall, humidity, soil pH and water runoff is adequate. There is considerable political interest in developing cacao production in West Cayo area, which has a rich Maya history in cacao.

The benefits that trees such as cacao provide for soil conservation, economic value and sustainability of the forest canopy are included in the 2009 CARDI report: "Perennial tree crops with cover crops beneath have the potential to reduce erosion to a fraction of its rate on bare soil". Cocoa trees aid soil conservation, reduce erosion, are easily propagated, are shade tolerant and have economic value as a cash crop.

Aging Cocoa Farmer

One area that will need further examination is the "aging farmer syndrome" that is plaguing subsistence farming all over the world. In southern Belize the average farmer is between 50 and 60 years old, and this age cohort makes up the majority of farmers in the area. In Toledo only 27% of farmers are under 40 years of age, and many younger individuals are leaving the South for employment opportunities elsewhere. Family members constitute 98.5% of persons used for all farm operations, and 34% of labourers are hired to assist in land preparation and weeding¹³.

Similarly, in West Africa, which produces about 70 percent of the world's cacao, the average age of a cacao farmer is 51, and the younger generation is abandoning farming for a living. This trend is prompting governments to promote commercialization within the agriculture sector.

Gender Roles

Traditional roles on the farm are men do the work in the fields and attend meetings while the women make chocolate, cook, make baskets and other craft items. There is evidence that this is changing and while TCGA has women in reception and doing office work only, the new trading company MMC is led by a woman and the next most senior position is also filled by a woman. MMC's business partners and field officers are mostly men and a woman works in quality control.

The situation with men dominance in positions of responsibility is common across cacao production in Africa. In Ghana an effort has been made in gender awareness in the co-operative of small growers, Kuapa Kokoo. One aim of the co-operative is to enhance the active and effective participation of women in decision making throughout the organization. Measures have been taken to ensure that a minimum number of members of the various councils and committees are women. The proportion of women members has also increased from 13% in 1993 to 32% in 2013.

2.3 Tourism Sector

In terms of GDP, tourism is by far the most important sector in Belize. The tourism industry started in the late 1980s and continues to experience growth. Today, tourism contributes between 18% and 25% of the total GDP, and accounts for about 28% of total employment.¹⁴

¹³ IDB Baseline Study, 2014

¹⁴ National Sustainable Tourism Master Plan (NSTMP)

The main source markets for tourism are the US, Canada, Guatemala and the United Kingdom. Table 4 shows the trends in overnight arrivals and cruise passengers, along with tourism expenditures, which accounted for the bulk of Belize's services exports, amounting to 80.2% (in 2012). Stayover visitors accounted for over 80% of annual expenditures (approximately \$650 million).

Table 4: Tourist Arrivals and Expenditure

Type	2010	2011	2012	2103
Stayovers	226,632	233,257	257,291	272,255
Cruise	688,165	654,790	576,661	609,612
Total	914,797	888,047	833,952	881,867
Expenditure (\$mn)	518.5	495.1	514.1	650.3

Sources: BTB, CBB and Immigration Department

In 2013, overnight stays maintained an upward trajectory as visitors rose by 5.8% to 272,255, marking the fourth consecutive year of growth. Success in the sector has been attributed to aggressive marketing, heightened publicity and improvements in the economies of the main source markets (US, Canada and the EU). Arrivals from the second largest source market (EU) grew by 8.6%, a reversal of the 8.4% downturn recorded in 2012. The largest increase was recorded from the Canadian market (10.9%), the main target of the increased marketing efforts of the Belize Tourist Board (BTB), while visitors from the US that account for 67.4% of stay-over tourists also grew by 4.1%. In the cruise ship sector, disembarkations rose by 5.7% in 2013 to 609,612, following an 11.9% contraction in 2012, as North American cruise lines reduced cruises to Europe and other alternative long-haul, non-traditional destinations, and deployed more ships to meet the demand for Caribbean cruises. Port calls to Belize increased by seven, and larger ships were used.¹⁵

According to the National Export Strategy (NES), a major challenge facing the tourism sector is the need to diversify the product offering. And the NES has identified "cultural services" as a priority sector of focus to ensure that Belize diversifies its tourism product into niche areas which complement its advantage of location, language, history, culture, and natural beauty while capitalizing on the shift within the global environment to cultural appeal.¹⁶

In spite of Belize's rich cultural heritage, the industry is currently experiencing severe constraints, including the absence of a deliberate strategy for branding or marketing, lack of an export-oriented strategy for cultural products and services, no comprehensive vision of the industry, inadequate strengthening of the cultural industry value chain and inadequate infusion of culture into the tourism package. The NES has outlined a number of ways to develop the cultural industry that are particularly relevant to this assignment:

- 1) Build the capacity of cultural practitioners and human capacity in areas which support the industry
- 2) Expand and increase the availability of the cultural goods and services
- 3) Increase the number of exporters in the sector, in particular MSME exporters
- 4) Increase the quality and number of formal education and training programs in areas which support development of the cultural industry
- 5) Ensure supporting legislation exists, such as intellectual property protection
- 6) Mainstream gender into development of the industry
- 7) Establish plans for focused product development
- 8) Increased coordination within the industry
- 9) Promote the industry nationally and internationally

¹⁵ BTB and CBB

¹⁶ NES 38

- 10) Integrate the industry into the tourism package
- 11) Facilitate greater linkages within the industry – nationally, regionally and internationally
- 12) Identify and access export markets for cultural good and services
- 13) Build a wider awareness of cultural services within Belize
- 14) Provide support to cultural bodies and associations
- 15) Establish a mechanism to effectively monitor the long term development of the industry
- 16) Support the industry to access and acquire the necessary input material, tools and equipment.

Within the area of cultural services, cacao is currently playing a role in the diversification process. Chocolate-making has been done by the Maya people for centuries, and Toledo is becoming recognized as the “home of cacao.” Furthermore, popularity of locally-produced chocolate is increasing, with farm tours being arranged by a few innovative families. As such, cacao is a “made in Belize” product that can be further developed as part of Belize’s experiential tourism and destination strategies.

Cacao processing is an example of how cultural goods and services can be incorporated into Belize’s tourism value chain. Providing linkages between agriculture and the tourism sector is an important way to develop new markets and opportunities in ‘experiential tourism’. In this case, cacao presents a particular opportunity to infuse the cultural experience in specific value chain segments, namely food and beverage, souvenirs, transportation and excursions. This fits within the NES strategy for tourism, where Maya sites and other cultural locations provide an opportunity to develop more robust cultural packages, building on services that are already being offered.

Further diversification of the tourism market has to take into consideration the challenges identified by the NES for the growth of tourism, including the following:

- Development and promotion of brand Belize internationally
- Product development
- Training in community tourism
- Development of souvenir products market including packaging and labeling standards
- Quality control/standards of tour products
- Infrastructure and roads
- Marketing of new tourism products and services

New Developments in the South¹⁷

Currently, all cruise passengers arrive at Belize City, the country’s only cruise port. In August 2013 a Memorandum of Understanding was signed between the Government of Belize and Norwegian Cruise Lines (NCL) giving NCL permission to develop a US\$50 million private cruise tourism port on Harvest Caye in southern Belize. This is a major new development that has to be factored into the cacao value chain analysis, as it presents significant opportunities to develop diversified cultural tourism products and cacao-related products in the South.

In 2012, Belize had just over 12,000 hotel beds, 23 % of which were in the south: Placencia (1,193), Stann Creek (915) and Toledo (603). Toledo also has a small number of tour operators (6 percent).

¹⁷ Much of the information in this section comes from the Belzeb Rapid Assessment Report, Judy Karwacki

Visitor spending patterns offer good insight into the potential for sales and marketing of cultural products in the tourism sector. According to the Visitor Expenditure, Motivation & Satisfaction (VEMS) survey (2012) conducted by the Belize Tourist Board (BTB), it was found that Caribbean nationals spent the most on average at US\$175.06 per day. Americans rank second at \$158.11 per day and Canadians are the third biggest spenders at \$132.55 per day. There is no information on overnight visitors' expenditures broken out by category, however recent studies on the economic impacts of the cruise sector conducted by the Florida-Caribbean Cruise Association (FCCA) provide excellent insight into spending on artisan products by cruise passengers and crew members visiting Belize. The studies looked at 21 destinations in the Caribbean and Central and South America, and found that 40 percent or more of the passengers that went ashore in Belize purchased local crafts. In the 2011-2012 season, cruise passengers visiting Belize spent an average of \$4.70 per person on arts and crafts compared with the regional average of \$5.68. In the meantime, crew members spent an average of \$2.86 per visit.

Archaeological sites are popular for overnight tourists, and were among the most popular attractions for VEMS survey respondents. In the 2012 survey, visits to archaeological sites were tied with national parks as the second most popular activity at just over 46% participation rate. The survey collected information on the most popular products purchased by visitors when visiting archaeological sites in Belize. Bracelets (24.8 percent) were ranked number one, followed by slate carvings (21.9 percent), wood carvings (18.5 percent), handmade bags (13.7 percent) and local blouses (10.4 percent). The BTB survey shows that 52.7 percent of cruise passengers take tours to Belize City, a fact that has implications for sales of artisan and chocolate products. Similar percentages can be expected for the cruise terminal in the South.

As part of a project designed to ensure communities adjacent to archaeological sites benefit from tourism activities (MTBCAAS), and in order for the BTB and NICH to gain insight into visitor satisfaction with their archaeological site experience, a visitor satisfaction survey was undertaken at nine target archaeological sites. The results are shown in Table 5.

Table 5: Belize Archaeology Site Visitors Characteristics (August 2012)

Characteristic	Findings
Type of Visitors	Cruise visitors – 55.8% Overnight tourists – 21.8% Other – 22.5%
Origin of Visitors	USA – 73.0% □ Belize – 8.9% Canadians – 7.9% Europeans – 5.1% Latin America/Caribbean – 2.3% Other – 2.7%
Motivation for Visit	Cultural Significance – 57.4% Activities at Site – 26.0% Time Constraints – 12.3% Site Accessibility – 5.0%
Sources of Information	Internet – 41.6% Cruise Ship – 22.3% Another Visitor – 17.7% Tour Operator/Hotel – 11.2% Travel Agent – 7.9%

The cultural motivations inherent in the statistics is an indication of the changing face of tourism, and demonstrates that there is significant untapped potential to develop linkages between tourism and cultural products, including cacao, in the South. This is part of the growing 'experiential tourist' trend which is one of the fastest growing product development

approaches in the global tourism industry, where more and more people are traveling for reasons other than 'sun, sea and sand'. This new type of traveler seeks an authentic and lasting experience. Experiential tourism includes eco, agro, nature, heritage, cultural, community, and soft adventure tourism and appeals to persons interested in nature, heritage and cultural experiences in the destinations they choose. Community tourism is an important segment of this market, as it provides tourists with a personal, interactive connection with local community members that enhance their understanding of local culture¹⁸. In this environment, the communities themselves share their culture with an appreciative audience, take pride in their community and diversify their livelihoods. Food tourism is another element that should be incorporated into the market analysis since it has direct link to chocolate consumption. Exact statistics regarding the size of the global eco tourism market are difficult to ascertain. The International Ecotourism Society (TIES) estimates that since the 1990s, eco tourism has been growing at 20 percent to 34 percent per year.

2.4 Infrastructure and Transport

This section describes the state of infrastructure and transport, particularly in the South, which is a constraint for both the agriculture and tourism sectors.

According to the NES, in order for Belizean exports to access regional and international markets improvements are needed in the transportation sector and the institutional framework governing quality standards. There is need for improvements in key agencies such as the Belize Bureau of Standards (BBS) and the Belize Agricultural Health Authority (BAHA) to enable them to successfully fulfill their mandates. The specific issues identified are as follows:

- High cost of compliance to international standards (cost of installing quality systems and cost associated with certification)
- Limited national technical expertise in HACCP, ISO and other services related to product and process development (both in public and private sectors)
- Lack of in-country accredited labs to do testing on an affordable and timely basis
- Low appreciation for quality

Building a national quality infrastructure is pivotal for driving the expansion of trade in goods. Some work is being done to improve the capacity of the BBS as well as the development of a regional quality policy, through a 2010 feasibility study on the Development of Certification Marks for Belizean Products (CROSQ). In addition, some work on quality is being implemented under a CARTFund grant to the Directorate of Foreign Trade (DFT) and a CDB project is currently being appraised to address HACCP, ISO 22000 certification. Furthermore, the NES is giving consideration to the following:

- Accredited laboratory and diagnostic capacity
- Building a food quality assurance system, and building national capacity in quality assurance and quality management
- Identifying the comparative and competitive advantages of Belizean products
- Improving other key export infrastructure including:
 - Enhanced port facilities and roads
 - Post-harvest handling facilities
 - Refrigeration and storage

¹⁸ Community tourism is an umbrella term that covers a wide spectrum of tourism niches and types. The portfolio of community tourism products includes nature tours, bird watching, adventure and cultural experiences as well as volunteerism, family experiences and thematic tourism products. Community tourism can also incorporate sports, health, events/festivals and related tourism products.

- Innovation and product development facility to expand value-added and quality management.

Section 5.0 includes a summary of constraints and opportunities affecting the VCA, some of which is related to infrastructure and transport.

2.5 Institutional and Regulatory Framework

This section describes the institutions, organizations and regulatory framework governing, influencing and supporting the cacao industry.

Cacao Production and Support

TCGA – The Toledo Cacao Growers Association was established in 1984 by a group of farmers with support from a USAID funded project. The association was incorporated as a non-profit company in 1986 with its mission being “to improve the socioeconomic standard of living of its members through competitive and diversified systems of production which incorporate sound ecological principles”. The inadvertent local market collapse in the late 1980’s positioned TCGA in a relative period of inactivity. However, in 1993 TCGA signed a three-year contract with Whole Earth Food Ltd., which later became Green & Black’s Organic Ltd. During this time, TCGA gained organic certification by the Soil Association and Fairtrade certification by Fairtrade Labeling Organization (FLO) – TCGA was the first cacao producer to be certified as Fairtrade. In 1994 the first shipment of approximately 24,000 lbs of certified cacao was exported to the UK. In 1995 the contract was moved from a three-year to a five-year rolling contract.

However, despite a guaranteed market, TCGA was dormant until 2003 when a renewed effort was made to boost production. The renewed effort was under Green & Black’s Maya Gold flagship project. Complimentary financing was provided by the Department for International Development (DFID) and International Humanist Institute for Cooperation with Developing Countries (HIVOS), a Dutch funding agency. Since 2003 production has doubled and approximately one million new trees have been planted. Similarly membership has increased from 270 to 1100 of which ninety-five percent are indigenous Maya farmers from 55 rural communities.

With much celebrated success in acreage expansion, the Maya Gold Project continued through to 2011 where membership grew to approximately 1100 members. Production from rejuvenated farmers also grew to 106,000 lbs (48 MT) in 2008.

TCGA has a nine member voluntary board of directors. Staff includes a voluntary Executive Director, a Project Accountant, a Compliance Officer and Project Coordinators/ Field Officers (11 funded by IDB/MIF and 2 funded by the EU) and a Technical Advisor (funded by Mondelez).

Ministry of Natural Resources and Agriculture (MNRA) – The Ministry of Agriculture is committed to sustainable rural development and sees the agricultural sector (including livestock and fisheries) as providing the economic base for enhanced economic growth of the country (in particular the rural areas) and addressing poverty alleviation. Agriculture and food policies are designed to make the agricultural sector more efficient and competitive, while at the same time contributing to the improvement of the economic and social well being of all Belizean’s.

However, there are severe limitations in what the Ministry can do as the current government budgetary allocation to the sector represents approximately 1.6 percent of the overall

government budget. This situation might improve in the future as the target is to increase the budgetary allocation to 5 percent of the overall budget by 2030.¹⁹

Food Safety and Quality Control

BAHA – The **Belize Agricultural Health Authority** is the main legal body responsible for food safety, sanitary and phyto-sanitary issues. The Ministry of Agriculture has a Biosafety Council that works in close collaboration with BAHA. The Pesticide Control Board promotes safe use and proper application of pesticides.

Official standards are being newly imposed and existing standards are being raised to meet both increasing knowledge about health and safety risks and increasing aversion to risk. The BAHA was established to ensure and maintain the necessary international food and safety standards that enable Belize to trade in the domestic and export markets in products from animal and plant origin. BAHA has been recognized as a model for efficient and effective service delivery, especially in those services related to inspection and certification. BAHA has benefited from continued support from development partners and donors for funding of infrastructure, and capacity building as well as from access to professional training provided by donors and international and regional SPS and trade organizations including the International Regional Organization for Plant and Animal Health – Organismo Internacional Regional de Sanidad Agropecuaria (OIRSA).

BBS – The **Belize Bureau of Standards** is responsible for Standardization, Metrology, Consumer Protection and Supplies Control. In relation to cacao the BBS is responsible for food safety and quality legislation:

- On behalf of the Belize government the BBS should regularly evaluate and revise the food legislation to ensure it best protects their populations and facilitates international trade in safe food.
- In collaboration with all interested parties including industry and consumers, regularly evaluate and revise food safety and quality legislation. To facilitate this, governments should make available sufficient resources for the task.
- The harmonisation of a country's legislation with other countries in the Region and globally should be facilitated by becoming a member of Codex, establishment of a national Codex Contact Point and Committee and participation in relevant Codex meetings. For such participation, both national and international support should be sought.
- Where appropriate, trading partners or countries with common borders should hold bilateral or multilateral meetings to harmonise legislation so that safe food can pass across borders with only the minimum delays necessary and so unsafe food is prevented from exportation.
- While the BBS establishes the standards and bring public awareness to the standards it is BAHA and the Ministry of Health's Public Health Department that ensure compliance.
- For example ISO have standards established by their Technical Committee (TC34/SC 18) for the Cocoa beans, cut test (ISO 1114:1977), Cocoa beans, determine moisture content (ISO 2291:1980), Cocoa beans, sampling (ISO 2292:1973), Cocoa beans, specifications (ISO2451:2014) that may be adopted as-is or adapted for Belize. In Jamaica the standard is established for Cocoa products only (JS196) and the Bureau of Standards Jamaica Technical Committee is working on the adaption of international standards for cocoa beans.
- BBS is currently developing a National Laboratory Policy and Regulatory Framework for Belize. Caribbean Medical Laboratory Foundation (CMLF) supported by the Global Fund Project in collaboration with the Ministry of Health and BBS had

¹⁹ Draft Agriculture Policy, December 2014, page 77

a workshop on the issue December 4, 2014 spearheaded by the Belize National Laboratory Network.

There are limitations in the area of food safety and quality standards. The demand placed on the services of BAHA and BBS has been increasing, and the staff has limited capacity in some operational areas including laboratory diagnostic and testing capacity and inspection personnel; and there is no national food safety policy. Notwithstanding the operational responsibilities of these relevant agencies, there are deficiencies in the agricultural health and food safety system in Belize resulting from:

- Limited capacity of BAHA to carry out all necessary services to ensure the health of the agriculture sector;
- Insufficient resource allocations to BAHA from the public sector to allow the authority to adequately carry out its responsibilities, resulting in higher charges to the producers and agro-processors;
- The processes of BAHA, which are time consuming and excessively bureaucratic;
- Insufficient monitoring of imported and local products for pest and residues;
- Lack of a clear, unambiguous policy on GMOs that allows import of GMO goods while restricting its local production;
- Lack of a revised and updated Bio-safety Policy;
- Insufficient grading, standards and SPS mechanisms in place.

In the context of the above, the MNRA through BAHA and in collaboration with the BBS will put in place a Quality Management Infrastructure (Systems and Measures) and establish the related legislative framework (HACCP, ISO 9001:2008, ISO 17025, ISO 14001) throughout the food production and processing sector to meet market requirements (FDA Food Safety Modernization Act (FSMA)) and similar legislation in the European Union and to ensure the certification of farmers and agro processors.

Trade and Investment Promotion, Small Business Development and Access to Finance

BELTRAIDE has 5 strategic areas of focus: 1) business and investment facilitation, 2) business development, 3) trade promotion and development, 4) export promotion and 5) entrepreneurial and SME development (Small Business Development Centre).

Value addition is a priority under the NES and other government developmental policies, as is small business development. The cacao industry is at an early stage of development and will require support from all of BELTRAIDE's strategic areas. The sector requires exponential growth to meet international and domestic demand, so there is potential to attract investors who are interested in cacao production, which will lead to development of trade. Support is also needed for SME development and in the creation of linkages between tourism and agriculture. Policies and incentives best suited to the sector will affect trade, agriculture, tourism and health and BELTRAIDE would serve well as the over-arching organization to bring together the ministries and grower associations, chocolate-makers, marketers and investors. In this sense, BELTRAIDE can bring together public and private sector stakeholders to oversee the cacao sector.

Access to finance has been identified as a key issue faced by the private sector, including exporters. While there has been a significant reduction in interest rates in recent years, other requirements remain cumbersome for productive sector loans. Additionally, most of the financial institutions do not offer export financing facilities and exporters must therefore try to access financing schemes that are not specifically designed to meet their needs. Specific issues cited by the NES include:

- Lack of export financing facilities
- Inflexible collateral requirements

- Inadequate financial records by companies, which negatively impacts the loan application process
- No commercial value given to intellectual property

Key considerations for improving financing mechanisms include

1. Financial mechanisms such as provided through export credit and export credit insurance are considered appropriate to supporting an export thrust.
2. Facilitating access to regional and international financing through specialized program for developing countries
3. Facilitate export financial mechanism facilities through development banks

The **Development Finance Corporation (DFC)** tries to design financial products that will be accessible by cacao farmers in the South. However, securing collateral and loan guarantees present a problem when dealing with Maya farmers who do not have land title. Furthermore, government may be constrained in providing guarantees for private interests. However the idea of a “guarantee fund” is something that could be explored. The DFC recently embarked on a small program for cacao rehabilitation and the organization was able to provide credit to some farmers with guarantees from TCGA. There are some lessons to be learned from this pilot that can help to make similar programs more effective.

Toledo Teachers Credit Union (TTCU) was established in late 2000 and early 2001 to improve the need for financial services for teachers working in the remote villages, and also to meet the needs of the wider community. It is a socially responsible financial institution that provides financial services to its members and community organizations at affordable rates. Starting with 87 members in 2000, its membership has grown to over 5300 (2009) with assets of BZ\$8.5 million (2008).

Micro-lending: Small farmers without land tenure or collateral find it difficult to use the lending facilities offered by established commercial and development banks. A range of micro-finance institutions (MFIs) like KIVA operate web-based micro-lending services, making it possible for anyone with an internet connection to take out small loans to help improve their business. In Belize, MMC partnered with KIVA in 2012 to raise 70 micro-loans for smallholder cacao growers. Today, MMC is in the process of expanding its loan portfolio on KIVA to include group loans designed to support women-owned nursery businesses. MMC has been experimenting with other organizations such as Agora, a social enterprise accelerator, and other micro-finance and crowd funding mechanisms. Many of these organizations are operating in a new field of “impact investing” that use investment funds to pilot Variable Payment Obligation financing, also known as “Demand Dividend,” which allows businesses to access funding on entrepreneur-friendly terms. However, financial literacy is needed to understand the obligations and payment schemes that these MFIs offer. And MNRA indicates that financial literacy is lacking in Belize.

2.6 Development Partners and Projects

This section describes the various development efforts provided to the cacao sector over the years, including initiatives financed by USAID, IDB, EU, Green & Black's Organic, among others.

Cacao Sector

Historically, the cacao sector has not benefited significantly from government support programs. Rather developments have been left to the private sector, international donor agencies and NGOs to foster. The main trading partners in Belizean cacao have provided much needed support to input supplies, testing, extension support, technicians, research and

development and standards that the growers need to establish for the sector. The MNRA, BAHA and BBS have had little involvement because of the high level of support provided by the private sector, donor agencies and NGOs including Green & Black's Organic, Mondelez, Taza, TCGA, Hershey's, DFID, IDB, USAID, NGOs and more recently MMC.

Today, Belize's development partners continue to provide technical and financial support to stakeholders in the cacao sector, primarily the Maya farmers. Current projects are financed by the EU, IDB, CDB, IICA, and CARDI. In addition, private sector partners such as MMC are supporting the Maya farmers while at the same time investing in large-scale commercial production.

The Returns from Investment in Cacao

By all accounts, a significant amount of donor funding support has been allocated to the Toledo District for cacao production and value added ventures, directed especially at the Maya growers (DFID, CDB, Green & Blacks, HIVOS, Sustainable Harvest International, Help for Progress and the Peace Corps). It has been reported that US\$40 million has been invested in the South, an area with 50,000 people. One question that has to be answered is: to what extent does Belize cacao need further direction so that it can be self-sustaining? It appears that the type of support provided by the private sector is geared to producing the type of results that the sector needs.

Current Projects and Programmes

A ***Joint TCGA / European Union project*** has the following objectives:

- Rehabilitate 200 acres of cacao
- Improve Farmers' Field School methods through training for 50 farmers (propagation, production, disease control, crop management and fermentation)
- Training in developing and strengthening household-based and cottage-based industries (50 women)
- Exchange visits with other Caribbean women's groups processing cacao (3 women)
- Training in business basics relevant to agriculture, agro-processing and eco-tourism (50 community members)
- Building solar drying facilities (10) with funds provided by both TCGA and Green and Black's Organic; and installed in 7 communities (each solar dryer has a capacity to dry 3,000 lbs and should service 5 families)

Closing the Gap between Maya Farmers and the Global Organic Cacao Market

Financed by IDB under the MIF, this 3 year project is designed to support TCGA through the following activities:

- Providing training
- Nursery assistance TCGA (10,000 seedlings) and management of 5 clonal gardens, each of which has 6 varieties of high production and tolerance to Moniliasis. Plans are for the nurseries to plant and graft 80,000 cacao plants to be sold to farmers in 2014
- Post-harvest training to over 200 farmers and 13 farmers attended training at FHIA (Honduran Foundation for Agricultural Research)
- While there are no known mechanisms to combat Moniliasis, TCGA's approach of vigorous farm rehabilitation has minimized effects by at least 10%; Over the next 5 years production should increase

Hershey Foods Corporation

During the 1980s, Hershey Foods Corporation provided an unlimited market for cacao beans, and agricultural loans and technical assistance were provided by international development agencies, which provided an incentive for Maya farmers to plant cacao trees.

USAID

From 1984 to 1988, the United States Agency for International Development (USAID) funded a project to facilitate the expansion of cacao production in Belize, the *Accelerated Cocoa Production Project (ACPP)*. The project provided agricultural services including the training of Ministry of Agriculture extension officers on cacao farming, and workshops for farmers on fermentation and drying methods. In 1988, USAID funded a follow-up project called the *Toledo Agriculture and Marketing Project (TAMP)*, which was designed to establish a viable export-oriented agriculture among small landholders in Toledo. Project activities included educational services, agricultural supply services, the disbursement of in-kind loans for the establishment of cacao farming and the construction of three Multipurpose Service Centers (MSC) in San Jose, San Antonio, and Big Falls, which served as agricultural input supply centers where farmers could buy pesticides, fertilizer, small tools, and seed.²⁰

Green and Black's Organic

In October 1993, TCGA and Green & Black's Organic, a British organic chocolate company, struck a deal that enabled the cacao farmers of southern Belizean to be the exclusive supplier of organically grown cacao for a new chocolate product called "Maya Gold". The deal included a 5-year rolling contract to buy cacao beans for US\$1.25 per pound, which was 70 cents above the world market price.

This new deal provided greater stability than the arrangement with Hershey because Green & Black's was interested in more than simply buying cacao beans. Belizean cacao was an important element in Green & Black's marketing strategy, which involved increased exposure as a socially responsible cacao buyer. For this reason, Green and Black's facilitated the development of organic and Fairtrade cocoa exports from Belize, and started marketing organic chocolate bars, as well as fair labor practices. They invested in the expansion of organic cacao production in southern Belize, provided technical support to the farmers so that they could obtain organic certification, supported the administration of TCGA with a \$20,000 loan so that farmers could be paid in cash for their cacao, and provided transport services from TCGA warehouse to Europe. In 1993, Green & Black's bought a total of \$10,000 of cacao beans from the Toledo District and by 1997 they purchased more than \$100,000 of beans. In 2005, Green and Black's was bought by Cadbury-Schweppes, following which the company was purchased by Kraft Foods, which changed the special relationship that TCGA enjoyed with the small chocolate maker.

Maya Mountain Cacao (MMC)

MMC sources premium cacao beans from Belize and Guatemala for fine chocolate makers in the United States, catalyzing social impact through "Direct Trade" and tight quality control. Formed in 2010, the company sells specific cocoa flavours to small-scale 'boutique' chocolate makers in the USA. This is part of a new chocolate movement, with at least 50 new 'micro-processing' chocolate makers springing up in the US over the last three years.

MMC provides transportation of beans, fermentation, seedlings and loans, with capital accessed from KIVA (US\$120,000 in 12-month loans at 6%). MMC buys from farmers on a regular schedule and finds international buyers. They have established trade relations and partnerships with chocolate makers and attend international cacao conferences. There are 42 people on the payroll, and 309 farmers supplying cacao beans. They have established a nursery for genetic selection with 82,000 trees, and are working in collaboration with Guatemala and the University of Hawaii on cacao genetic research for genotypes. They are 3 years into a 10-year testing process to select superior cacao genetics with USDA, FCI (Fine Chocolate Industry) and Heirloom. They have data collection and inspection for 5 years. And

²⁰ The Human Ecology of Mayan Cacao Farming in Belize, Michael Emch, 2003

they have made the first percentage Belizean bar outside of Belize: Xibun. MMC is now responsible for 60-70% of Belize national cacao production.

Ya'axché Conservation Trust

Ya'axché is a Belizean NGO that aims to maintain healthy forests, rivers and reefs. Through protected area management, advocacy and working with communities, it strives to develop the capacity for the wise use of land and natural resources in and around the Maya Golden Landscape in Toledo.²¹ Apart from the promotion of alley cropping with leguminous trees in milpa farms they have also supported the establishment of cacao on 140 acres near the town of Trio, signing an agro forestry concession with deal with the Forestry Department in the Golden Stream Corridor Preserve. The community has a fast growing migrant workforce. Inter-American Foundation (IAF) gave US\$50,000 in planning grants to 35 people in the community.

Cacao Forum

In 2012, a “Cacao Forum” was held in an attempt to move towards a common agenda to develop a sustainable and competitive industry. The forum was organized by the Ministry of Agriculture together with the Inter-American Institute for Cooperation on Agriculture (IICA), the US Embassy and CARDI. The one-day event brought together key stakeholders to discuss various opportunities for the Belizean cacao industry based on demand and supply trends, key constraints and opportunities for sustainable cacao/chocolate commercialization, and the role of the Ministry of Agriculture in facilitating private-public partnerships for sustainable cacao production, processing and marketing.

A major outcome of the forum was that stakeholders agreed to develop a National Cacao Platform involving government, industry, NGOs, cacao farmers, development agencies and other cacao stakeholders to discuss and develop strategies to address the issues facing the industry, focusing on removing barriers and creating an enabling environment to increasing productivity, competitiveness and sustainability of the industry. It was also agreed that the Ministry in collaboration with IICA and CARDI, with the support of the major players of the cacao sector, such as TCGA, MMC will conduct baseline studies to establish the current and future status of the Belize cacao industry.²²

CDB support: CDB is providing support to Belize through the following projects, which are not directly related to the cacao sector:

- Road Safety Project (US\$7.248 mil.)
- The Youth and Community Transformation Project (US\$5.2 mil.)
- Education Sector Reform Project (US\$2.0 mil.)
- BNTF Poverty Alleviation Project (US\$6.4 mil.)

3.0 TRENDS IN THE INTERNATIONAL & DOMESTIC CACAO MARKETS

This section provides an overview of the international and domestic trends in prices, production and productivity of cacao and other value added processes.

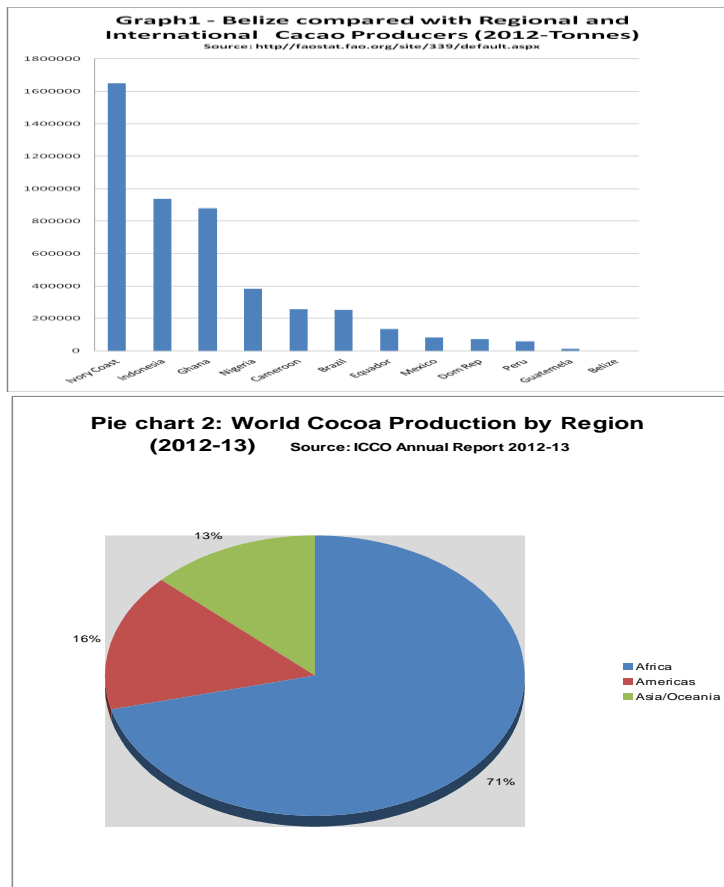
3.1 International Trends

Belize's place in the international export market in relation to West African and Central American producers is hardly noticeable as shown in Graph 1. The quantity of Belize's

²¹ <http://www.yaaxche.org/index.php?page=ilm>

²² IICA Press Release

production is so small that it does not really factor in the global export market. Pie Chart 2 shows the relative share of cacao production in the Americas in international markets (16%), with Belize producing a small amount – 54 MT (0.001% of global production and 0.015% of the Americas in 2012).



Quality Cocoa

All cacao is not created equal. And if Belize cannot compete on *quantity*, it fares better in the realm of *quality*. The international cacao market is divided into two categories – bulk and fine flavoured cacao. Bulk cacao is generally used for cocoa butter and bulk mass, while fine flavour cacao is sought by specialized buyers for its specific, unique flavours. Bulk cacao is treated as a commodity, where prices are set by the international commodity markets (see Graph 2 for history of world prices). Industrial chocolate makers use a combination of bulk and fine flavour cacao to make their products, while craft chocolate makers use only fine flavoured cacao²³.

The price differentials between the world (bulk) price and the price of fine flavoured cacao create different scenarios for the cacao farmer. Bulk commodity prices tend to depend on supply and demand, where an increase in the supply will trigger a lower price, and a decrease in supply tends to result in price increases. Over the last 40 years, the world price has been fluctuating because of fluctuations in supply and demand. The trend has been that when there is a large deficit of cacao, the price increases, and then farmers start to produce more, following which the price falls – and so the cycle continues to fluctuate. Factoring inflation into the equation provides a telling story. 40 years ago the world price for cacao was around \$1500/metric ton. Today, the bulk price is currently around \$2900/metric ton. \$1500 US dollars in 1974 is worth about \$7,224.13 today – which means that the farmers' share of bulk

²³ <http://www.dandelionchocolate.com/2014/12/16/a-future-with-chocolate/#anchor>

cacao has been declining in real terms and the price paid to them has not kept up with inflation.

Increasing Demand from 'Bean-to-Bar' Boutique Chocolate Processors

Fine chocolate makers do not buy bulk cacao because it will not provide the variety of flavours they need to make fine chocolate. Thus, the price they pay is not based on the bulk commodity price. When they purchase cacao, they pay a price based on its value, which depends on a variety of attributes ranging from the quality of the flavour, to the social impact of the organization producing the cacao, etc. So, as producers improve their product, they are able to get better prices. For example, the price Dandelion (a US chocolate maker) has paid varies from \$4,400 to \$7,600 per MT, which is one and a half to two and a half times higher than the world price (\$1,500-\$2,900)²⁴.

Comparing the prices that Belize's competitors in the Caribbean are paid (US\$4,700 to \$6,000)²⁵ to the prices quoted by TCGA (US\$4,400 to US\$5,600) and Dandelion (US\$4,400 to \$7,600), indicates that Belize farmers are getting a fairly good price for their high quality beans. However, these figures do not factor in all the costs associated with purchasing the beans from the farmers, drying, fermenting and transporting them to overseas processors.

Nevertheless, a case can be made for the "Bean-to-Bar" approach, where fine chocolate makers in the US and Europe work directly with cacao producers in a sustainable, equitable trading environment. This arrangement ensures that chocolate makers get a higher quality product, and it ensures that the farmers get a better price for their cacao beans – a win-win situation for everyone and good protection against the market's volatility.

This is part of a new global "ethical" chocolate trend where at least 50 new chocolate makers have popped up in the U.S. over the last three years, much like microbrew beers and specialty coffee roasters. These "bean-to-bar" producers import beans and then roast, crack, winnow, grind, conch, temper, and mold their own bars. Some producers also purchase processed chocolate (or cocoa) to create their own particular blends. Current cacao demand in this new market is estimated at a relatively small level but quickly growing around the world to 7,000 tons. These small-scale niche chocolate makers are looking for cacao with the right quality, a positive social impact and consistent supply to satisfy their customers.²⁶

Organic Cocoa

The organic cocoa market represents a very small share of the total cocoa market, estimated at less than 0.5% of total production. ICCO has estimated production of certified organic cocoa at 15,500 tons, sourced from the following countries: Madagascar, Tanzania, Uganda, **Belize**, Bolivia, Brazil, Costa Rica, Dominican Republic, El Salvador, Mexico, Nicaragua, Panama, Peru, Venezuela, Fiji, India, Sri Lanka and Vanuatu. However, the demand for organic cocoa products is growing at a very strong pace, as consumers are increasingly concerned about the safety of their food supply along with other environmental issues. According to *Euromonitor International*, global organic chocolate sales were estimated to have increased from a value of US\$ 171 million in 2002 to US\$ 304 million in 2005.

Health and Wellness Trend in United States Confectionery Market

Increasingly, US consumers are moving away from what they perceive to be unhealthy confectionery products that contain sugar and can lead to tooth decay, obesity, and diabetes. Consequently confectionery products that are marketed as low calorie and organic have driven growth in the US confectionery product market. Increased product innovation by

²⁴ <http://www.dandelionchocolate.com/2014/12/16/a-future-with-chocolate/#anchor>

²⁵ A farm in Jamaica selling to a buyer in Europe

²⁶ <http://www.forbes.com/sites/ashoka/2014/10/10/the-chocolate-revolution-central-american-start-up-seeks-to-grow-sustainable-cocoa-production/>

major players in the confectionery market appeal to new consumers that previously would not purchase products in this market. There is a major thrust for the use of 'healthier' alternatives to sugar such as xylitol, fruit sugar, dextrose and stevia. This has contributed to the health and wellness trend in the US confectionery market. Many consumers cite health concerns as their reasons for not purchasing products in the confectionery market. However new product flavours and low-calorie options are helping the US retail confectionery market total more than US\$18bn by 2018. The two main companies that are benefiting from the growth in this market are Mars Inc. and The Hershey Co., who combined account for around 65% of sales.

Graph 2: World Prices for Cacao (1975-2012)



Supply and Demand for Cacao

During the past few months a number of articles were published in the international press about a potential cacao shortage²⁷. These articles appeared in reputable publications such as the Guardian, etc. In November 2014, the ICCO released a statement saying that this concern was overblown²⁸.

3.2 Domestic Trends

This section provides an overview of the domestic market associated with the production of cacao in southern Belize.

Several different cash crops have historically been produced by the Maya in the Toledo District. In the early 1900s, bananas were the most important cash crop, and in the 1930s rice became dominant. During the 1980s, a new international market provided an opportunity for the Maya to grow cacao.

In 1977, Hershey Foods Corporation (HFC) established a 500 acre cacao farm located on the Hummingbird Highway in Cayo District, naming the company Hummingbird-Hershey Ltd. (HHL). The farm housed a modern post-harvest processing center and was used by HFC as an agricultural research center. HFC promoted small-scale cacao farming among the Maya by importing seeds from Costa Rica and the Dominican Republic, providing technical assistance

²⁷ <http://www.burtonmail.co.uk/World-cocoa-shortage-spell-bad-news-beloved/story-25845265-detail/story.html>

²⁸ <http://www.icco.org/about-us/icco-news/270-icco-statement-on-reports-of-a-cocoa-supply-deficit-in-2020.html>

to small farmers and offering a market for fermented and dried cacao. When HFC bought the farm, they made an agreement with the Belizean government to buy all cacao grown in Belize at the world market price. From the early 1980s until 1991 the price was BZ\$1.70 per pound (US\$1,874/MT), following which it was lowered to BZ\$1.23/lb (US\$1,356/MT). To obtain this price, farmers needed to arrange for their cacao beans to be transported to the HHL farm themselves.

During the 1980s, land planted with cacao increased from 237 acres in 1983 to 1014 acres in 1990. The number of cacao farmers increased from 70 to 365, and beans sold to Hershey increased from 1086 to almost 32,000 pounds (14.5MT)

In 1992, the world market price of cacao dropped to BZ\$1.10/lb (US\$ 1,213/MT), and HFC stopped buying cacao beans from Belize. Hence, the market for the Maya farmer's new expanding cash crop was lost. Then in October 1993 TCGA struck an exclusive deal with a British organic chocolate company, Green & Black's, to supply organically grown cacao for a new product called "Maya Gold". The deal included a 5-year arrangement to buy beans for BZ\$2.50 per pound (US\$2,756/MT), which was approximately US 70 cents more than the world market price. Green & Black's also supported farmers technically so that they could obtain organic certification, and they provided a \$20,000 loan to the TCGA so that farmers could be paid in cash for their cacao. In 1993, Green & Black's bought \$10,000 worth of cacao beans from the Toledo District and by 1997 they purchased more than \$100,000 worth of beans.²⁹

In the end, Green & Black's bought over 80,000 pounds of cacao, which is more than double the amount that was sold to HHL in 1990. Therefore, in the late 1990s the British organic food company provided the Mayan farmers with a more stable market for their cacao. This market lasted until 2005, when Green and Black's was bought by Cadbury-Schweppes, and later by Kraft Foods, which changed the special relationship that TCGA had established with the small organic food company.

Since 2010, the cacao industry in Belize has undergone another change resulting from increased competition in the sector stemming from the entrance of Maya Mountain Cacao. The changing market dynamics are reviving a sense of optimism among the primary stakeholders in the sector, which include small farmers in the Toledo District, larger farmers in Cayo, the Ministry of Agriculture and the Ministry of Trade, among others. In addition, it is also having a positive effect on investment in the cacao sector and the way the country has looked at the cacao industry since the departure of large cacao farms during the mid-1990s. However, the introduction of new market entrants is also creating new competitive forces that have negatively impacted the status quo in the cacao industry, resulting in a decline in the membership and production levels of the primary growers' association, the TCGA.

Table 6 shows the changing prices that farmers in Belize have received for cacao, selling to buyers in Europe and USA between 2003 and 2014. The figures include all exporters including TCGA, the last exports by Hummingbird Farms (2004 and 2005) and new exporters such as MMC (2010 to 2014). It shows the number of pounds (and MT), the annual revenue and average price per pound, which is aggregated by buyer in Tables 9 and 10 below.

The 2003 figures range from BZ\$ 1.54/lb (1,692/MT) sold to Holland for BZ\$2.80/lb (US\$3,095/MT) and to the UK (Green & Black's), which is a very high price. The average for 2003 is BZ\$2.11/lb (US\$2,326/MT). Similarly, in 2013 Dutch buyers paid BZ\$2.73/lb (US\$3,012/MT) and US buyers paid BZ\$4.53/lb (US\$4,993/MT), averaging at BZ\$3.68/lb (US\$4,057/MT). In 2011, the average price jumps to over US\$4,000 because of the higher prices MMC was able to attract from boutique buyers in the US market. The fluctuations in

²⁹ The Human Ecology of Mayan Cacao Farming in Belize, Michael Emch, 2003

production and price demonstrate the importance of increasing production and having a stable relationship with a reliable buyer over a long period of time in order to create a sustainable platform for organizations like TCGA and MMC.

Table 6: Belize's Cacao Exports (2003-2014)

Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
000 lbs	44.6	67.8	46.8	23	23.4	106	35.7	9.9	10.8	122	64.3	197.5
MT	20.2	30.7	21.2	10.4	10.6	48	16.2	4.5	4.9	55.3	29.1	89.3
\$BZ/lb	2.11	1.81	1.39	1.39	1.63	?	3.38	0.39	3.84	3.28	3.68	4.53
US\$/MT	2,326	2,000	1,542	1,538	1,801	?	3,730	435	4,236	3,615	4,066	5,000
Total BZ	94,227	122,815	65,384	31,994	38,175		120,848	3,914	41,510	399,837	236,627	895,000

Source: Statistical Institute of Belize, Belize Cacao Industry Profile (2008, see description of TCGA and Maya Gold project, page 16 of this document)

The changes in market dynamics in Belize's cacao sector are precipitating changes in the agricultural sector and other sectors of the economy, such as tourism, as some innovative farmers begin to add value to traditional export products. Recently, some farmers and their families have started adding value to their cacao beans, including making cocoa butter, chocolate, soap, wine, compost and tourism related products. These cacao by-products have contributed to increased earnings for families, especially women, and provided employment for other members of the community.

PART II – VALUE CHAIN ANALYSIS

Part II provides an overview of Belize's cocoa value chain and a snapshot of the revenue accruing to the main actors (farmers, processors, traders and exporters) at each stage of the value chain.

4.0 OVERVIEW OF THE VALUE CHAIN

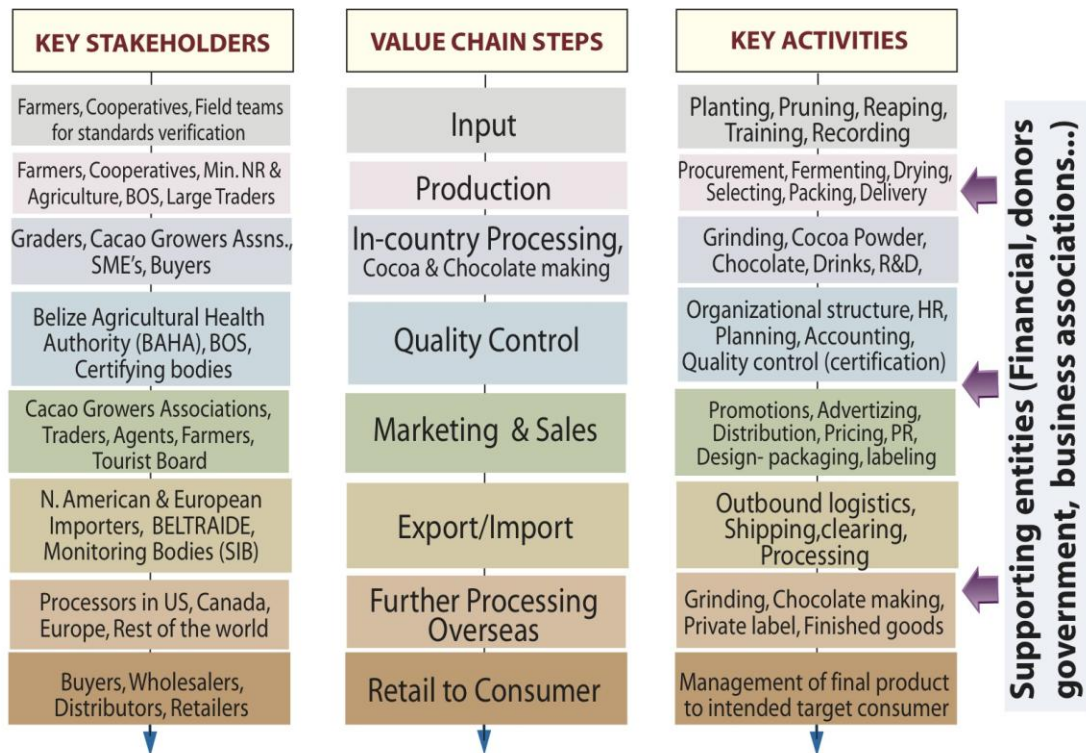
The following section outlines the functions of the main stakeholders, including input suppliers, small growers, buyers, export market channels, domestic value added processing and support services. It should be understood that most value chain analyses for the cacao sector focus on the export-oriented elements of the value chain, as cacao is usually treated as an export commodity. But Belize is in a unique position because in addition to the export market, there exists a budding local value added industry for local consumption that is targeting the growing tourist market. This two-pronged VCA is depicted in the Cacao Cycle chart showing both exports and local chocolate making.

The chart illustrates that Belize's VCA for the cacao sector is both simple and complex. It is simple because there are only two traders operating in the export market (TCGA, MMC); and it is complex because there are a large number of small-scale processors operating in a number of diverse sectors (farming, chocolate making, farm tours, etc.)



The Cacao Cycle chart provides an illustration of the various steps, processes and stakeholders in Belize's cacao value chain. In addition, the relationship between the main actors, influencers and supporters is depicted in the Summary Value Chain below, which shows the value chain steps, the key stakeholders and their activities.

Summary of Value Chain Analysis PRODUCTION and EXPORT of BELIZE CACAO PRODUCTS



Profiles of the Main Value Chain Actors

This section presents the profile of the main stakeholders in Belize's value chain, including input suppliers, smallholder farmers, in-country processors, traders, international chocolate makers, among others. Analysis of the gaps in the roles and responsibilities for actors, supporters and influencers is included in Section 5.0, Challenges and Opportunities.

Input suppliers

The providers of inputs in the Belizean cacao industry have been the main trading partners, primarily TCGA and more recently MMC. These buyers have a vested interest in providing a range of inputs to support the growers – extension support, testing, technicians, standards, transportation, etc. In addition, a number of international donor agencies (USAID, DFID, IDB) and private sector firms (Hershey, Green and Black's) have provided support through the main input supplier, TCGA. For the most part, MNRA, BAHA, Ministry of Health and BBS have had little involvement because of the high level support provided by TCGA, MMC, private sector operators, international agencies and NGOs.

Small growers - Baseline Information

The Toledo District of southern Belize is populated primarily by indigenous Q'eqchi and Mopan Maya, who farm an average of 1 to 3 acres of land. Agriculture is the primary driver of economic activity in the South, accounting for 42% of employment (and 70% of informal employment) compared with 16% nationally. The Maya farmers practice subsistence agriculture using a "milpa" system, which is a small-scale slash-and-burn system of alternating cultivation and fallow (land is cropped for 1 year and fallowed for 6 years). This slash-and-burn agricultural system provides the Maya with most of their subsistence needs (maize, vegetables, and root crops), as well cash crops. Farmers began planting cacao in the 1980s primarily as a cash crop but also to gain usufruct rights to reservation and national

land. Today, cacao is grown by approximately 1000 small farmers, approximately 20% of which ferment and dry the beans. Farms are small, and the majority of farmers prefer to sell wet beans to the main buyers (TCGA and MMC), because they harvest a range of crops.

Some information is available on the income levels and incidence of poverty in the South. Most Maya farmers operate at a subsistence level, which involves low inputs and multiple crops. Since the 1980s, one of the few commercially viable cash crops available to these farmers has been cacao, which has provided the bulk of cash in the local economy over the past 20 years and has accounted for approximately 94% of farmers' income.³⁰ However, incomes are modest. For example, the total revenue farmers received in 2011 amounted to BZ\$178,500, and when shared by 908 growers, suggests that the average cacao grower earns approximately BZ\$197 (US\$100)/year from farming cacao (see Table 7 below). This supports the estimate that a staggering 70 percent of the population in Toledo is under the regional poverty line.³¹ In fact, a report published by UNDP in 2010 suggested that the situation is so bad that Belize may not achieve half of the targets set by the Millennium Development Goals by 2015, including reduction of extreme poverty, women's share of paid employment, and universal primary education³². Unemployment remains high at 16%, particularly affecting the young (30%) and women (22.4%).

Further to this, although women make up a significant proportion of those vulnerable to poverty in Belize, international development projects have had differing impacts on men and women. A 2004 study on "Toledo's Elusive Development" concluded that most development projects have not taken enough account of the social and economic empowerment of women, largely because most projects tended to put emphasis on "farmers", most of which were male, "as units of production" – rather emphasizing households comprising a wider structure. As a result in Toledo, the role and needs of women have been all but invisible. Where account was taken, "it was largely in terms of the *reproductive* rather than the *productive* capacities of women". Programmes were often orthodox, reinforcing domesticity rather than encouraging broader social and economic empowerment and participation.³³

Nevertheless, as indicated earlier, changes in the status of women and opportunities for empowerment are occurring. Improvement in education is having an impact on change in Maya family life, as more girls experience secondary schooling and begin to pursue employment opportunities in tourism and other non-traditional sectors. Also, Maya women's organizations and various projects and programmes are having an impact on women's empowerment. In addition, many of the opportunities for product diversification suggested in this document's Industry Strategy section are designed to reduce poverty and empower women.

Because the Maya farmers practice subsistence agriculture, it will not be possible to work out the gross margins for the VCA because multiple crops are planted on lands and tools and other inputs are used for all crops. Nevertheless, it is possible to calculate their average revenue/income from the annual production figures reported by TCGA and MMC, and dividing by the appropriate number of active farmers (608 with TCGA and 309 with MMC). Table 7 shows that farmers received an average of between BZ\$200 and BZ\$600 per year for their beans. This modest figure increases in significance when it is remembered that cacao sales provide 94% of the cash in the local economy.

³⁰ Arzu et al., 2014, quoted from IDB/MIF Mid-Term Evaluation Report (November 2014)

³¹ Human Development Report, Belize, 2013. Nationally, the level of poverty increased from 33.5 % in 2002 to 41.3% 2009 (MDG Goals Report and Post 2015 Agenda, Belize, September 2013).

³² Belize Scorecard and Outlook Report 2010, UNDP, p. 16 (quoted from Draft National Agriculture and Food Policy, December 2014)

³³ Toledo: A Study in Elusive Development, DFID, May 2004

Table 7: Average Share of Revenue for Farmers (BZ\$)

Year	Prod. (MT)	Prod. (lb)	Wet (lb)	Dry (lb)	Farm price wet/lb	Farm price dry/lb	Revenue wet beans (total + per farmer)	Revenue dry beans (total + per farmer)	Total Revenue	Farmers	Average Revenue/Farmer /Yr
2011	31.7	69,740	159,565	13,948	0.9	2.5	143,609	34,870	178,479	908	197
							BZ\$ Share per farmer	158	38		
2012	67.9	149,380	341,781	29,876	0.9	2.5	307,603	74,690	382,293	908	421
							BZ\$ Share per farmer	339	82		
2013	39.6	87,120	199,331	17,424	1.00	2.65	199,331	46,174	245,504	908	270
							BZ\$ Share per farmer	220	51		
2014	89.3	196,460	449,500	39,292	1.10	2.8	494,451	110,018	604,468	908	666
							BZ\$ Share per farmer	545	121		
									4 Year Average		388

Note: Assume selling 20% dry and 80% wet and conversion of wet beans to dry as 35%

Large growers

Large scale farming of cacao has not been practiced in Belize since the departure of Hershey in the mid-1990s. However, dynamics in the international market has sparked the interest of new entrants in the sector in Belize and other countries around the world. Since 2009, international buyers have shown an interest in buying Belizean cacao beans, both directly from the Maya farmers as well as investing in larger farms. Expanding markets for chocolate and cacao by-products has sparked interest in large-scale commercial farming of cacao, to the point where investors are in the process of reviving production at the old Hershey Farm. Currently, production is occurring on 530 acres in the Cayo District (HCL), and there is interest in another 4,000 acres in small and large farms in Toledo, Stann Creek and Cayo.

Traders (TCGA and MMC)

Toledo Cacao Growers Association (TCGA)

TCGA is an association of over 800 small Maya farmers in the Toledo and Stann Creek districts, who are growing cacao on 1-2 acre farms. TCGA farmers have a total of 1,537 acres in certified organic production, with an additional 92 acres pending certification.

During 2013, TCGA's production decreased by 53.5% (to 26MT) from 54MT in 2012, which was their all time high production year. Multiple factors caused this decrease including cyclical production, farm rehabilitation, and the challenges of Moniliasis, a fungal disease. TCGA remains upbeat as they move toward sustainability and improved product quality and increased quantities with the help of development projects financed by IDB and EU. During 2013, these projects helped to install 10 solar drying facilities, build 3 centralized fermenters and provide over 50 training sessions. Also, 300 acres of cacao was rehabilitated.

In the export market, TCGA's Board of Directors changed the former policy of selling all production to one buyer, thus opening options for sales to new and multiple buyers. In 2013, TCGA sold 60% of their beans (approximately 34MT) to two international buyers, Mondelez (52%) and Choco del Sol (8%). The remaining 40% (14 MT) was sold on the domestic market to local chocolate processors – Belize Chocolate Company, Ixcacao, Cotton Tree, Che'il and Goss (see Pie Chart 2 on page 44 for the breakdown of local processors). Normally, the proportion of domestic sales is between 10% and 20% of production (20% when there is limited production and 10% when production is high). In 2013, the domestic portion increased significantly partly due to decreased bean production and partly because of a shortage in TCGA's stock. In 2014, the figure for domestic sales is estimated to increase to 18 or 20 MT. Even though prices are higher in the export market, TCGA makes a special

effort to supply Belize's local processors to ensure they have a sufficient supply of beans for the growing value added chocolate industry which is sold in the tourism sector. TCGA sells beans to local producers at BZ\$3.75/lb, which is less than they could sell in the international market (BZ\$4.75). As a result, TCGA is in effect subsidizing the cost of local production (MMC sells to domestic processors at BZ\$5.00/lb).

Farmers are paid in full on the spot for their beans, at delivery to TCGA, for both wet and dry beans. TCGA is encouraging growers to increase value addition by drying and fermenting their beans. Currently, only 20% of TCGA's production is dried by farmers. Also, in order to increase production, farmers are being encouraged to "modernize" their production methods through techniques and training provided through TCGA's development projects, and to become more entrepreneurial by reinvesting half of their cacao income to make improvements and expand cacao production. Increasing production is in the interest of TCGA, which needs to increase sales to 250MT to become financially sustainable. However, increasing production may not be in the interest of all growers, who farm multiple crops.

Demand in both the domestic market and on the world market for organic and ethically traded beans is extremely bright and TCGA plans to remain proactive for its members by providing improvements and growth. Also, rather than engaging in a price war with competitors like MMC and other buyers, where farmers are tempted to sell their beans to competing companies for higher prices, TCGA is encouraging growers to remain loyal to the association, which it feels is in the long term interest of the growers.

Maya Mountain Cacao (MMC)

MMC was founded in 2010 by a team of American entrepreneurs and local Belizean cacao farmers and chocolate makers. MMC was established with the mission of creating a more farmer friendly model that is designed to generate higher incomes for farmers through improved market access, micro-credit opportunities and higher yields through a combination of technical services, new plants and market incentives.

MMC is currently working with 300 small Mayan farmers in the southern districts, as well as at least one large farm in the Cayo District (Hummingbird Citrus Ltd). Their aim is to export fine flavor cacao, thus connecting Belizean farmers with specialty chocolate makers in the USA. MMC's niche market buyers prefer Belize's high quality beans that provide the flavours needed to make "fine chocolate". Demand for Belize's varieties of organic cocoa has grown significantly (especially among US chocolate makers). Buyers include seven chocolatiers in the US with more than 80 on the wait list.³⁴

By selling to the specialty bean-to bar market in the US, MMC has been able to fetch higher prices for Belize's fine flavoured organic cacao (see Table 8). Starting in 2011, the average price per metric ton doubled from US\$2,300 to over US\$4,600.

Table 8 - MMC Export Figures 2011-2013

Type	2011	2012	2013	2014 (est)
000 lbs	10.8	30.8	30	95.5
MT	4.899	13.97	13.61	43.3
Sales (BZ\$000)	41.51	126.8	135.9	433.2
Price/per lb (BZ\$)	3.844	4.118	4.53	4.54
Price/MT (US\$)	4,237	4,539	4,993	5,000

³⁴ <http://www.forbes.com/sites/ashoka/2014/10/10/the-chocolate-revolution-central-american-start-up-seeks-to-grow-sustainable-cocoa-production/>

In 2014/15, MMC plans to increase production by helping to plant 82,000 new cacao trees, and providing technical assistance and microloans to over 165 farmers. MMC also operates a demonstration farm that is intended to function as a practical tool to help local and industry-wide cacao farming education, and to help increase Belize's annual production by 50 %.³⁵

In summary, the revenue earned by the two primary traders (TCGA and MMC) demonstrates the precarious position the sector is in (see Tables 9 and 10). To make both organizations financially viable there is a dire need to increase cacao production from 90MT to 400MT. Furthermore, fluctuations in production and price demonstrate the importance of having a stable relationship with a reliable buyer over a long period of time, which creates a sustainable platform for organizations like TCGA and MMC to operate.

Tables 9 and 10 show the revenue earned by TCGA and MMC and the share of revenue going to the farmers (80% in the case of TCGA and 61% for MMC). The tables also show the increasing prices per pound obtained by TCGA in the export market (BZ\$ 2.99 to BZ\$ 4.72), following the lead established by MMC in selling to specialty buyers in the US market. Also shown is the volume and prices for sales to domestic processors, where TCGA sales have increased to between 14 and 18 MT and MMC sales increased to 7 MT.

Table 9: Revenue Earned by TCGA and Portion Paid to Farmers 2012-2014 (BZ\$)

Activity	Units	2012	2013	2014 est.			
Sales to EU buyers	BZ\$/lb	2.99	2.94	4.72*			
Volume of exports	,000 lb	91.2	34.3	59.5			
Volume of exports	MT	41.4	14.6	27			
Export Revenue	BZ\$	272,688	100,842	280,840			
Price to local processors	BZ\$/lb	2.99	3.75	3.75			
Volume of local sales	,000 lb	25.1	30.9	39.6			
Volume of local sales	MT	11.4	14	18			
Local Revenue	BZ\$	75,049	115,875	148,500			
Total Revenue	BZ\$	375,245	216,717	429,340			
Volume from farmers	,000 lb	125.5	65.2	99.1			
Volume from farmers	MT	57.0	28.6	45.0			
Wet beans: 80%	BZ\$/lb	0.90	257,526	1.00	148,656	1.10	248,543
Dry beans: 20%	BZ\$/lb	2.50	62,750	2.65	34,556	2.80	55,496
Total Farmer Share	BZ\$	320,726	183,212	304,039			
Average Share/608 Farmer	BZ\$	527	301	500			
Farmer % of sales		85	85	71			
TCGA Operating Margin	BZ\$	54,969	33,505	125,301			
TCGA % of sales		15	15	29			

Source: Table 1.2 in Cacao Industry Profile and interview with TCGA

What the tables don't show is the expenses that both organizations have to pay for extension services, drying and fermenting, transportation, etc., all of which comes out of their operating margins (19% for TCGA and 38% for MMC). The price paid on the international market includes a number of premiums that TCGA receives for Fairtrade (US\$200/MT), organic (US\$300/MT) and a separate premium for a "Belize blend", which TCGA negotiates. These funds are used to finance farmer programs, certification and the AGM. In 2012, the Fairtrade

³⁵ <http://www.candyindustry.com/blogs/14-candy-industry-blog/post/86477-kickstarting-help-for-belizean-cocoa-farmers>

premium amounted to BZ\$ 16,668. The organization also benefits from international development projects, which provide technical assistance and pay for infrastructure. MMC has a “Direct Trade” relationship with its buyers, which attracts a higher price based on the quality of beans, organic and other factors.

Table 10: Revenue Earned by MMC and Portion Paid to Farmers 2011-2014 (BZ\$)

Activity	Units	2011	2012	2013	2014
Sales to US buyers	BZ\$/lb	3.84	4.12	4.53	5.03
Volume of exports	,000 lb	10.8	30.8	30	71.0
Volume of exports	MT	4.9	13.9	13.6	32.2
Export Revenue	BZ\$	41,472	126,896	135,900	357,256
Price to local processors	BZ\$/lb		5.00	5.00	5.00
Volume of local sales	,000 lb		11	11	10.6
Volume of local sales	MT		5	5	4.8
Local Revenue	BZ\$		55,000	55,000	52,766
Additional Revenue	BZ\$				130,094
Total Revenue	BZ\$	41,472	181,896	190,900	410,023
Volume from farmers	,000 lb	10.8	41.8	41	81.6
Volume from farmers	MT	4.9	18.9	18.6	37.0
Wet beans from farmers	BZ\$	1.00 30,780	1.00 119,130	1.00 116,850	1.10 255,747
Dry beans from farmers	BZ\$	0	0	0	0
Total Farmer Share	BZ\$	30,780	119,130	116,850	255,747
Average Share/309 farmers	BZ\$		386	378	829
Farmer % of sales		74	65	61	47
MMC Operating Margin	BZ\$	10,692	62,766	74,050	284,368
MMC % of sales		26	35	39	53

Source: Table 1.2 in *Cacao Industry Profile and interview with MMC*

Local Chocolate Processors

Cultural traditions are strong among the Maya, and farming is at the root of these traditions. But changes are coming to the Toledo area that are discouraging younger farmers from continuing the lifestyle associated with subsistence agriculture. Some innovative families are becoming more interested in making a living from offering tours and processing chocolate. This trend is creating a range of other stakeholders in Toledo and throughout Belize that should be included in the study – chocolate makers, farm and chocolate tours, eco lodges and resorts that feature cacao production and farming. These domestic players have been attracting national exposure through the Toledo Chocolate Festival, an annual exposition attended by about 1,900 locals and tourists at a weekend event in May.³⁶

Currently, the Belize cacao sector has few value added products, chocolate bars being the main one. Belize has about 7 well-established chocolate brands – Cotton Tree, Moho, Kakaw, Goss, Che’il, Ixcacao and Eliado’s. Four are locally owned chocolate makers and tour operators that make a range of cacao products and farm tours on a micro scale (Belize Chocolate Company, Che’il, Eliado’s and Ixcacao), and three are operated by foreign-owned chocolate companies (Cotton Tree, Moho and Goss).

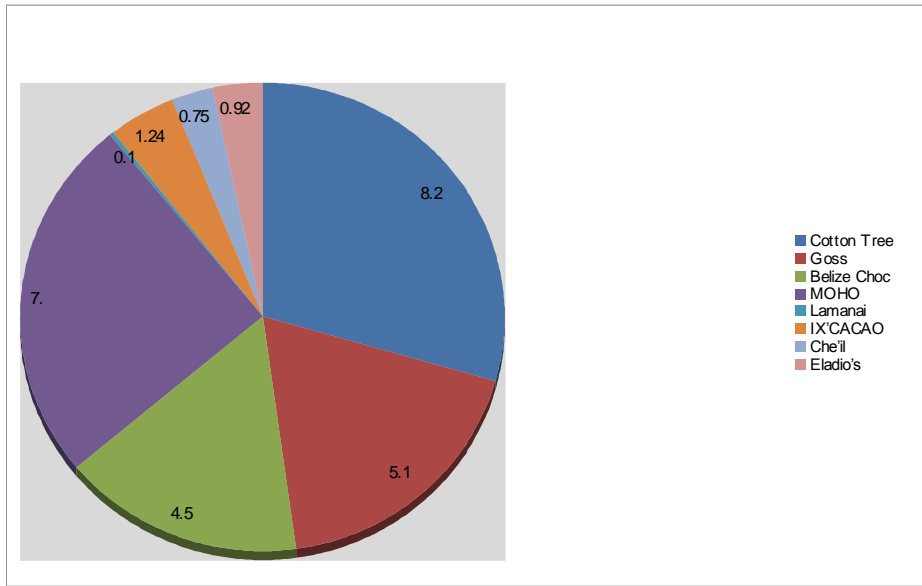
³⁶ Toledo Tourism Information Center (BTIA Toledo)

Most local chocolate processors buy cacao beans from TCGA at BZ\$3.75/lb, with the exception of Moho and Cotton Tree, which buy beans from MMC at BZ\$5.00/lb. Innovation and support from NGOs and donor agencies has allowed some rudimentary product development, training and promotion. Products include a range of chocolate bars, cacao powder and cacao tea bags. Tours and the Maya museum are an attraction for tourists and sales are good.

The companies sell chocolate bars on the local market, predominantly to tourists since most Belizeans prefer milk chocolate and the price is higher than imported chocolate. The attraction among tourists is that it is a locally made product and sourced from Maya growers. Sales of chocolate bars occur mainly through retail gift shops or through cacao farm tours, and some companies export small quantities to overseas visitors either on-line or through “carriers” traveling to the US. Sales are limited by price, by lack of demand for local chocolate products, and sometimes by an inadequate supply of beans. Volumes are small, packaging is low quality, and level of technology is low compared to the boutique chocolate makers in the US or the well-established chocolate makers of Europe. Some chocolate makers are progressing into additional value added products that are offshoots of the chocolate making process, such as cocoa powder and tea, which are available in small quantities. Other locally available value added items include beauty products like cocoa butter, lip balm, soaps and scrubs, aromatherapy chocolate candles and spa gifts. Many of these other value added products suffer from a lack of proper in-store merchandizing, creative packaging, and quality labeling which would give them greater consumer appeal.

Rough estimates are that the local processors generate approximately BZ\$ 1.9 million for the economy from the sale of finished chocolate products. See Pie Chart 2 for the proportion of the domestic market share of the local chocolate processors.

Pie Chart 2: Domestic Market Share of Local Chocolate Processors



Cacao Farm Tours

There are approximately 15 chocolate and tour-related businesses currently operating in the Toledo area. The two main ones are traditional Maya cacao growers who have branched out to make chocolate and offer farm tours (IXCACAO and Eladio's Chocolate Adventure). These are family operations where the father has been a grower and the mother makes chocolate. The children have seen the potential of earning more from chocolate making and tours. The approach each has taken to earn a living for their families has been different.

IXCACAO has upgraded the chocolate making equipment to increase throughput and Eladio has strived for getting a better price for the beans through MMC's 'bean-to-bar' model.

In 2014, IXCACAO recorded 1,074 scheduled bookings for the year, plus another 50% drop-ins, for an approximate total of 1,600. This works out to an average of 133 visits every month (4 per day). By charging US\$27.50 per person, plus revenue earned from selling chocolate bars³⁷, the business provides a healthy income for a chocolate-making family, and significantly more than they would make from farming cacao (see Table 11). In 2014 Eladio had 800 visitors and has already had 500 in the first 2 months of 2015. Che'il, a chocolate maker in Stann Creek, estimates that he sells 100 bars (1.5 oz) per week at BZ\$3.50, for an annual total of BZ\$18,200.

Table 11: Profile of the New Maya Farmer/Tour Operator in the South – IXCACAO

Business	Visitors/Sales	Fee (US\$)	Sales (US\$)
IXCACAO farm visits 2014	1,600 annual (133 monthly)	\$27.50 per visitor	\$44,000 yearly (\$3,667 monthly)
Chocolate sales 2014	13,650 bars (80% cacao)	\$5.00 per 4oz bar	\$68,250

Other Value Added Businesses (cacao by-products, crafts, etc.)

Some farmers and their families have started adding value by making cocoa butter, chocolate, soap, wine, compost and tourism-related products. These cacao by-products have contributed to increased earnings for families, particularly women. Improved marketing of southern Belize's "Cacao Experience" should be promoted by BTB, which will increase earnings related to farm tours by replicating successful experiences. Stay-over tourists can enjoy a range of options from chocolate making, farm tours, Maya ruins, living Maya, lunch, zip line, river tubing and home-stays.

There will be room for more cacao-related activities after the Norwegian Cruise Line cruise terminal at Harvest Caye becomes operational. Bus loads of tour groups of up to 120 will be looking for 1-hour activities such as the chocolate experience, along with archeological sites and fauna reservations that are conveniently located along the route. But the businesses will need to improve facilities and certifications so as to satisfy the cruise line's standards.

The activities and revenue of the main actors, growers, traders, processor and tour operators are summarized in Table 12.

Table 12: Outline of Belize Cacao Stakeholders: Estimated Employment and Revenue

Cacao Suppliers	Direct Employees	Indirect Jobs	Total	Export Markets	Domestic Markets/Products	Sales (BZ\$)
Chocolate Processors & Tours						
MOHO	12	0	12	USA	Chocolate sales	500,000
Cotton Tree	3	0	3		Chocolate sales	500,000
Goss	6	0	6		Chocolate sales	340,000
Belize Choc	9	0	9		Chocolate sales	340,000
IXCACAO	4	4	8	USA, Canada	Chocolate making, farm tours, living Maya, lunch, home stay	224,500
Che'il	2				Chocolate making, museum tour	18,200
Eladio's Chocolate	3				Chocolate making, farm tours, living Maya, lunch, home stay	100,000

³⁷ In 2014, Ixcacao sold 13,650 4oz bars made from 2,730 lbs of cacao beans, 40% of which was bought from TCGA and 60% of home-grown cacao

Adventure						
Totals	70	1,160	1,225			2,022,700
Traders						
TCGA	13	608	621	UK, Amsterdam, Germany, Canada		300,000 (Operating margin: 150,000)
MMC	42	300	318	USA (8 chocolatiers)		300,000 (Margin: 200,000)
Totals	55	908	939			600,000
Growers	908					125,000
Grand Total	1033					2,625,000

Sources: Belize Export Consortium Proposal, Cluster of Premium Chocolate Producers, Shahera McKoy, May 2014, and interviews with stakeholders

NGOs and Other Stakeholders

NGOs have provided input to Belize's cacao value chain. Organizations range from environmental groups to religious groups to women's groups, and have benefiting from donor-funded programs.

Bean-to-Bar Buyers

'Bean-to-bar' buyers represent a new trend among the US and Europe chocolatiers where boutique chocolate makers build a marketing story around growers in a developing country who participate in supplying quality beans for a particular product. Dandelion is an example of a chocolate company in the US that makes specialty chocolate bars that are sold in designer stores, airports and 'coffee shop' type retail outlets, as opposed to supermarkets. The highly prized cacao creates special flavours of dark chocolate and fetches a high price.

Valrhona is a chocolate company in Europe, with a deeper tradition in fine chocolate and elaborate systems of processing to improve texture. Like Dandelion they have developed products that are renowned for their particular qualities and tell the benefits of the cacao from a particular region, or even grower. Both Valrhona and Dandelion have developed online sales for their chocolates. The companies visit the growers to ensure they are getting the quality of cacao and the supply will be steady and they offer the stability of contracts with the growers.

Other Consumers

Other consumers include a) the superfood, raw, organic, health advocates, b) the connoisseurs and specialists, c) the adventurous, exotic flavour, try-anything-chocoholics that are categorized as high end, middle market and basic, and d) tourists in Belize. What gives the "Maya" chocolate its cache and identity is the Heirloom Criollo strains in Toledo, which are organic and special, and the best tasting, which need to be protected, preserved and marketed.

4.1 Methodology for the VCA

The methodology for analyzing Belize's cocoa value chain is focused on the estimated income/revenue accruing to the various stakeholders – small growers, large farmers, traders, processors and exporters, based on the cocoa value chain depicted in the "cacao cycle" (see page 36). Ideally, the VCA should include a breakdown of the costs of production and processing and a tabulation of the gross margins. However, as many of the actors are subsistence level farmers and/or private sector operators, it is difficult to get accurate figures for costs, profit margins and trade secrets. Nevertheless, a comparison of income/revenue provides an accurate snapshot of the situation in Belize at the present time.

4.2 Results

Based on an examination of exports, niche markets, farmer income, local value added products and linkages to the tourism sector, the value chain analysis presents a number of scenarios and options for cacao production, the export sector and value added processing in Belize.

Exports

The graph of the world production of cacao (page 31) demonstrates that there is little hope for Belize in trying and compete with West Africa or regional powerhouses such as Ecuador in exporting cacao beans. However, by focusing on the *quality* of certain cacao varieties, Belize can attract significantly higher prices in international markets. Following this export strategy means that Belize should continue to explore the various niche opportunities presented by fine chocolate buyers for the bean-to-bar market.

Belize farmers obtain one of the highest prices for beans compared to other fine flavour producing countries in the region such as Ecuador, the Dominican Republic and Jamaica. Farmers in Belize receive approximately 75% above the world market price for cocoa (currently at \$2,900)³⁸. TCGA sells its beans on the export market for between US\$4,400 and US\$5,600. As a non-profit organization, TCGA does not retain a profit margin, but its operating margin is approximately 20%. MMC tends to negotiate higher prices on the export market (over US\$5,000/MT), and has a higher operating margin (38%).

Table 13 shows the comparative prices that Belize has been able to attract on the international market, with overseas buyers paying increasingly higher amounts for Belizean cacao in the last 4 years. The table shows that US-based fine chocolate makers are paying higher prices, and that TCGA is catching onto this trend by selling to smaller processors in Europe, where for example one buyer based in Belgium (Zotter) paid US\$10,000 to one of TCGA's brokers in Holland for 1 ton of Belize cacao. Although there is a premium price to be paid for quality, many of these fine chocolate processors buy in small quantities (from 500kg to 1 MT), which is normally sourced from an importer/broker who has to pay for shipping, brokerage, taxes and inland transportation. Nevertheless, this is an example of the changing market dynamics that is enabling non-profit organizations like TCGA to catch-up to private sector operators like MMC. This is important information that needs to be understood by stakeholders in Belize, because the international market dynamics can influence local farmers when they hear that international buyers are paying increasingly higher prices. Farmers have to consider the pros and cons of short-term price increases against the stability of long term relationships with guaranteed buyers.

Table 13: Comparison of Belize Cacao Export Prices by Country (US\$/MT 2011 – 2014)

Country	2011	2012	2013	2014
USA	4,237	4,540	4,994	5,000
Swiss			4,806	
Holland		3,306	3,012	
Germany		3,177		
TCGA (local sales)				4,134
MMC (local sales)				5,512
World (Bulk) Price	2,200	2,400	2,038	2,900

Domestic Production

In the past 4 years, price has been a major factor in the battle for cacao production in Belize. With the entrance of MMC in 2010, the two main trading organizations (TCGA and MMC)

³⁸ Source: interview with TCGA, US \$3,900 per MT converts to US\$1.769 per lb (BZ\$3.54)

have been waging a price war, offering farmers increasingly higher prices for wet as well as dry beans. In response to internal competition, TCGA's prices have risen from 90 Belize cents (wet) and BZ\$2.50 (dry) in 2012 to \$1.00 and \$2.65 in 2013, and to \$1.10 and \$2.75 and \$2.80 in 2014. In 2015 the price for dry beans has been increased to \$3.00.

The intention of the price war is to win over farmers by encouraging them to sell to the highest bidder. This has resulted in battles over loyalty, prices, organic certification, and a number of other fronts, essentially shaking up the cultural glue that has unified the Maya under TCGA since the early 1980s. The price war is also having an effect on farmer production and productivity. As MMC buys wet beans only, both organizations have been offering higher prices for wet beans, so there is little incentive for farmers to increase productivity or to increase on-farm quality and value addition by fermenting and drying their beans. Less attention at the farm results in reduced farm level quality control, less value addition and stagnant productivity.

Currently, one acre produces a dismal 115 to 200 lbs per acre, which is some 400% less than the target and 600% less than the optimum. Because of Belize's low cacao output in the Toledo area, TCGA and MMC are trying to implement improved production systems and increased productivity. Increasing production will serve two purposes, it will meet the growing demand for Belize's high quality beans, and it will ensure the financial sustainability of TCGA and MMC as trading organizations. But the price war appears to be destabilizing the incentive structure that is designed to increase farmer productivity and increase on-farm value addition, as farmers can simply rely on increased income through price increases, instead of increasing productivity. It is evident that the production system needs a drastic shift in order to increase production, productivity and farmer's income levels. However, with the new competitive international market scenario, new buyers are arriving every month and offering farmers higher prices – so there is little incentive for farmers to increase productivity.

One way to escape this poor productivity loop has been to expand production into other areas and invest in larger farms, which is what both TCGA and MMC have been trying to do, by reviving production at the old Hershey farm and searching for other farms and partners. This may create a new category of stakeholder in the Belize cacao sector, that of farm worker. The same situation is happening in Jamaica, where new buyers are flocking to old cacao farms and offering farmers increasingly higher prices (US\$4700-\$5000/MT FOB).

There are a number of ways Belize can exploit the current niche market opportunities to benefit farmers and other cacao stakeholders. Belize has a number of advantages that can be taken advantage of: Close proximity to North America where the growing US market is doubling every year; easy shipping route; and the "Belize Blend" that offers fine flavour cacao.

The comparative benefits of the TCGA and MMC models of production are depicted in the following chocolate bar graphics, which show the relative percentages that accrue to the farmers, traders, retailers, etc. (see Chocolate Bar #2 & #3). This can be contrasted with the percentages earned in the "bulk" chocolate bar scenario (Choc Bar #1).

The first chocolate bar illustrates the percentages of the final price that the various stakeholders in the value chain receive from the export of bulk cacao beans that go into making a \$2 chocolate bar for sale in US or European retail stores, indicating that farmers receive 3%.

Chocolate Bar Figure 1: Percentages for Bulk Cacao Beans



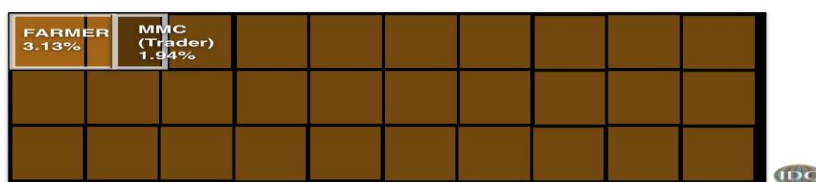
The second and third chocolate bar illustrations show the percentages in the “Bean-to-Bar” market (TCGA and MMC) indicating that farmers still receive approximately 3% of the final value of the chocolate bar, and the in-country traders (TCGA and MMC) receive between 1 and 2%, with the bulk of the value being exported overseas.

Chocolate Bar Figure 2: Percentages for “Bean-to-Bar” Market (MMC)

THE REAL COST OF A CHOCOLATE BAR
 MAYA MOUNTAIN CACAO - (Bean-to-Bar Trade)
 US\$10.00 Chocolate Bar (retail)

FARMER	3.13%	US\$0.31
TRADER	1.94%	US\$0.19
Outside Belize	94.93%	US\$9.50

Other Costs & Markups - Grinder Processor, Transportation, Production, Packaging, Marketing, Retail/ Store margins

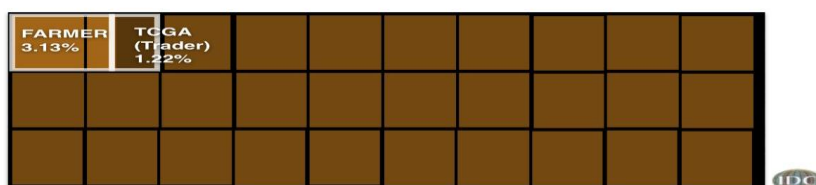


Chocolate Bar Figure 3: Percentages for “Bean-to-Bar” Market (TCGA)

THE REAL COST OF A CHOCOLATE BAR
 TCGA Toledo Cacao Growers Association - (Bean-to-Bar Trade)
 US\$10.00 Chocolate Bar (retail)

FARMER	3.13%	US\$0.31
TRADER	1.22%	US\$0.12
Outside Belize	95.65%	US\$9.57

Other Costs & Markups - Grinder Processor, Transportation, Production, Packaging, Marketing, Retail/ Store margins



Local Value Added Processing

Apart from exporting raw cacao beans, local chocolate processors contribute a significant amount of value added benefit to the domestic economy by generating a significant amount of

employment and income. Higher margins enable these local chocolate processors to contribute approximately BZ\$ 1.9 million to the domestic economy from the processing of approximately 15 tons of cacao beans. Table 14 shows estimated sales figures by chocolate processors in 2013.

Table 14: Estimated Margins enjoyed by Local Processors (2013) – BZ\$

Business	Chocolate Output	Cacao Inputs (lb) MT BZ\$	Sales (BZ\$)	Margin (BZ\$)	Operating Costs
Belize Chocolate Co	49,605 bars	4-5 MT (9,921 lbs) = Bz 37,203.75	496,050	458,846.25 (92.5%)	9 staff, rent
IXCACAO. (buys 40% from TCGA)	13,650 4oz bars (80% cacao)	2,730 lbs of cacao (40% = 1,092 = Bz 4,095)	136,500	132,405 (97%)	4 staff
Che`il	5,265 bars	1,653 lbs = Bz 6,200	18,430	76,450 (92.5%)	
Eladio`s	10,140 bars	2,028 lbs = Bz 7,605	101,400	93,765 (92.5%)	
Goss					6 staff, rent
Cotton Tree (TCGA/MMC)	90,390 bars	18,078 lbs = Bz 67,792	903,900	836,108 (92.5%)	3 staff, rent
Moho (from MMC Bz5.00/lb)	26,000 bars	5,200 lbs = Bz 26,000	260,000	234,000 (90%)	12 staff, (est.) rent (12,800)
Totals	198,050 bars	34,410 lbs (15.6 MT)	1,980,500		

Figure 4 shows that farmers and local traders receive a higher percentage of the final sales value when chocolate is processed locally for sale the domestic chocolate market, 6.27% and 2.8% respectively. This is primarily because the costs of freight and storage have been reduced, and the overseas portion is limited to packaging material (10%).

Chocolate Bar Figure 4: Percentages from Local Chocolate Processing Market

THE REAL COST OF A CHOCOLATE BAR
Local - BELIZE CHOCOLATE BAR
US\$5.00 Chocolate Bar (retail)

FARMER	6.27%	US\$0.32
TRADER	2.81%	US\$0.14
Outside Belize Packaging	10%	US\$0.50

Other Costs & Markups IN BELIZE - Grinder Processor, Transportation, Production, Marketing, Retail/ Store margins



Exports versus Local Processing

Table 15 compares the amount of revenue earned from the sale of cacao beans overseas versus that generated from processing into chocolate bars for sale in Belize. When the cacao beans are exported overseas, local farmers and buyers (TCGA and MMC) retain between 4.5% and 9% of the final value of the finished product. When the beans are used by local chocolate processors, between 7.5% and 10% is retained by the farmers, TCGA and MMC, with approximately 90% of the value addition staying in Belize (10% is used to buy packaging material overseas). This demonstrates the significant added benefits to the local economy from processing beans into chocolate bars in Belize. Once the revenue from farm tours, accommodation, meals, etc. are added to the sale of local chocolate bars, the benefits accruing to the local economy become quite significant.

Table 15: Comparison of Revenue Generated from Chocolate Bars (Overseas & Belize)

Value Proposition	Cacao Beans (2014)	Sale Price / Revenue	TCGA/MMC/Farmer % of Final Sale	Chocolate Bars (3.5oz)/ Sale price	Revenue (Overseas & in Belize)
Export	89 MT (196,873 lbs)	US\$5000/MT US\$445,000	9% 4.5%	984,365 US\$ 5.00 US\$ 10.00	\$4,921,825 \$9,843,650 (91 to 95% of value exported overseas)
Local chocolate sales	17 MT (37,480 lbs)	TCGA/MMC US\$70,275 US\$ 93,700	7.5% 10%	187,400 US\$5.00	\$937,000 (100% stays in Belize)

Chocolate Tourism: "Farm-to-Table" Tours – the US\$ 2,000 Chocolate Bar

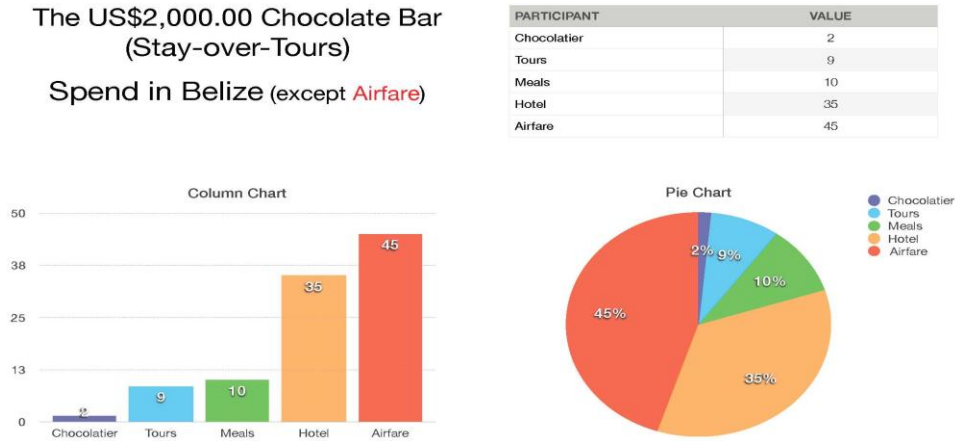
Even though farmers may get a higher percentage of the final value from the local processed chocolate, they receive the same price per pound for their beans whether they are used for the export or domestic market (BZ\$ 1.10 wet and \$2.80 dry). This translates into a modest average income of between \$200 and \$600 per year. However, this income increases exponentially when innovative farmers participate in the "farm-to-table" market by offering farm tours and chocolate making (\$44,000 as shown in Table 11). The value chain analysis demonstrates that significantly higher levels of income can be attained by stakeholders participating in cacao farm tours and chocolate making.

Farmers and chocolate processors can significantly increase their income when catering to the tourists coming to Belize by selling chocolate bars and providing farm and chocolate tours. Hence, the value of a \$2 chocolate bar sold in a New York supermarket increases to over \$2,000 when consumed in Belize. Granted, the majority of this \$2,000 will be spent on hotels and airfare, and only between 3 and 4 percent will accrue to the farmer. Nevertheless, the main point is that Belize should not attempt to focus on the fiercely competitive market involved in attempting to export \$2 chocolate bars into the US market, when the country can start thinking about destination strategies for farm tours, chocolate tourism, etc. The income to the local Maya communities increases from higher value items such as meals, farm tours, chocolate making, culture tourism, etc. (eg., 3% of \$2 is 6 cents, while 3% of \$2,000 is \$60).

In addition, international tourism trends are creating an expanding market for handmade artisan products, and visitors to Belize are following in the trend. This can provide benefits for communities to diversify their livelihoods and create opportunities for women to earn additional income from making by-products such as chocolate and handicrafts, or find employment in new businesses. The opening of a cruise terminal in Harvest Caye will provide a number of opportunities in southern Belize for chocolate sales, farm tours, and other tourism-related activities. Norwegian Cruise Lines expects 60,000 cruise tourists in the

first year and 300,000 in three years. And they estimate that 25% of the passengers will take a tour, and will purchase an average of 4 chocolate bars each. Thus, the demand for the domestic market for chocolate products alone will double. So there is a dire need to increase production of cacao in order to meet local demand.

Chart 3: Spend in Belize for Chocolate Tourism



5.0 CHALLENGES AND OPPORTUNITIES

This section summarizes the challenges and opportunities in Belize's cacao value chain, and used these as a guide in the development of the Industry Strategy. The VCA demonstrated that Belize's cacao sector is comprised of two value chains, an **export** and a **national** value chain. The following chart depicts the different roles and responsibilities of the various actors, supporters and influencers at the micro, meso and macro levels.

The primary actors, supporters and influencers in Belize's cacao value chain are as follows:

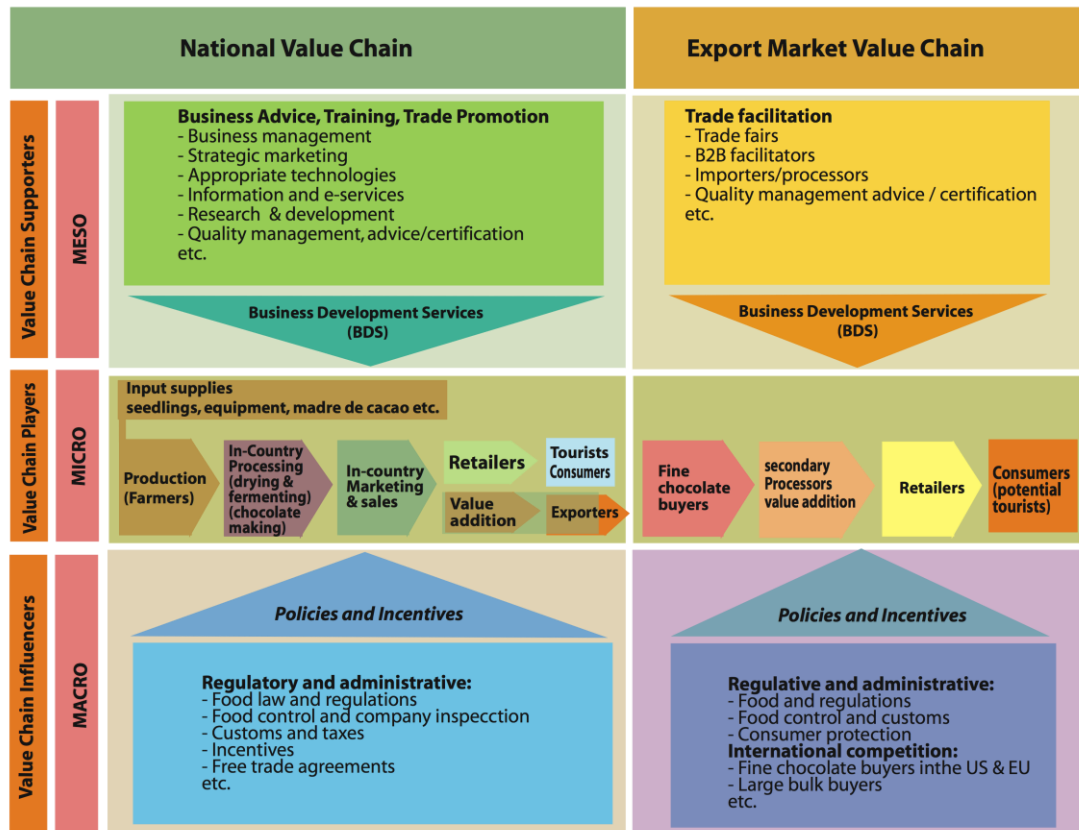
Actors: Farmers, TCGA, MMC, Processors, Local Traders, Exporters, Importers, Distributors, Retailers, Marketers

Supporters: Government support ministries (Ministries of Trade, Agriculture, Tourism, Health) and agencies (BELTRAIDE, BAHA, BBS), financial institutions, quality control agencies (Soil Association, IMO, USDA), donors, business associations

Influencers: Government policy makers

In Belize's case, there are a number of challenges and opportunities among these groups and at each link in the value chain. The SWOT analysis presents the roles and responsibilities of each of these groups in Belize, as well as the strengths, weaknesses, opportunities and threats in Belize's value chains.

Chart 4: Actors, Supporters & Influencers in Belize's National & Export Value Chains



SWOT Analysis

Strengths

- A strong growers association and a unifying sense of cohesion and loyalty among the majority of Maya growers
- Strong links to the market involving small groups of organic buyers in “bean-to-bar” markets in the US and Europe
- Quality beans that boutique buyers find have the desirable flavours for their market
- Because of TCGA’s and MMC’s forward sales strategies, they are able to guarantee growers a fair price, with premiums paid for organic, Fairtrade, “Belize blend”.

Weaknesses

- Low production and infighting among traders is having an impact on forward sales strategies, which reduces the country’s ability to deliver on forward contracts and increases the risk to buyers
- Reliance on traditional farming methods where small farmers don’t have the capacity to adopt modern methods of cacao production, which has resulted in low productivity, far lower than Belize’s competitors in the region
- Lack of a national research program geared toward finding solutions to problems of disease, soil fertility, pruning, etc., and each trade organization has to do its own research (MMC, TCGA, individuals).
- Quality management at the farm level, which creates delays, extra work and losses for the traders
- Inefficient organic certification with 2 sets of field officers covering the same farms for IMO and Soil Association
- Lack of a skilled work force in chocolate processing and new product development

- Weak support for SMEs in southern Belize

Opportunities

- Demands of the market: Belize is well-positioned to take advantage of the new trends in the market for fine quality, traceable, certified and organic cacao
- Increased tourism in southern Belize; Norwegian Cruise Line port at Harvest Caye and growing interest in eco-tourism
- Tourist market is demanding an improved range of Belize-made products such as chocolate products, gift and craft items
- EU and US increased demand for fine flavoured cacao for destination chocolate
- Organically grown and ethically traded cacao & new interest in grower communities

Threats:

- Milpa agriculture practices and insecure tenure in southern Belize is leading to erratic expansion of acreage planted and possibly environmental degradation
- Ageing cacao trees and farmers
- Effects of climate change and hurricanes on production
- Diseases devastating cacao production
- Disbanding of the TCGA
- Slash and burn and other crop systems that devastate forest ecosystem, reduce soil health and affect rainfall patterns
- Over-zealous tourism traffic damage to a fragile culture, farms and environment

The main opportunities and constraints affecting each of these groups have been summarized in an Overview of Constraints and Opportunities (Chart 5, page 57), with a more detailed outline of opportunities and constraints for each value chain link attached in **Annex 2**. A summary of the major points is listed below:

Production

The VCA analysis indicates that by focusing on higher value niche markets, farmers may be able to increase their income, particularly by increasing on-farm quality, value addition and productivity. However, increasing production from the present 89 MT (2014) is the single most important constraint holding back the sector. It has been estimated that there is currently around 500 MT of unmet demand, and this figure increases each time a new potential cacao buyer visits Belize. For example, a group of importers based in Arizona (Gone Green) indicated that they could buy all the beans Belize could grow – they were looking for large quantities from 100 to 500 MT. With considerable investment and higher yields production is estimated at over 2,000 MT in 10 years.

Traders

Fine cacao receives a higher price. Given the higher price paid for quality cacao beans, TCGA and other buyers of Belize's cacao beans should continue to supply niche markets in both international and domestic segments. Because of small production levels in Belize and the logistics associated with organic cacao, there is a need to align objectives, commitment of resources, and sharing of best practices among the two main trading and support organizations (TCGA and MMC). These two organizations should come to a business agreement, put an end to the price war and focus on improving quality and production.

Wholesale buyers are already in a line to buy Belize's organic cacao (both EU & US). The IDC team conducted repeated and focused interviews with major wholesale buyers of healthfood and superfood, raw, organic cacao products in the US – "Gone Green" who want to buy all of Belize's production of beans and is now working with TCGA, to develop "nibs" for export (see *Marketing Strategy* and *Fine Chocolate* attachment). They concurred with IDC's findings that identified nibs as the easiest and one of most viable value added products for export.

IDC also interviewed chocolate makers and chocolatiers about their products and their markets – Companies in EU, North America, Belize and Jamaica. Facts gleaned from these interviews are used throughout the Marketing Strategy. Also *See Fine Chocolate attachment* for expanded information.

Retail products – Value added cacao products present many opportunities for Belize for both local and export markets. Some of the potential products, which are referred to as "Every'ting Cacao", are to be developed. They are listed in section 10.2 of the Industry Strategy (Market for Value Added Cacao Products). It will be important to promote these products under a banner such as "Every'ting Cacao" or "Unique Belize" supporting the Belize Brand campaign.

Support

There has been no support offered by the Ministries of Agriculture or Trade. In the past, TCGA has received excellent support from private sector companies with direct links to the market, such as HFC and Green & Black's, and from donor agencies such as the recent IDB/MIF and EU projects. TCGA had the Executive Director, Accountant, Project Officer and Field Officers funded by these projects. MMC has had to use grants from partners, Kickstarter crowd funding and consulting projects to supplement the sale of beans. Both TCGA and MMC must double the volume of cacao beans to be self sustaining. Going forward, it is likely that Maya farmers will continue to need this type of private sector, market-linked support. TCGA and MMC are still exploring various options for establishing relationships with buyers in the US and EU markets, as MMC has done with Dandelion and Valrhona and TCGA has done with Gone Green and Choco Del Sol.

Analysis of the success of donor-funded suggests that private sector linkages are far more appropriate for creating linkages to the market and sustaining income. The trick is to establish partnerships with like-minded, ethically-oriented organizations and buyers. The bean-to-bar market is all about establishing these types of partnerships between growers in developing countries and consumers in the US and Europe. These partnerships provide a stable market for both parties (grower and buyer) because of alignment of philosophies for marketing organically grown cacao, fair trade and labor practices. Besides, the marketing strategy is based around the story of the growers. However, it cannot be emphasized enough that Belize has to increase its supply (and improve its organization of growers) if it is to continue to meet the demands of this niche market. Government support is required to provide an over-arching entity to take on the cost and responsibility of certification, research, testing, finance training and promotion of investment.

Growers

The world price of cacao has not been keeping up with inflation. As with all commodities and how price has affected growers, they have had to increase volumes or add value to keep up with inflation. Forty years ago the world price for cacao was US\$1,500/MT. Today, the bulk price is around US\$2,900/MT, or US\$4,500 for organic. Calculating the average inflation rate at 4% per annum, \$1,500 in 1974 US dollars is worth about US\$7,200 today. Belize is not marketing cacao at bulk prices. The best prices for fine flavoured cacao today are US\$5,500/MT. This does not bode well for the future of growers in Belize or anywhere, unless productivity can be increased and value can be added to fill the gap left by inflation. This is one of the main findings of the VCA – farmers should be encouraged to participate in increased value added activities both on-farm (fermenting and drying) and to move along the value chain into processing chocolate and farm tours.

Local processing

Younger farmers are leaving the sector, but some innovative ones are developing farm tours, chocolate making, and other tourism related activities. Given the higher levels of income from processing chocolate and farm tours, local operators should continue to add to Belize's

tourism destination strategies, perhaps with support from BTB and BELTRAIDE. Chocolate bars are the most highly developed value added product that Belize has. Unfortunately, none of the brands are innovative or up to par for competitive niche markets. They are at a standstill, needing further development (quality) and more raw materials (cacao beans) to expand. The many obstacles found and reasons for this conclusion are outlined in the SWOT, *Marketing Analysis* and the *Marketing Strategy* and *Fine Chocolate* sections.

Trade Policy

Like many Caribbean countries, Belize's trade policies tend to focus on exports, whereas in the case of cacao, tourism can be seen as a form of export – where instead of shipping cacao products overseas, tourists are willing to travel to Belize to experience cultural tourism, and bring in foreign exchange.

Support Institutions

The cacao industry is at an early stage of development and will require support from all of BELTRAIDE's strategic areas. The sector requires exponential growth to meet international and domestic demand, so there is potential to attract investors who are interested in cacao production. Support is also needed for SME development and in the creation of linkages between tourism and agriculture. Policies and incentives best suited to the sector will affect trade, agriculture, tourism and health and BELTRAIDE would serve well as the over-arching organization to bring together the ministries and grower associations, chocolate-makers, marketers and investors. In this sense, BELTRAIDE can bring together public and private sector stakeholders to oversee the cacao sector.

In the current environment of rapid growth there is urgent attention and support required from MNRA for detection of superior cacao germplasm and nurseries as well as enforcement of organic standards. BAHA needs to look beyond the cacao beans for export and ensure compliance for the local manufacturers. Ministry of Health has to ensure education and compliance of the local chocolate makers in the interest of food safety. The BBS should form a working committee to bring cacao to international standards for the stakeholders in Belize so as to agree and adopt the standards that best fit local conditions and comply with the dominant export markets in the EU and USA. Belize government collaboration with countries in the region would reduce costs and increase local knowledge. TCGA and MMC have already established relationships with Honduras and Guatemala respectively. Trinidad has a well-established cocoa gene bank and Jamaica is also in the process of updating its cocoa standards for their local conditions. Universities can also support the national effort to improve and organize the sector and divest considerable cost in the interest of education. The University of Hawaii has been leading research in cacao and collaborating with MMC, and the University of Florida is already working with one Belizean grower. Where possible, the results of the research must benefit all stakeholders in Belize.

Justification for Growing Organic Cacao in Belize

The organizations TCGA and MMC have said that organic cacao production is best suited to the conditions and market in Belize. The justification for this position has been based on the cost of production and the expected yield as well as the resulting price. For a similar acreage of land in 10-year old (mature) cacao trees it was compared with Belize and other countries. The cost of production was BZ\$500 per year in organic systems as compared to non-organic cost of production BZ\$1,500 per year. The difference in yield of cacao beans is 800 lb/acre in organic and 1,200 lb/acre in non-organic. The price for organic beans is BZ\$3.00 per lb compared to BZ\$2.60 per lb for non-organic. The sales revenue, less cost of production is BZ\$1,900 for organic compared to BZ\$1,620 for non-organic production. In these circumstances the case for organic production systems is a margin difference of BZ\$280 or 17% better net returns.

Research and Development

More research and development is needed by cacao traders and by the Ministry of Agriculture into the maintenance of existing varieties, development of new varieties and new strains of cocoa trees. Some of the material that needs to be researched includes the cause of the fluctuation in production and the use of nitrogen fixing plants such as the *madre de cacao*, the use of mulch and other natural fertilizers (soil amendments). Internationally, research is focusing on developing trees that can produce up to seven times the amount of beans traditional cocoa trees can produce. This will include creating linkages with “centres of excellence” in the region, such the International Cocoa Research Unit based in Trinidad and Tobago.

Chart 5: Overview of Opportunities and Constraints



VC Step	Opportunities	Constraints
Input	Provision of seedlings, research into better varieties, nurseries, disease resistance, etc. by MNRA	Limited access to finance, land title, aging farmers, knowledge of varieties, collaboration between stakeholders, leadership, policies and incentives
Production	Increase production by 400-600%	Disease, fluctuating yields, low yield per acre, nitrogen fixing plants, soil health, no business planning, bad roads
In-country processing (farms)	Introduce more consistent drying, fermenting and selection techniques	Some farmers aren't interested in processing, lack of drying facilities, inconsistent quality, knowledge of bean selection
In-country chocolate making, tours, etc	"Bean-to-bar" model can provide higher revenue but it requires better chocolate making, packaging, farm tours offer opportunities for increased revenue to farmers	Shortage of beans, rudimentary and expensive equipment, lack of knowledge about techniques and ingredients, few by-products, lack of infrastructure and market knowledge
Quality control	Improve quality control at farm level. TCGA and MMC have quality certification officers. BAHA checks exports. Soil Organization and IMO standards applied for organic	BBS has not established national standards with the stakeholders. MNRA has not supported the organic auditing with extension officers. Public Health has not trained chocolate makers for food handler permits and food processing premises certification
In-country trading (Cacao Beans)	TCGA makes a special arrangement to supply local processors even though the prices for export market are higher. Improve selection, quality, transport, centralized facilities	Small farms and low level of production and productivity, farmers distracted by infighting and market dynamics, lack of national leadership
In-country marketing & sales	Merchandizing, designing, packaging & labeling	Lack of national strategy, insufficient supply and quality products, packaging, labeling, pricing, trade shows, etc.
Export/import	"Bean-to-bar" model can provide higher revenue. North American chocolate market is growing by 100% each year, particularly for Belize's preferred high quality fine flavoured cacao	Lack of production, uncertainty about storage, access to finance, shipping costs, boutique buyers and appropriate prices
Further processing (overseas)	Create a "Belize brand" to link with destination strategy and attract more tourists to the Toledo area	Limited strong relations with and knowledge about niche buyers, health food/super food markets
Retail to consumer	Establish a strong niche market for Belize cacao value add products	Lack of branding, awareness about products, and consumer tastes.

See **Annex 2** for more detailed descriptions of the Opportunities and Constraints for each value chain element

PART III – CACAO INDUSTRY STRATEGY

6.0 INTRODUCTION

The opportunities and constraints identified in the VCA provide guidance and direction for development of the Cacao Industry Strategy. The main opportunities identified in the VCA are: a) **export**, b) **value addition** and c) **Linkages to tourism**. In addition to the opportunities, there are a number of constraints that have to be overcome: a) **quantity** of production, b) **quality** of processing, c) product **diversification/value addition**, and d) an **overall governance structure**. The Industry Strategy is focused on identifying ways of capitalizing on the opportunities in the short term, and removing the constraints in the medium to long term.

The development of a vibrant Cacao Industry Strategy promises to generate important economic benefits for farmers and tourism-related enterprises. One of the overarching considerations in the terms of reference (ToR) for this assignment was that benefits should accrue to Maya farmers and small businesses in southern Belize. This was used as a guiding principle when formulating the Industry Strategy, which as described below is based on the need to develop a two-pronged approach for the development of the sector, one involving a sustainable development approach and another involving a private sector-driven approach.

In addition, the ToR for this assignment put a great deal of emphasis on the promotion of “exports”, as if the ultimate goal should be to increase exports. However, one of the main outcomes from the VCA was that local value addition contributes significantly more to the economy than exporting raw beans. The VCA also emphasized the futility of a small Third World tropical country with limited production of cacao attempting to export \$2.00 chocolate bars to the US or EU markets, particularly when those same customers were willing to visit Belize and pay \$2,000 to purchase the same chocolate bar, which should be promoted as part of an experiential tourism destination strategy. These important elements are brought out in the context for the development of the sector.

Two important draft government policy documents provide the context and rationale for the formulation of the Industry Strategy, the National Agriculture and Food Policy and the National Export Strategy. As indicated in Part I (2.0 Policies and Strategies), the underlying strategic consideration of the NES is to “maximize the direct contribution to overall economic and social development through increased employment, reduced level of poverty, and increased national income.” In this respect, the Industry Strategy is designed to contribute to the development of rural areas, especially in the south and west, where poverty rates are highest and where degradation of natural resources and the environment is more pronounced. The need for sustained international competitiveness in the export performance of value-added and niche products and services is emphasized. In the agriculture sector, key options include adding value through efficient production, improvements in quality standards and support services to exports. In tourism, the focus is on diversifying products to offer more services, including niche markets and a higher quality tourist product in the south of Belize. Similarly, the goal of the draft Agriculture Policy is “to engender a conducive environment for the development of an agriculture and food sector that is competitive, diversified and sustainable, that enhances food security and nutrition, and contributes to the achievement of the socio-economic development goals of Belize”.

7.0 CONTEXT FOR THE STRATEGY

There are two contexts in Belize's cacao sector that have to be taken into account in the development of an Industry Strategy (and the design of a new development project). These two contexts are roughly aligned with the different farming systems practiced in Belize,

characterized by large and medium-sized commercial farms and the traditional small-scale “milpa” farming system. One has to do with the traditional production systems practiced by the Maya and the other has to do with commercial farming practiced by large private farmers. It is important to understand the motivation behind both the commercial and Maya farmers so that efforts will result in the desired outcomes – increased production and income, security of land tenure, commercial success and environmental sustainability.

Traditional “Milpa” Farming System

In Toledo, approximately 80% of the farmers are Maya who practice a small-scale slash-and-burn system of alternating cultivation and fallow. This slash-and-burn agricultural system evolved in response to local conditions and provides Maya families with most of their subsistence needs, primarily maize, vegetables, root crops, as well as cash crops.

The expansion of cacao among Maya farmers that took place in the 1980s and 1990s occurred for three reasons: a) A new market provided by Hershey and later by Green and Black's; the expansion of cacao would not have taken place without these guaranteed markets; b) Development projects had a significant effect on increasing cacao production in Toledo, particularly USAID's TSFDP and TAMP programs in the mid- to late 1980s, where a loan program and other support mechanisms had a marked effect on cacao expansion in the 1990s and farmers who got loans and technical support expanded their cacao holdings; c) The other driver that led to cacao expansion involved population density. A 2003 study on human ecology found that population growth in Toledo between 1983 and 1990 caused competition for land, which prompted farmers to gain rights to adjacent lands. Maya farmers can gain de facto control of land on reservation land using usufruct rights by planting with permanent tree crops, and they can attempt to gain title to national land (through leases) by planting permanent crops on 50% of the land within 5 years. Citrus, instead of cacao, can be grown to gain rights to land, and there is a market for citrus, but most farmers chose to grow cacao. One reason for this was that citrus did not provide agricultural extension services and credit assistance as in the case of cacao. Also, it is more difficult to transport citrus to market³⁹.

Belize's land tenure system also played a role in the expansion of cacao. All Maya living in a village are allowed to use reservation land for farming by paying a \$5 annual land tax to the Alcalde. The farmer who clears the forest has usufruct rights to that land, unless it is left fallow for 15 years. Land cannot be bought, sold, rented or passed through the generations. However, cacao and citrus trees can be bought, sold, rented or inherited. The owner of the trees essentially owns the land planted with tree crops. Planting of cacao on reservation land is a sensitive issue because growing cacao limits the land available for other milpa crops.

However, reservation land is not owned communally by the Maya; the government owns it. This system of tenure makes land ownership among the Maya on reservations impossible and national authorities have the power to eliminate Maya rights to this land. The issue of land tenure has become very political among the Maya because many are afraid that they will lose access to land.⁴⁰ Because many Maya fear the government will soon break up the reservations, some farmers have tried to establish rights to land by planting cacao on the reservations. Others have gone outside the reservation and planted cacao orchards on national lands, assuming it will establish their rights to this land when the government eventually parcels it out. In fact, one of the main reasons for the formation of the TCGA in 1985 was to establish cacao on leasehold land and eventually gain title to that land.

While the expansion of cacao in Toledo indicates that Maya farmers may be attempting to gain rights to land, the story of agricultural change in Toledo is much more complicated. The expansion of cacao would not have occurred without the support provided by international

³⁹ The Human Ecology of Mayan Cacao Farming in Belize, Michael Emch (2003)

⁴⁰ The Maya Alliance Association (MAA) is dealing with the government on land tenure.

development projects and the provision of a guaranteed cacao market by Hershey and G&B. Nevertheless, the precarious land tenure system may be a constraint to increased production, because farmers will be reluctant to invest in land where ownership is uncertain.

Commercial Farming

Commercial farms have substantial acreages (100-400 acres) and involve large initial investments as well as secure land tenure. They are highly mechanized and include technological inputs, and they have a well-established marketing system. These farms grow traditional crops (citrus, bananas, sugar) and non-traditional crops (papayas, hot peppers, cacao) on a large scale in Cayo, Stann Creek, Orange Walk and Corozal. There are also smaller commercial farms (50 acres) that tend to be family-owned, and use family and hired labour to harvest. These small farmers have been able to participate in the commercial economy of the traditional crops such as sugar and citrus. With the organization of bean collection and fermenting these farmers may be willing to convert to cacao. The sugar sector is losing the preferential market in the EU and the citrus sector is suffering from decreased yield due to disease, hence farmers may be looking for viable alternatives

8.0 DEVELOPMENT OF THE CACAO INDUSTRY STRATEGY

The Industry Strategy for the cacao sector is based on the opportunities and constraints identified in the VCA. The strengths, weaknesses, opportunities and threats related to Belize's cacao value chain from the VCA have been used as a guide in the development of the Industry Strategy. The intention of the Strategy is to identify ways to capitalize on the opportunities and overcome the constraints.

8.1 Rationale and Scope for the Development of an Industry Strategy

Although cacao was developed by the Maya centuries ago, it has become an international commodity that is part of a \$100 billion global chocolate industry in which large manufacturers based in Europe and the United States capture the vast majority of profits. Globally, developing countries produce an estimated 4.4 million tons of cacao every year, with export of beans and semi-processed products valued at more than US\$5 billion (5% of the final value)⁴¹. Demand for this commodity is expected to grow over 30 percent in the next five years as countries like China, India, and Brazil start eating more chocolate.

In capturing a small part of this industry, the underlying rationale for developing an industry strategy for Belizean cacao is two-fold: a) to increase income, employment and exports for the benefit of the Belizean economy, and b) to contribute to a sustainable, rural development strategy through increased income and employment as a way of reducing poverty and stemming rural exodus, particularly among the Maya farmers in southern Belize.

Demand for Belize's cacao is increasing: Traders are coming to Belize with increasing regularity to buy beans for a variety of chocolate, health food and superfood markets in the US and EU. A number of brokers and companies have been visiting Belize for years trying to establish relationships with growers to obtain a stable supply of organic cacao. Since 2009, buyers like Taza, MMC and Gone Green have been trying to establish the right relationships with growers. These buyers are linked to dozens of bean-to-bar and superfoods markets in the US market. However, cacao production is in short supply, and the buyers have been providing technical assistance to growers in an attempt to increase production. Recently, some buyers have indicated that they would be willing to buy Belize's entire cacao output.⁴²

⁴¹ <http://ageconsearch.umn.edu/bitstream/36949/2/Proceeding%20of%20the%2026th%20West%20Indies-Neptune%20and%20Jacque-%20pgs-50-58.pdf> , <http://www.forbes.com/sites/ashoka/2014/10/10/the-chocolate-revolution-central-american-start-up-seeks-to-grow-sustainable-cocoa-production/>

⁴² Interview with Gone Green.

In addition to exports, the VCA has shown that cacao production and processing are becoming an increasingly important part of the Toledo economy, where 94% of cash is provided from cacao, and where incomes have grown over 20 percent since 2012.⁴³ In addition, value added processing of cacao and cacao by-products in Belize significantly increases the income-generating capacity of smallholder farmers and local chocolate producers throughout in the domestic economy, contributing approximately BZ\$2.0 million.

8.2 Vision, Mission and Core Values of the Cacao Industry

Based on discussions with stakeholders in both the commercial and traditional farming systems and with government ministries, a strong statement by government is required to establish the priority it places on the cacao sector, while at the same time acknowledging its role in meeting the challenges and focusing on the opportunities identified in the VCA. A possible vision statement for the sector includes:

- ✓ The Government of Belize encourages the private sector to invest in the commercialization of the cacao sector, while specific governance structures and policies will be adopted to protect the interests of the Maya and other small farmers in southern Belize

Possible mission statements and core values for the sector include the following:

- ✓ To establish an enabling environment for the development of a private sector-led industry that will be able to incorporate increased production from both large scale commercial farming and smallholder farming systems
- ✓ Adopt appropriate policies that will encourage increased production and quality, protect the interests of the Maya and other small farmers as well as provide incentives for investors
- ✓ Adopt a joint vision shared by all stakeholders that will capitalize on commercial farming opportunities and overcome the challenges associated with the traditional practices of Maya farming systems, communities and lands
- ✓ Embrace the values of competition while at the same time recognizing the benefits of cooperation.

8.3 Strategic Goals

Three main strategic elements emerged out of the opportunities in the VCA, and these formed the basis of the Industry Strategy: a) Export of quality cacao, b) Support value addition, and c) Create linkages between agriculture and tourism. The strategic goals for each of these elements are as follows:

Strategic Element	Goal/Target
a) Export of quality cacao to the “bean-to-bar” markets in the US and Europe	Increase production to (330MT by 2017), 900MT by 2019 and over 2,000MT by 2024
b) Value addition comprised of processing chocolate and other cacao value added products for sale in the domestic tourism market	Support value added processing by supporting 30 SMEs per year, establishing quality standards and waiving import duties on cacao processing equipment and inputs for 10 years
c) Linkages to tourism sector , primarily in the form of cacao farm tours and other related activities	Create and support linkages between agriculture and tourism sectors by promoting activities and events through BTB

⁴³ 94% from IDB/MIF MTR (Nov 2014); 20% based on VCA of increased production and processing

8.4 Strategic Results

The VCA revealed a number of constraints hindering progress towards these 3 goals/opportunities. These constraints need to be addressed if Belize is to capitalize on the opportunities and meet the goals. (A summary of the constraints is listed above in Section 5.0 Challenges and Opportunities with detailed specifics on each element in the value chain attached in Annex 2). The Industry Strategy will focus on alleviating these constraints by focusing on obtaining the following strategic results:

- a) **Increase Quantity** (through production and productivity increases)
 - b) **Improve Quality** (through research, on-farm value addition and clustering)
 - c) **Diversify Products** (through support to SMEs)
 - d) **Improve Governance** (through farmer organization and cooperation)
-
- a) **Increase Quantity**: In order to increase production and productivity in the two potential “Cacao Growth Corridors” (shown in Figure 5 on page 63), a number of activities will be required (some of which will form the basis of sustainable development projects described in Section 8.5 and Annex 1):
 - Improved farming techniques and providing support to existing farmers
 - Increase in cacao farmland through encouraging investment for larger commercial farms
 - Increase the farmland workforce by attracting more farmers
 - Improve infrastructure by constructing roads, storage facilities, etc.
 - Improving seeds and research into varieties
 - Improving farmer organization and representation through the establishment of several village clusters that represent all small growers and a separate cacao business arm that manages the marketing and value addition for the grower association
 - b) **Improve Quality**: Quality can be improved by establishing the following on-farm and cluster activities and incentives:
 - Improve incentives by encouraging farmers to take more responsibility for quality control, and by shifting incentives from quantity (weight) to quality (grading),
 - Pay a premium price for high quality cacao and penalize farmers that try to pass off poor quality beans
 - Improve access to financing for farmers and growers associations
 - Improve the quality of on-farm and cluster value addition (fermenting and drying) and the associated knowledge and skills of farmers
 - Provide training to farmers and collectors to recognize and grade good quality, and how to deal with poor quality beans
 - c) **Diversify Products**: It must be stressed that currently there are very few products that meet international standards and will not be able to compete effectively in the international market, and few individuals who have the technical expertise and experience required to create these products. Product diversification is an ongoing multifaceted process that will require significant investment in market research to understand consumer habits and preferences, market requirements, product trends, packaging requirements, distribution and retail channels, marketing strategies, attendance at trade shows, training, etc). Product diversification can be supported through the following means:
 - Expand the value chain into various cacao by-products including providing support to chocolate processing, development of other cacao value added products (e.g. nibs)

- Provide support to SMEs in chocolate making, baking, soaps, fragrances, crafts, etc.
 - Create linkages with other sectors such as tourism (cacao farm tours, etc.)
 - Build a “Belize Brand” strategy for value added products in line with a national brand image for Belize
 - Develop new products that will use ‘Every’ting Cacao’ in categories of flavours, beauty products, merchandise, craft and accessories (see ‘Every’ting Cacao’ Product Diversification Annex for product matrix, including marketing strategy and rationale)
- d) **Improve Governance:** Organizational governance can be improved through the following means:
- Create effective farmer groups or clusters of farms that take pride in the quality of their work, and take responsibility for improving quality and productivity
 - Improve price transparency by providing farmers with the knowledge and practices associated with pricing, quality control, training programs, etc.
 - Establish an over-arching body that brings all stakeholders to the table and takes strategic issues to the Economic Development Council

Chart 6: Summary of Strategic Results

Increase Quantity	Increase Quality	Diversify Products	Improve Governance
Improved farming techniques through training - i.e. pruning & soil amendments for increased yield	Improved farmer incentives - increase rewards for more responsibility - quality control, fermenting, drying	Expand value added for export and domestic markets with further processing, chocolate making, raw nibs, etc.	Create effective Farmer groups or clusters
Increased farmer support - attract more farmers	Pay premium price for high quality, penalties for “padding” and poor quality	Linkages with farmers to tourism - small eco-farm tours	Improve transparency - farmer awareness of pricing, QC, best practices
Increased farmland investment in larger farms	Improved access to financing for farmers through associations	Expanded Tours - large scale purpose-built visitor tours - model farms, and chocolate factory(ies)	Centralisation, governing certification, grading, export and QC
Improved infrastructure roads, storage facilities etc.	Increased knowledge for farmers - how to recognize and improve poor quality beans	Involvement of SME's - development of local cacao products i.e. cookies	Establishment of over-arching body - representing all stakeholders
Improved farmer representation - through associations and establishment of business association for all stakeholders	Improved research and seed varieties - High quality, higher yielding, disease resistant seeds	Linkage with Tourist Board “Unique Belize initiative” - cacao gift & craft items	Build awareness of cacao farming and extension opportunities through schools, ministries and Government programmes
	Improved certification best practices, quality control	Development of more Cacao events - attract both locals and tourists to build brand image	

8.5 Description of the Cacao Industry Strategy

The VCA demonstrated that there are two main elements in Belize's cacao value chain: An export market value chain and a national value chain. The Industry Strategy involves developing activities and projects to capitalize on the opportunities and to overcome the constraints in each value chain.

Thus, the Strategy will focus efforts on a **two-pronged approach** that will provide the necessary guidance and support mechanisms to take advantage of the opportunities and overcome the constraints. The intention of the Strategy is to identify the need for support services and infrastructure required for the development of the two main pillars of activity: i) One focused on a private sector-led approach, and the other ii) Identifying the inputs for a series of sustainable development projects – under the overall guidance of a viable organizational structure.

Pillar I: Private sector led approach: The first pillar will involve increasing production through investment in large and medium-sized commercial farms

Pillar II: Sustainable development approach: The second pillar will provide support to the Maya and other small farmers in southern Belize to enable them to increase production, productivity and acreage. This will involve designing a number of development projects around farming, clustering, fermenting and drying and support for chocolate processors and other value added activities.

Pillar I – Increase Production and Investment

The market analysis revealed that Belize has high quality, organic beans, and buyers are flying in to buy them with increasing frequency. This provides an opportunity to increase production significantly.

The main features of the component designed to increase production are listed in the Industry Goals and Road Map (see Attachment for Section 6.2). Activities are listed for each stage of the value chain: Input (planting), production, farmer organization, processing, etc.

Belize's two "cacao corridors" are shown on the map below – Toledo and Stann Creek/Cayo areas. Because of the larger sized commercial farms in the Stann Creek/Cayo area, that area is expected to have higher growth potential – up to 7,000 acres by 2024.

The areas are made up of the following acreages in cacao production in 2014: Toledo has 1400 acres, Stann Creek an estimated 200 acres and Cayo an estimated 100 acres. Toledo is expected to increase area in cacao by 30% annually for the next 5 years but the target is ambitious and growth will likely taper off due to restrictions in land ownership. Farm sizes in Toledo are also expected to increase in size from 2 acres to 10 acres but are not expected to become large farms of over 40 acres. There will be small and large farms in Stann Creek and Cayo suited for private sector investment under Pillar 1, but Toledo will only be suited to small farms and the focus of sustainable development under Pillar 2.

Large farms = 5,500 acres, production potential 500 lb/acre for 1,250 MT per year by 2024.

Small farms = 5,500 acres, production potential 300 lb/acre for 750 MT per year by 2024.

Production in Belize where has generally been quite low. In 2014 the yield was 115 lb/acre whereas in 2006 it was 124 lb/acre in Toledo and 165 lb/acre at Hummingbird Citrus Ltd. Production is expected to increase on all farms due to the rehabilitation of cacao trees through development projects and competition for greater support services by MMC, improved

pruning techniques, control of the Monilliasis disease, improved seedling varieties, greater use of soil amendments. Greater increases in yield will be on the larger farms where investors will have access to capital and technology. Several cacao farms are being rehabilitated, including 400 acres at Hummingbird Citrus Ltd., and MMC has planted seedlings on 130 acres on land adjacent to it. In addition, other investors have been attracted to Belize by the potential of cacao and 2,000 acres in Stann Creek are planned. Discussions with BELTRAIDE have begun with investors in West Cayo and cacao has been considered as a viable option

The market development strategy will involve expanding links to existing markets in the bean-to-bar market that MMC and TCGA have been successful at. Those organizations, along with a few others like Gone Green and a new Russian investor, are actively looking at expanding their production in order to meet the demands of the market, where unmet demand has been estimated at 500 MT.

The old Hershey Farm was managed by TCGA for a period as Green and Black's attempted to increase production, but the project was not successful. More recently MMC has included the farm in its sales to the US bean-to-bar market for cacao and there appears to be potential for a reasonable profit. US bean-to-bar buyers have visited the farm and taken samples of the cacao beans and been pleased. Demand is very high. Cacao trees are being refurbished and fermenting and drying facilities are being built. MMC is also planting seedlings and becoming a vertically integrated company participating in the value chain in every way except making chocolate.

BELTRAIDE is attracting investors and has participated in a Latin American and Caribbean regional meeting exploring export consortia in the Caribbean in Peru (May 2014) submitting a proposal on Belize cacao exports. Belize's cacao sector is miniscule in the region but the quality of fine flavored beans is high, and very much in demand. The opportunity for Belize to increase production is particularly useful since it is suited to the southern districts that have the greatest dependence on agriculture and lowest contribution to GDP. BELTRAIDE can offer investors business models and the best practices for production and post-harvest handling. BELTRAIDE can support BBS in forming a working committee on cacao standards to be adapted or adopted suited to local conditions and premium markets. BELTRAIDE can harness the resources and work alongside MNRA in forming a Cacao Oversight Authority to look after the interests of the sector for Belize (this is described in Section 4.0, the Operational Plan and Part IV Recommendations). The Cacao Oversight Authority would be an over-arching entity that would not trade in cacao but would offer certification, research, testing, nurseries, incentives, best practices, standards and business models. On the processing side, BELTRAIDE can facilitate investment in cacao by pushing for policy such as duty exemption on inputs in production and chocolate making for 10 years.

Pillar II – Sustainable Development

The traditional milpa system of the Maya is expected to remain with small farmers in the Toledo and Stann Creek districts. TCGA expects this group to increase overall production by 30% annually for the next 5 years. For this to happen, support will be needed. In addition, the VCA revealed that there was a budding chocolate processing industry that will need support to reach higher value markets.

This will involve designing a Sustainable Development Cacao Programme around farming, on-farm processing, value added activities and linkages to tourism. Outlined below are a number of sustainable development projects that are needed for continued growth of the cacao sector in southern Belize. Each of these projects will have to go through a more elaborate design phase to identify they type of support needed. Annex 1 includes a more detailed situational analysis and a rationale for each of these projects:

1. Production support for the Maya and other small farmers in southern Belize to enable them to increase production, productivity and quality
2. Support the organization of farm clusters in geographical locations, the formation of a national cacao growers association, and build a business arm of the TCGA to trade and add value
3. Support to craft chocolate makers including farm tours and operational support to TCGA for the Maya House of Cacao
4. Joint research with MNRA into fine flavored, high yield, disease resistant cacao varieties

Figure 5: Map showing the two Cacao Corridors in Belize; Toledo and Stann Creek/Cayo



1) Production support for Maya farmers to enable them to increase production, productivity and quality

With the increased demand in the international market for high quality beans, the system of farming in Toledo needs to be improved if it is to continue to supply the “bean-to-bar” niche markets. TCGA is encouraging its farmers to increase their acreage (from 2 to 10 acres), as well as increasing their production per acre (from 115 to 450 lbs/acre). Support for some of these activities is being provided under the IDB/MIF project “Closing the Gap between Mayan Farmers and the Global Organic Cocoa Market” and the EU’s Poverty Reduction Programme. However, additional efforts will be needed. The following elements will be critical for developing a project in this area:

- Train 1,000 present growers and 50 new growers expected every 2 years, in best practices for pruning, addition of soil amendments, harvesting, post-harvest handling and farm business management

- Emphasis should be placed on providing farmers with productivity enhancements to achieve 100 per cent increase in productivity by 2020
- Train farmers on the significance of quality and how it affects the price for the collective sale of cacao beans
- Access to credit, as small farmers find it difficult to get guarantees for commercial bank loans
- Belize has seen the potential for growth and export in cacao but BELTRAIDE's small business section has not had a strong link with the people of southern Belize. Small business owners were not aware of support in training from BELTRAIDE in financial management, legal requirements, education in standard requirements for organic, ethical trade, food safety, tax obligations on imports. These areas should be more evident for the growth of the cacao sector.

2) Support the organization of farm clusters in geographical locations, the formation of a national cacao growers' association, and build a business arm of the TCGA to trade and add value

Because of small production levels in Belize and the logistics associated with organic cacao, there is a need to increase responsibility for quality and raise productivity at the farm level, decrease "padding" and increase on-farm value addition. For this to happen, there is a need for the two main trading and support organizations (TCGA and MMC) to align objectives, commitment of resources, and share best practices. TCGA's membership is predominantly Maya, and its responsibilities have grown greater than a growers' association as it has been operating in 3 Districts, Toledo, Stann Creek and Cayo. With a few changes, TCGA can evolve into a national level association for small cacao growers, and remain a non-profit company. The type of support needed includes the following:

- Encourage clusters of villages to form natural groups to improve farm management, and elect representatives to participate in District association meetings.
- Train growers in the responsibility of elected members to speak on their behalf and bring back information for the community
- The national association would be formed with representatives from the District associations, and its motto, principles and primary functions will be decided by the elected leaders
- Small growers do not have to be a member of the national association to market their cacao beans and large growers are not expected to be members
- Establish a business arm of the TCGA to trade and add value, and support the formation of a limited company to trade the cacao beans of members, just as TCGA does now
- The company will have two grower representatives on the board.

3) Support to craft chocolate makers including farm tours and operational support to TCGA for the Maya House of Cacao

The VCA demonstrated that some innovative families are earning higher levels of income from processing chocolate and organizing other tourism related activities such as farm tours. Also, TCGA is planning on having a chocolate making factory in the Maya House of Cacao, likely through a concession with a local chocolate processor. These processors could benefit from training with expert artisan chocolate makers in order to improve and diversify their products, and reach higher value markets. Not only this, with support from the Belize Tourist Board (BTB) and BELTRAIDE, they could add value to Belize's tourism destination strategies. The following elements will be critical for developing projects in this area:

- Positioning as a Fairtrade chocolate vendor and tourism experience
- Development of a brand for Belize chocolate tourism value added products and experiences

- Experiential product development training for farms, tour operators, tourism partners
- Development of rich, interactive cacao focused tourism adventures/experiences targeted to high potential niches (e.g., cruise, independent travelers, local students, study abroad groups)
- Storytelling and experiences around historical and cultural legacy of cacao in Belize and the world and the chocolate culture of today should be highlighted. This could be accomplished through a museum-like component for the Maya House of Cacao.
- Provide support to SMEs: Training for craft chocolate makers, as well as spa, cosmetic, gift, and gourmet food product makers
- Training for tour guides, hospitality providers and other tourism experience participants
- Training for women's groups to add value and earn additional income, starting with groups such as the Ixchel Women's Group
- Using rudimentary equipment suited to small-scale chocolate making training will include food handlers training from the Public Health Department and training in simple packaging suited to on-farm sales to tourists
- Training growers in on-farm tours and the requirements for maintaining organic status, public health rules and recommendations from BTB
- The operation of the Maya House Chocolate Factory will need equipment such as a convection roaster, refrigerator, refrigerator, show glass, cacao grinder, concher and specially designed chocolate moulds. In the interim cacao liquor (Maya House recipe) will be sourced from other chocolate processors for later tempering and packaging at the Maya House. Training of personnel will be needed in Toledo and surrounding areas
- Tourism market linkages – Toledo farms, Punta Gorda, and the new cruise terminal at Harvest Caye will be critical points for marketing cacao value added products. Other key sales points are the main tourism destinations of Belize City, San Ignacio, Caye Ambergris and Caye Caulker and the main points of entry into Belize, Philip Goldson Airport and the border crossings. Developing linkages with retail sales network partners, including hotel gift shops, in these areas is essential for the successful marketing and sales of these products. Tour operators, and the guides working for them, play an important role in influencing visitors where to shop and what to buy, and are very important marketing partners. Therefore, it is important to nurture strong linkages between with the cacao sector and tour operators in these tourism hubs
- Additionally, establish linkages with hospitality and tourism industry. BTB's new sustainability standards measure and award points for use of local products and services by tourism suppliers, providing the opportunity to encourage the creative use of cacao and chocolate in restaurant and spa menus
- Important to establish linkages with BTB and BTIA for marketing purposes. A key goal is to have these partners feature Belize's chocolate culture more prominently in tourism marketing programmes and material
- Development of marketing tools, particularly a website and cacao tourism map
- Cultural experience linkages – the attraction of visitors to Belize's Maya culture, and its Garifuna, Kriol and other cultures, provides many possibilities and opportunities for creating linkages to artisans and cultural experiences which will both enrich the visitors' experience and increase the appreciation and sale of Belizean artisan products, including chocolate and cacao
- Corporate gifts – develop a corporate gift line that can be sold to the government and corporate sector in Belize, which currently buys large quantities of gift for conference and other events. The line could also be marketed to international visitors and even exported.

- Visitor ready status – obtaining licenses, registrations, training, insurance etc. needed to operate legally and to meet minimum operating requirements of cruise ship, tour operator and other marketing partners.

Figure 6: Cacao Farm Clusters and VC Linkages, Showing the Relationship between Organizations, Infrastructure and Linkages in the Export and National Value Chains



4) Other areas: Research and Development

More research and development is needed by cacao traders and by the Ministry of Agriculture into the maintenance of exiting varieties, development of new varieties and new strains of cocoa trees. Some of the material that needs to be researched includes the cause of the fluctuation in production and the use of nitrogen fixing plants such as the *madre de cacao*, the use of mulch and other natural fertilizers (soil amendments). Internationally, research is focusing on developing trees that can produce up to seven times the amount of beans traditional cocoa trees can produce. This will include creating linkages with “centres of excellence” in the region, such the International Cocoa Research Unit based in Trinidad and Tobago. The following elements will be critical in developing projects in this area:

- Joint research fine flavored, high yield, disease resistant cacao varieties with MNRA
- Solicit the support of the MNRA and in-country research that has started already
- Invite universities to study and share information that will benefit the conditions of Belize
- Protect the variety of germplasm that Belize has
- Maintain a nursery to supply proven superior cacao seedlings to members
- Prepare for increased demand for cacao seedlings
- Identify and encourage the replacement of low quality, low yield, and disease prone cacao trees.

These projects are described in more detail in Annex 1.

Figure 7: Map of Traditional Farming Area in Toledo



8.6 Beneficiaries of the Strategy

The expected beneficiaries of the strategy are as follows:

- **Production:** 1,100 households (3.9 persons per household in 2011) or 4,290 people
- **In-country processing** (drying & fermenting): 45, supporting the livelihood of 180 people
- **Chocolate making,** 70 direct and 60 indirect jobs (130), supporting 520 people
- **Quality control, phyto-sanitary and organic certification** (3 warehouses) 6 direct jobs and 6 indirect jobs = 12, supporting 48 people
- **Ancillary services** of transport, port handling and transit may be 50 direct and 50 indirect jobs = 100, supporting 400 people
- **Tourism linkages** to cacao (Ixcacao and Eladio's) may employ 4 people and 20 indirect jobs = 24, supporting 96 people

With the sector producing only 89MT in 2014 and expected to grow to over 2,000MT by 2024, employment can increase 20 fold. Populations in southern Belize: Toledo – 34,077, Stann Creek – 38,728 and Cayo – 85,243 (SIB Survey 2013).

Table 16: Preliminary Summary of Expected Results and Indicators of Progress

Strategic Goal	Expected Quantifiable Results	Methods to Obtain Results	Indicators of Progress
1. Increase production	Increase quantity (by 3 to 4 times in 2 years, 10 times in 5 years and 25 times in 10 years)	<ul style="list-style-type: none"> ▪ Improve farming techniques ▪ Increase in cacao farmland ▪ Attract investment ▪ Increase farmland workforce ▪ Improve infrastructure (roads, storage facilities, etc.) ▪ Improve research into varieties ▪ Improve farmer organization 	<p>Area of rehabilitated and new farmland</p> <p>Amount of new investment</p> <p>Number of farmers</p> <p>Miles of new roads</p> <p>Number of new clusters and associations</p>
	Improve quality and reduce padding by 25% per year	<ul style="list-style-type: none"> ▪ Shift incentives from quantity (weight) to quality (grading) ▪ Pay higher price for quality and penalize farmers for padding ▪ Improve access to finance ▪ Improve on-farm value addition (fermenting and drying) through clustering ▪ Provide training in quality control 	<p>Amount of reduced spoilage, increased quality</p> <p>Area of desired varieties</p> <p>Reduced disease</p> <p>Increase in dry beans</p> <p>Number of people trained in quality control</p>
2. Increase value addition	Improve product diversification and value added processing by supporting 30 SMEs per year	<ul style="list-style-type: none"> ▪ Support SMEs in cacao by-products (chocolate processing, other cacao value added products, e.g. nibs) ▪ Establish quality standards and waive import duties on cacao processing equipment and inputs for 10 years ▪ Build a “Belize Brand” image ▪ Develop new products under a ‘Every’ting Cacao’ banner (beauty products, merchandise, craft and accessories) 	<p>Number of new market ready products</p> <p>Existence of quality standards</p> <p>Evidence of cacao marketing and promotion</p> <p>Existence of new events and festivals</p> <p>Results of customer satisfaction surveys</p>
3. Create linkages with tourism	Create and support linkages between agriculture and tourism sectors by promoting 4 activities and events through BTB	<ul style="list-style-type: none"> ▪ Promote cacao farm tours ▪ Establish new itineraries in conjunction with tour operators ▪ Establish new farm-to-table events and festivals ▪ Promote local produce in hotels 	<p>Number of farm tours, events</p> <p>Number of new products</p> <p>Results of customer satisfaction surveys</p>
4. Improve Governance	Create 3 village clusters and improve farmer cooperation	<ul style="list-style-type: none"> ▪ Establish village cluster farms ▪ Establish district grower associations ▪ Establish a TCGA business arm ▪ Form a national oversight body 	<p>Number of farm clusters, associations</p> <p>Existence of TCGA business arm</p> <p>Existence of Cacao Oversight Body</p>

9.0 OPERATIONAL PLAN

Effective implementation of the Cacao Industry Strategy will require an institutional structure that ensures actions on the strategy are coordinated with the National Agriculture and Food Policy and the National Export Strategy as well as related activities in the private sector and development projects underway in the Belize agriculture, SME, trade and tourism sectors.

9.1 Organizational Structure for Managing & Coordinating Cacao Industry

TCGA has been the backbone of the development of the cacao sector in Belize and the only organized collection and fermenting system for small farmers until MMC started in 2009. Just as TCGA was the beginning of the UK organic and Fairtrade cacao market in the 1990s, so MMC has caught onto the emerging US bean-to-bar market. Belize has no rules in place to ensure that growers are getting a reasonable price, marketing organizations are transparent about their margins, quality is assured, standards established, natural resources are sustained and that research into the highest yielding, fine flavoured, disease resistant varieties is conducted and available to growers. Many of these standards have been controlled and monitored by the overseas market and hence the information is not for the most part in the hands of Belizeans. Thus, an over-arching entity is needed that can take on the responsibility for the development of the cacao sector in a rapid growth period and link the growers ultimately with the stakeholders that can add the most value to their produce – the traders, processors and tourism sector.

There are several options open to stakeholders. Belize Citrus for example has been through recent upheaval because it has been deemed unconstitutional for growers to be forced to market their produce through one organization. Citrus Products of Belize Ltd. (CPBL) processes and exports citrus juice and is 51% owned by the Citrus Growers Association (CGA). CGA, a non-profit organization, formed the Investment Company Ltd. (ICL) to enable growers to get loans. Members of the CGA all contribute a cess to fund an independent body, Citrus Research & Education Institute (CREI) that has representation from various ministries, agencies and NGOs. It is the CREI that does product development, agricultural research and disease resistance studies.

In Jamaica, the Cocoa Industry Board (CIB) was formed to organize the collective fermentation and drying of cocoa beans and market them for export. It was through the CIB that support was offered to farmers for seedlings, and standards were established for the sector to comply with the overseas market. It was felt that the economies of scale would be best for the farmers to collectively sell their beans. A study by USAID in Jamaica indicated that the farmers were not benefiting from the CIB mechanisms. As a result, the cocoa sector was liberalized and farmers can now sell their beans in any market once they have been granted an exporters license. The function of the CIB has moved from being a marketing board to that of a certifying body.

The Belize cacao sector is small and growing. It will not be able to financially sustain a national entity at the present size. But in 2 years production is expected to increase 3 to 4 times, in 5 years it will increase by 10 times and in 10 years it may increase by 25 times. An example of a small entity that has been able to gather information and present investment models is the Jamaica Dairy Development Board. The entity is not a marketing board, but rather gathers information for the sector's development and brings together stakeholders to push for an enabling environment. A cess is collected from all stakeholders based on handling of the product. The entity is comprised of a Chairman, Chief Executive Officer, representatives from large and small farmer groups, agri-business conglomerate representative and a scientist. Ministries of Trade, Agriculture, Office of the Cabinet and the Planning Institute of Jamaica are all represented.

As described above (Section 8.5), the strategy for the development of cacao in Belize is based on a two-pronged approach involving both the traditional milpa system of the Maya and the development of large commercial cacao farms such as the 400 acre Hummingbird Citrus Ltd. In addition, other investors have been attracted to Belize by the potential of growing cacao.

A national cacao body is needed to provide guidance to stakeholders and overall governance of the sector. This can be named the Cacao Oversight Authority, which will be best led by MNRA and BELTRAIDE due to the combined functions of agriculture production and trade development as presented in the objectives of the Industry Strategy, requiring support with quantity, quality, value addition and linkages with tourism. It is timely for an umbrella entity to be formed that will encourage growth and development. The entity must ensure growers are protected, investment is encouraged and useful production and market information is gathered and shared for transparency in trading. Lessons learned from other organizations suggest that the entity would not handle marketing of cacao beans but would handle certification and organic auditing. It can offer guidance to investors with options for business models, best practices and links to markets and market information. Supporters and stakeholders can come together and decide on issues that affect growers, processors and even the linkages to tourism.

For this to happen, there is a need to align objectives, commitment of resources, and sharing of best practices among the two main support organizations (TCGA and MMC). There is a need for a transformation among these organizations to focus on helping farmers to become more productive in order to secure a sustainable livelihood for the cacao sector. This represents a new way for stakeholders to work *with* instead of *against* each other. Such a cooperative spirit will also strengthen the existing relationships that each organization has been able to build with their respective growers and buyers.

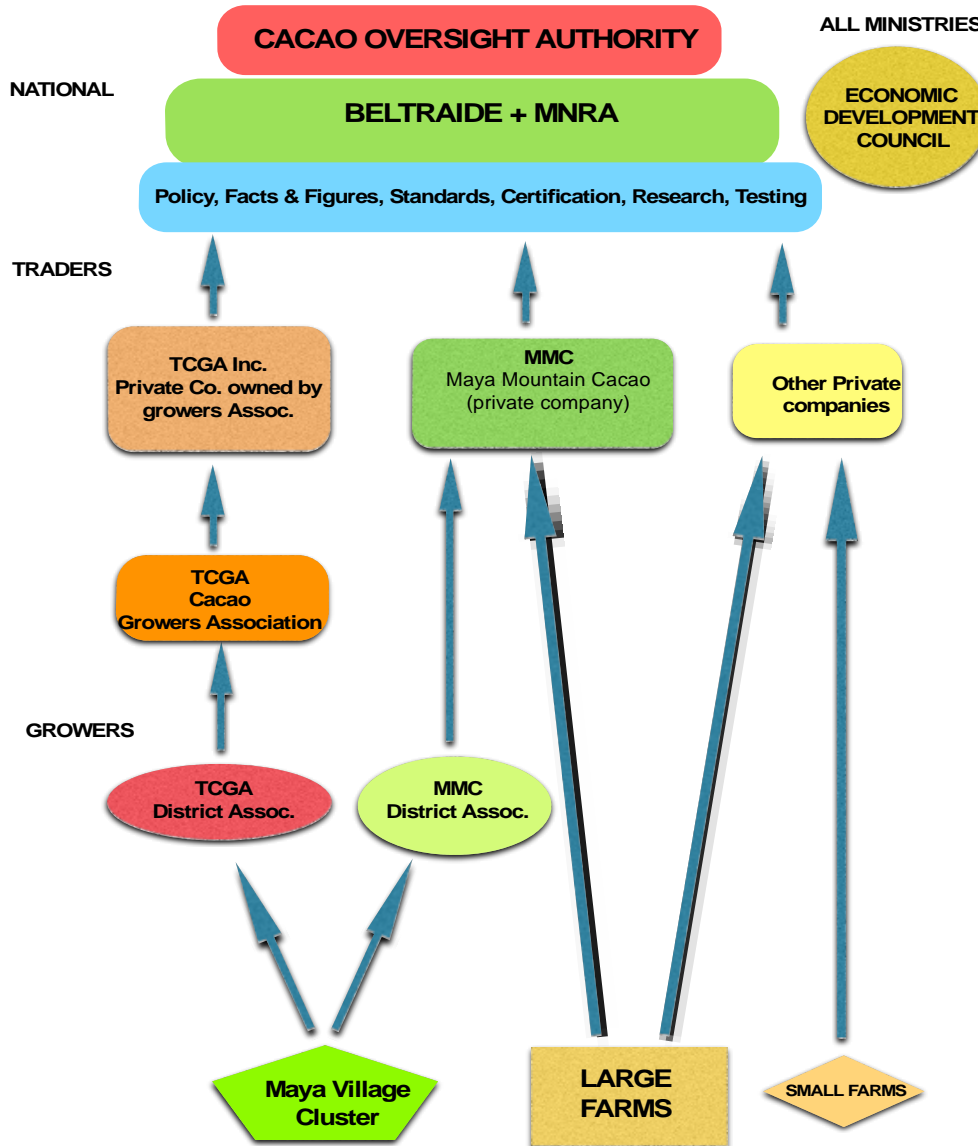
The complexity of the development of the cacao sector will require cooperation across several government ministries: Trade, Agriculture, Tourism, Health, Education and Human Development. In addition, the Cacao Oversight Authority will need to have established means of support and supervision from the Economic Development Council to have coordinated dialogue with all ministries at one forum.

To achieve greater efficiency in certification of cacao for export and for local use, the Cacao Oversight Authority should issue and audit standards such as the various organic standards and ISO standards required by the major markets for cacao. This will require accreditation by the IMO, Soil Association and others. Field officers are presently trained by the IMO and Soil Association and the salaries and transport costs are duplicated and unnecessarily high for TCGA and MMC, when it could be taken on more efficiently by MNRA Field Officers. This is consistent with the current market driven approach, and the two organizations have already started discussions to collaborate on organic certification and other matters.

Additionally, if a GI component is going to be included in the organizational structure, a business case will have to be determined – that is, it will have to be determined if the market will bear another premium for GI, as buyers are already paying a premium of \$200/MT for Fair Trade, \$300 for organic, and special premiums for a “Belize Blend” and “Direct Trade” which are negotiated by TCGA and MMC separately.

As the primary focus of the initiative is on agricultural production and SME development, it is recommended that MNRA and BELTRAIDE take the lead in close association with representatives from the Ministries of Trade and Tourism. The following general structure is proposed in Chart 7.

BELIZECACAO ORGANIZATIONAL CHART



9.2 Professional and Advisory Support

The Cacao Oversight Authority will be led by MNRA and BELTRAIDE in association with Trade and Tourism, and with representation from all participating stakeholders such as TCGA, MMC, large cacao growers, chocolate makers, marketers, BAHA, BBS, Public Health, IICA and CARDI. The cost of operating the Authority will be funded by a nominal cess (1%) placed on cacao in all levels of the value chain; traders, value-added processing, marketers and growers. Other functions of the Authority will be guiding policy, gathering facts and figures, producing annual reports, standards, research and testing.

It should be noted that a Cacao Forum was held in 2012 in an attempt to move towards a

common agenda to develop a sustainable and competitive industry. The forum was organized by the Ministry of Agriculture together with the IICA, the US Embassy and CARDI. The one-day event brought together key stakeholders to discuss various opportunities for the Belizean cacao industry based on demand and supply trends, key constraints and opportunities for sustainable cacao/chocolate commercialization, and the role of the Ministry of Agriculture in facilitating private-public partnerships for sustainable cacao production, processing and marketing. A major outcome of the forum was that stakeholders agreed to develop a National Cacao Platform involving government, industry, NGOs, cacao farmers, development agencies and other cacao stakeholders to discuss and develop strategies to address the issues facing the industry, focusing on removing barriers and creating an enabling environment to increasing productivity, competitiveness and sustainability of the industry.

Primary stakeholders of the Cacao Oversight Authority

Executive Committee for Management/Implementation: The committee will be co-chaired by the Ministry of Agriculture and BELTRAIDE (CEO level)

Executive Group: Responsible for implementing the Cacao Development Programme:

- Ministry of Agriculture, Chief Executive Officer (Co-Chair)
- BELTRAIDE (Co-Chair)
- Directorate of Foreign Trade
- BTB
- BAHA
- Small Grower Association reps (TCGA)
- Large Grower rep

Other Members: Providing advice, facilitating coordination between stakeholders, undertaking specific implementation tasks for the Cacao Development Programme

- Ministry of Tourism (project officer)
- Ministry of Agriculture (development/extension type officer)
- Representation from Belize tour operators
- Representation from chocolate makers
- Representation from marketers
- Community tourism associations

10.0 MARKET ANALYSIS AND PRODUCT RANGES

The value chain analysis identified three key strategic markets for Belize's cacao, each of which will require unique approaches, marketing strategies and tactics to exploit. These three key markets are:

- The export market for fine cacao
- The market for value added cacao products
- The local tourism market for cacao themed tours

10.1 Export Market for Fine Cacao

International demand for Belize's fine flavoured cacao is increasing with growing numbers of cacao importers and traders interested in sourcing organic cacao from Belize. These traders are looking to supply the bean-to-bar chocolate market in North American and Europe, as well as the wider health food and super food markets. These international buyers see Belize as a stable supply of organic, fine flavoured cacao, necessary ingredients for their cacao-based products. Buyers travel to Belize to establish relationships with growers in order to secure their supply. The IDC team interviewed several overseas bean-to-bar buyers and chocolate makers (see list at Annex 3). None were interested in further processed cacao (paste or liquor) as they prefer to do their own roasting and grinding, etc. The only interest expressed in any value added product, was regarding nibs. TCGA has already started to prepare to meet the demand for 'nibs' from overseas buyers, but production has to be increased to meet the demands of existing markets before new markets like this can be explored. Most of the buyers interviewed were reluctant to divulge much information in terms of numbers or trade secrets.

A Fine Flavoured Product

The VCA indicated that the bean-to-bar market is a new trend among US and European boutique chocolate makers, who create a marketing story around growers in a particular country. Belize is not a member of ICCO and therefore is not listed as a "fine flavoured producing country". But the increasing numbers of international chocolate makers who are keen to secure Belize's cacao beans validates the quality of Belize's fine flavoured cacao. Until recently, there was no compelling reason for Belize to become a member as little income was generated by the cacao sector. But with the growing interest being generated by international buyers, and the increase in consistent flavour and production volumes, the Ministry of Foreign Affairs should look into the issue of meeting ICCO requirements and develop legislation for the cacao industry.

Target Market

The vast majority of international customers for Belize's cacao products are in the middle-to high-end of the market. They are generally affluent and educated North American and European consumers with reasonably high disposable incomes. These consumers value high quality products, which are produced sustainably and ethically. For the most part, Belize's cacao consumers are influenced by environmental and social factors such as organic and Fairtrade certifications, and support the Maya culture. They value high quality ingredients, the visual and sensual appeal of good quality packaging, and the health attributes of dark chocolate and natural foods. Generally knowledgeable about current health trends, this market segment includes a) the super food, raw, organic, and health advocates, b) chocolate connoisseurs and specialists, c) the adventurous, exotic flavour, try-anything-chocoholics.

Marketing Strategy

As significant numbers of bean-to-bar buyers are already approaching Belizean producers to source organic cacao beans, these buyers require a less aggressive marketing and sales

approach. However, it will be important to continue to strengthen linkages with these buyers and to stimulate ongoing demand from this market segment. Belizean farmers/producer groups will need to selectively target and court bean-to-bar buyers/traders to encourage them to buy Belizean cacao beans for their products rather than go to a competing source country.

The bean-to-bar market segment requires a hands-on, one-on-one method of bean sales. Bean-to-bar buyers generally travel to Belize to work with the farmers individually to select exactly what they want. New buyers often get introduced to the product through 'tasteings' and the Toledo Chocolate Festival is key to this process as buyers are exposed to a range of products.

The main promotional strategy for this market segment involves identifying and promoting a special line of Belizean products under "Brand Belize" in both local and international markets. Adding cacao to this national brand will help to maintain its premium value and assure a high level of quality. Reliability of supply is also crucial. It is therefore essential to maintain strong relationships with current and potential buyers to keep them coming back to Belize. An international public relations campaign focused on promoting the high quality of Belize's cacao will be key to maintaining Belize's reputation and to attract new buyers.

The best Belize cacao (and value added products) should be priced at a premium, following a strategy similar to Jamaica's Blue Mountain coffee. Jamaica's premium coffee beans (in Belize's case these would also be organically grown and Fairtrade) are kept separate from the non-premium beans and marketed as fine flavoured and top of the line. This premium product would ideally carry a certification stamp of authenticity, and only beans thus certified would be allowed to carry this identity. Most of these premium beans would be exported as with the best Jamaican coffee beans. Regarding the Geographic Indicator (GI), it is yet to be determined if the market will bear another price premium for a GI for Belizean cacao, as buyers are already paying premium for Fairtrade, organic, and Belize Blend.

Competitors

Belize's natural competition comes from nearby Caribbean islands (mostly very small producers with the exception of the Dominican Republic) and Central and South American countries that also produce fine flavoured cacao. Some countries, like Ecuador also grows mostly organic. However, global demand for fine flavoured cacao far outstrips supply as production of fine cacao is still relatively small compared to bulk cacao production. Demand for fine organic cacao continues to grow.

Activities and Support

In order for Belize to fully exploit this market segment, a range of activities need to be undertaken primarily focused on increasing the supply and maintaining the quality of the premium quality fine flavoured cacao.

Activities	With Support From
Increase production of fine flavoured cacao	Farmers, TGCA, MMC, other producer groups, BELTRAIDE, certifying bodies, Ministry of Trade, BTB
Market "Brand Belize" fine flavoured cacao internationally	BTB, Ministry of Trade, BELTRAIDE, producer groups, other stakeholders
Target new potential bean-to-bar customers	Ministry of Trade, BELTRAIDE, producer groups, MMC, TGCA
Develop a range of internationally marketed cacao themed events to continue to build Belize's reputation as a reliable source for cacao beans for the international bean-to-bar market	BTB, BELTRAIDE, Ministry of Trade, producers groups
Identify and designate premium beans with certification (GI if supported by buyers)	BELTRAIDE, certifying bodies, producer groups, Ministry of Trade

10.2 The Market for Value Added Cacao Products

Product Diversification

The VCA revealed that Belize's value added cacao products are currently extremely limited. In terms of export, the only product with immediate export potential is cacao nibs, which require little processing and has a ready export market in the premium health food/super food sector in the USA. Export of semi processed cacao nibs is actually due to start shortly through TCGA, which has already identified a large potential buyer, Gone Green. As with the bean-to-bar buyers, Gone Green is spending time in Belize identifying its preferred beans and working with the farmers and TCGA to develop and process this new export product.

Currently, the market for Belize's other value added cacao products is mainly the domestic market, and particularly the local tourist market. In the future, as more value added products are developed, meet international standards and gain market acceptance, these value added products can be exported.

Competition for organic nibs and pre-processed cocoa butter is strong from Latin America, with the Navitas brand in California processing beans in the US.

New Product Development for Local and Export Niche Markets

The 'Every'ing Cacao' Annex features a list of possible value added products, set out in categories that could be developed for a "Unique Cacao" brand. These are products that sell well in niche markets overseas, so could eventually compete. Some of them do not require as much cacao content as chocolates. It is up to the experts, creative minds and designers to make them appealing and outstanding.

- The path towards **New Product Development** (NPD) starts with an entrepreneur who gets an inspiration to create a new product or product line. This is an area that BELTRAIDE can initiate with SME's (See matrix of recommended products)
- **Research** is done to see what the competition looks like and where the trends are going. The "Mintel Report"⁴⁴ is an excellent guide to research and market insight. BELTRAIDE can guide SME's to potential opportunities - visiting specialty stores in foreign markets is also a very helpful way to see, touch and smell the competition
- **Development of a unique product:** Only copy products that can be improved on, at a better price. Develop packaging and labels.
- **Production** is based on **available raw materials** - the first major constraint since manufacturers are competing for the limited cacao that is already getting premium price in the *bean to bar* export market. (Chocolates being one of the most cacao intensive products)
- Identify **equipment:** If it is to make chocolate properly equipment costs over US\$250,000 (equipment costs might be easier to address than shortage of beans if investors are brought in through BELTRAIDE).
- A **skilled workforce** is needed – this does not exist yet in Belize as training is needed. (See *Fine Chocolate* attachment)
- Follow a sound **business plan**, upholding the marketing tenets of: Product, Placement and Price – The price will need to reflect the relatively high cost of local *fine flavor cacao*. See below and *Fine Chocolate* Attachment. BELTRAIDE can assist small businesses.
- **Market test:** Tourists visiting Belize are the same niche consumers from overseas –

⁴⁴ <http://www.mintel.com/food-market-research>

so are ideal for feedback and immediate sales. Product is then tweaked in response to consumer feedback.

- As winners and losers become apparent, products to move forward will be identified.
- **Trade shows:** Entry to an export market is usually done through an overseas show, where buyers and distributors might take up a product that catches their eye. (*See Roadmap phase 2*). Exhibiting at trade shows is expensive and highly competitive so many new entrants group together to share the costs. Results should not be expected for a few years - unless the product is phenomenal. It is recommended to go through all the research and development steps before exhibiting. Do walk-throughs and learn as much about the export trade process for identified products until manufacturers and new products are market ready. One objective could be to find a distributor who can represent the products in an overseas market. (*see Roadmap Phase 1*)

Markets: For all the reasons set out above, we found that Belize needs time to be export ready – estimated 5+ years. However, there is a tremendous opportunity to grow the Belize brand and develop new items. As more cacao becomes available – the high end tourist market, essentially the same consumer as niche markets overseas, is growing rapidly (*Marketing Strategy, below*). In a few years if all the right developmental and production steps are taken, that will be the right time to consider expanding to the niche export markets. (*Roadmap Phases 2-3*)

Domestic Value Added Chocolate Products

Another local value added cacao product of significance is the chocolate bar, although none are currently well developed enough to compete overseas in an export market. Belize now has about seven well-established local chocolate brands: Cotton Tree, Moho, Ixcacao, Kakaw, Goss, Che'il, and Eliado's.

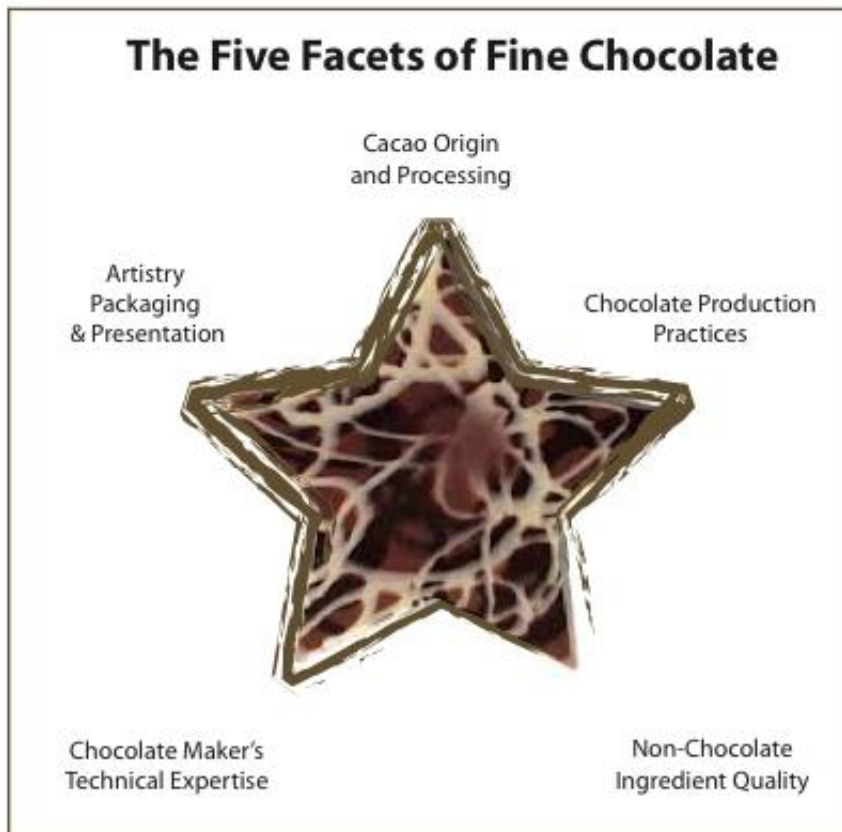
Although the cacao used in the chocolate bars is of high quality, the finesse in chocolate making is lacking. It should be noted that it takes a great deal of sophistication, training, experience, specialized equipment and world class packaging to make 'fine chocolates'. Although producing one of the best organic cacao beans in the world, Belize is faced with a dilemma: 'Fine Chocolate' refers to more than flavour alone, and it takes more than high quality cacao beans to make top quality chocolate. Fine Chocolate melts in your mouth and has a texture that is difficult to achieve without using sophisticated screens and equipment. A Fine Chocolate maker usually has solid training and several years of experience in crafting chocolates. 'Fine' also refers to the other ingredients used in chocolate making, which should be of the best quality. Fine Chocolates are beautifully finished and refined in appearance and are packaged with artistry and sophistication. The top chocolate makers have already set these standards.

See 5 Facets of Fine Chocolate in the illustration below by the Fine Chocolate Industry Association. Also, for more information, see definitions for "Fine Chocolate" in the attachment.

A few farmers have discovered that making rustic chocolate, cocoa powder, cacao tea and cocoa butter can earn extra cash, and tourists are the main customers for the most part. There is therefore much room for development in the local commercial and home-made chocolate industry.

Some local chocolate makers are also developing other value added products that are offshoots of the chocolate making process, such as cocoa powder, which is available in small quantities locally. Other items include beauty products like cocoa butter lip balm, soaps and scrubs, candles and spa gifts. Many of these other value added products suffer from a lack of

proper development. Creative packaging, quality labeling and effective in-store merchandizing would help to give them greater consumer appeal in this niche market.



Chocolate confectionary items such as a chocolate rum cake and chocolate drinks exist, but are hardly visible. Developing these value added items will require training, significant research and product development, packaging and labeling upgrades, and a more sophisticated marketing and promotional approach.

High quality chocolate products generally sell well in overseas niche markets, but end customers are generally discriminating and attracted by unique and distinctive presentations. Competing in these niche markets will require substantial investment in product development and marketing as well as time spent at trade shows to learn the ropes and the demands of this exceedingly competitive market (see 'Every'ting Cacao' Product Diversification Strategy as an attachment for further details).

Target Market

There are two main target segments for Belize's value added products:

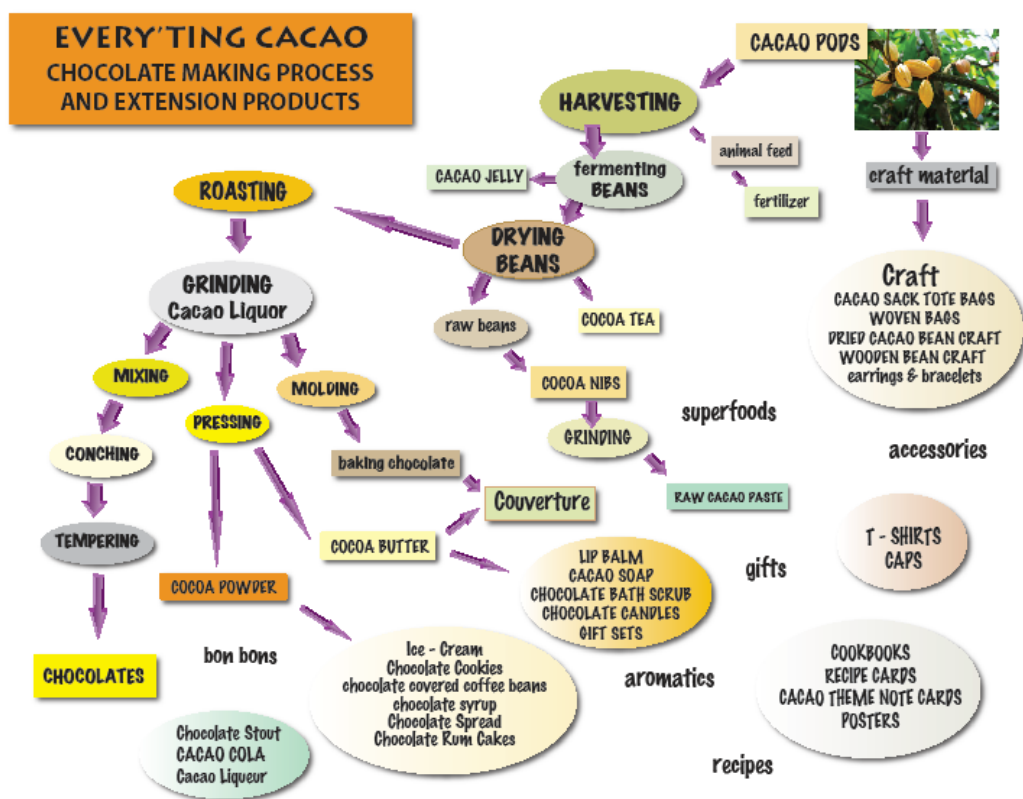
1. The local market, mainly up-market Belizean consumers who value the high quality of local chocolate and related value added products and who are willing to pay a premium price for Belizean cacao. This market also includes the Belizean Diaspora who travel home and who also value and appreciate 'Brand Belize' products.
2. The local tourism market is comprised of the thousands of tourists that visit Belize every year looking for an experience of Belize's culture and country. This demographic is interested in a variety of products and services including Belize's range of natural attractions, tours, and products. This market segment can be targeted for local chocolate and other cacao value added products. It should be noted that

there are two main sub-groups in the tourism market: 1) the cruise ship tourist and 2) the stay-over visitor.

Marketing Strategy

Belize chocolate makers now sell their chocolate bars mainly into the tourist market through on-site sales outlets and airport gift shops. Chocolate bars are also sold in small quantities in the local market via supermarkets and other retail outlets as well as online. Local sales are limited by the relatively high price of locally made chocolates, by the general lack of demand for local chocolate products, (Belizeans prefer sweeter, less expensive imported milk chocolates) and possibly by the inadequate supply of beans for use by local chocolate producers.

Local cacao products are not always sold together, and therefore loose impact. The 'Every'ing Cacao' strategy seeks to bring together and market cacao products coupled with tourism tours and craft items (see Attachments).⁴⁵



The Local Market: Marketing strategies and activities targeted to the local market will leverage Brand Belize. Sales channels include local gift shops, 'Every'ing Cacao' kiosks in high traffic areas, as well as the medium to high-end supermarkets and other retail outlets. Cacao themed events such as the annual Chocolate Festival in Punta Gorda are also excellent channels to reach the local consumer. Marketing activities targeted to the local market include online marketing (online advertising, content marketing via social media) sampling in high traffic retail outlets, public relations activities (stories carried in the local media, interviews with local cacao stakeholders, tour owners, etc.) and targeted advertising campaigns especially around relevant events. Traditional advertising campaigns (TV, print, and radio) can often be expensive and so online channels and activities will be exploited as they are generally less expensive and effective at reaching the target consumers, especially the younger segment of the market.

⁴⁵ Every'ing Cacao is a marketing/merchandizing concept grouping a range of cacao products to enlarge footprint

The Local Tourist Market – A key strategy for marketing Belizean chocolates and other value added chocolate products to tourists is to highlight the connection between Belize's Maya culture and cacao/chocolate/chocolate value added products. This cultural authenticity is a key factor in promoting and marketing local products to visitors. An important channel to reach the local tourist market is through purpose-built outlets like the tourism village, general purpose gift shops, and the hotel and airport gift shops and kiosks. The large groups of cruise line passengers visiting a chocolate factory or going on a model farm tour will be able to visit the on site gift shops with the Every'ting Cacao concept. Research suggests that on average each tourist will buy four bars of chocolates. These gift shops should be encouraged to carry a wide range of chocolate/chocolate themed products to appeal to the large groups of cruise ship tourists/shoppers. The smaller cacao farm tours would also have their own gift shops focused on showcasing their products, as these smaller tours would also have customers eager to buy the cacao products being featured on the tour. Local chocolate producers can also exploit their websites and market their brand online to continue to supply their tourist customer once they have returned home.

High season for tourism in Belize generally extends from October through to April. Understanding and planning for tourism seasonality is essential for the Belizean value added sector's product production and marketing cycles.

Tourism Market Linkages – Toledo farms, Punta Gorda, and the new cruise terminal near Placencia will be critical points for marketing cacao value added products. Developing linkages with retail sales network partners, including hotel gift shops, in these areas is essential for the successful marketing and sales of these products. Tour operators, and the guides working for them, play an important role in influencing visitors where to shop and what to buy, and are therefore important marketing partners. It is important to nurture strong linkages between with the cacao sector and tour operators in these tourism hubs.

The value of the local cacao as a premium product needs to be established through sophisticated packaging, merchandizing and overall presentation across all outlets.

Competition

At present, local chocolate producers have few competitors. However, large multinational companies like Diageo or Godiva are a threat to local producers as these companies are targeting the Caribbean to satisfy a demand for chocolates that is not being filled. For example, cruise ship lines could bring in international chocolate brands for their customers or other importers of foreign chocolates could import international brands into Belize.

Activities and Support

Since it will be both difficult and expensive for Belizean producers to achieve the high international product and packaging standards in the near future, we are recommending that local companies get support/technical assistance to develop and refine their products first for the local market and then for the international market. With a constant stream of visitors added to the local market, there is a lot of room for the market to grow locally, along with improved cacao production. And selling to the tourist market is almost equivalent to conventional export (earning foreign exchange).

Belize can consider developing a range of potential cacao value added products and branded merchandise to market to the local and export markets (See Every'ting Cacao Attachment) at present Belize makes small batch chocolate, some more rustic than others.

Activities	With Support From
Product diversification – seek technical assistance to develop range of value added products	BELTRAIDE, producer and processor groups, Ministry of Trade, BTB, BBS, universities
Develop packaging, marketing, and promotional campaigns for value added products	Processor groups, BELTRAIDE, Ministry of Trade, BTB, BBS, universities
Strengthen linkages into distribution sector	Wholesalers, distributors, retailers, producer groups
Market Brand Belize cacao locally and internationally	BTB, Ministries of Trade and Tourism, producer and processor groups, other stakeholders
Strengthen linkages with tourism stakeholders (tour operators, etc.)	BELTRAIDE, BTB, producer and processor groups, Ministry of Tourism, tour companies
Conduct market research into visitor satisfaction associated with the cacao sector	BELTRAIDE, BTB, other public sector stakeholders, universities

10.3 The Local Tourism Market for Cacao Farm Tours

The Cacao Farm Tour Product

The value chain analysis demonstrates that farmers and chocolate processors can significantly increase their income by catering to the tourists coming to Belize by providing farm and chocolate tours. There are currently several chocolate and tour-related businesses currently operating in the Toledo area. The two main ones are traditional Maya cacao growers who have branched out to make chocolate and offer farm tours (IXCACAO and Eladio's Chocolate Adventure). Though in need of development, these small-scale chocolate and cacao farm tours are ideal for independent stayover visitors who want an intimate experience of a cacao farm tour.

Moho Chocolate has created a chocolate factory in the Tourist Village that sells chocolates and value added products. Additionally, TCGA is planning on introducing a chocolate making tour to the Maya House of Cacao that would cater to the Norwegian Cruise Line starting in October 2015. NCL estimates that it would ideally need three tour products of that type in the area to satisfy their demand. They estimate that in three years, 48,000 visitors will leave the ship for a short tour in nearby Toledo and the south. (See Annex 1: Model Toledo Chocolate Factory; project, layout and brochure)

Target market

The target market for cacao farm tours include self described cultural enthusiasts, eco and agro tourists, 'foodies', students, journalists, and food bloggers, among others. Belize attracts visitors from two distinct market segments: the overnight or stayover tourist and the cruise ship visitor. The cruise ship segment dominates, bringing two to three times the number of visitors annually compared to the overnight tourist market. The combination of the large size of the cruise ship market and the proximity of a new cruise ship port near Placencia provide a golden opportunity for the South.

Cruise ship visitors and overnight tourists are quite different market segments, which should be taken into consideration when designing and promoting tour experiences. Cruise line visitors arrive in vast numbers and only have a few hours onshore. They generally travel in

large groups to purpose-built locations that can process them quickly like the Tourist Village in Belize City. They require first world facilities. Though they would be interested in visiting cacao farms and seeing the chocolate making process, they do not have much time for a hands-on adventure and would be satisfied with a model farm rather than a real one. They are likely to purchase chocolates, and other products that appeal to their niche market taste. Bracelets and other accessories are best sellers. Access to the range of cacao products would be provided at purpose-built tour centers or the tourist village gift shops wherever they disembark or visit.

Other visitor segments such as study abroad groups have high potential to purchase experiential tourism programs focused on cacao.

Marketing Strategy

Belize receives 900,000 to 1 million visitors annually, providing a healthy customer base for cacao themed tours. Philip Goldson International Airport (PGIA) is the most important land-based port of entry to Belize, welcoming over three-quarters of overnight visitors to Belize. Meanwhile, Belize City is the only port of entry for cruise ship visitors. These two ports of entry are therefore critical points for the marketing and sale of tourism products including tours.

The opening of a cruise terminal in Harvest Caye will provide a number of opportunities in southern Belize for farm tours and other tourism-related activities. Norwegian Cruise Lines expects 60,000 cruise tourists in the first year and 300,000 in three years. They estimate that 25% of their passengers will take a tour. Placencia will also provide critical touch points for marketing cacao farm tours to visitors. Developing linkages with tour operators, guides, taxi operators, hotels and other tourism stakeholders will be important to influence visitors regarding what experiences they should partake in while in Belize.

Chocolate-making has been done by the Maya people for centuries, and Toledo is becoming recognized as the 'home of cacao'. The popularity of locally-produced chocolate is increasing, with farm tours being arranged by innovative entrepreneurs. As such, cacao is a 'made in Belize' product that can be further developed as part of Belize's experiential tourism and destination strategies. Cacao processing is an example of how cultural goods and services can be incorporated into Belize's tourism value chain. Providing linkages between agriculture and the tourism sector is an important way to develop new markets and opportunities in 'experiential tourism'. Cacao presents a particular opportunity to infuse the cultural experience in specific value chain segments, namely food and beverage, souvenirs, transportation and excursions. This fits within the NES strategy for tourism, where Maya sites and other cultural locations provide an opportunity to develop more robust cultural packages, building on services that are already being offered.

The marketing strategies and tactics to be used to market cacao farm tours to visitors will again focus on leveraging "Brand Belize" and positioning cacao farm tours as a unique experience of Belize – culture, country, people. The approach to the cruise ship visitor versus the stayover visitor will be different as the cruise ship visitor will be highly dependent on the tours made available to them by the cruise ship. The internet (especially review sites such as Tripadvisor), word of mouth, hotels, tour operators, travel agents and other stakeholders will all be important sources of information on Belize and its cacao tours. Marketing efforts should focus on these channels to inform visitors about the various types of farm tours

available in Belize. Strategic partnerships between the cacao sector and tourism stakeholders will be crucial. An ongoing international public relations campaign will also be important to market Brand Belize.

Competition

The cacao farm tours compete with the variety of different tours and attractions offered in Belize.

Activities and Support

To comprehensively leverage Belize's rich cultural heritage and develop and market a range of cacao related tour products, the tourism industry will need to:

Activities	With Support From
Aggressively promote brand Belize internationally	BTB, Ministries of Tourism and Trade
Develop world class tourism products and services	BTB, tour companies, BBS, Ministries of Health and Education, TCGA, MMC, NICHE
Develop an export-oriented strategy for cultural products and services	NICHE, BTB, Ministry of Tourism, tour operators, TCGA
Strengthen the cultural industry value chain and infuse culture into the tourism package	NICHE, BTB, Ministry of Culture, TCGA, MMC
Build human capacity in areas which support the tourism industry, e.g. Training in community tourism	Ministries of Education and Culture, BTB, NICHE
Ensure supporting legislation exists, such as intellectual property protection	BELTRAIDE, BTB, BBS, Ministry of Trade
Increase coordination within the tourism industry and facilitate linkages with other sectors	Economic Development Council, BELTRAIDE, Ministries of Tourism, Agriculture and Trade
Build a wider awareness of cultural services within Belize	NICHE, BTB, Ministries of Tourism and Education, tour companies
Provide support to cultural bodies and associations	Ministry of Tourism, NICHE, BTB, public sector stakeholders
Establish a mechanism to effectively monitor the long term development of the industry	BELTRAIDE, Ministry of Tourism
Develop quality souvenir products meeting packaging and labeling standards	Ministries of Education and Culture, BBS
Ensure quality control/standards of tour products	Ministries of Tourism and Health, BTB, BBS, tour companies
Maintain infrastructure and roads	Ministry of Lands and Works
Train growers in on-farm tours and the requirements for maintaining organic status, public health rules and recommendations from the Belize Tourist Board	Ministries of Health, Agriculture and Tourism, TCGA, MMC

11.0 IMPLEMENTATION STRATEGY AND RESOURCE REQUIREMENTS

An Implementation Plan and preliminary summary budget for the strategy is provided below. It is assumed for the purposes of this implementation plan that MNRA and BELTRAIDE will oversee review of the Industry Strategy report with the participation of stakeholders in the agriculture, trade and tourism sectors.

It should be emphasized that the most important step in the implementation process is the design phase. Careful attention must be devoted to designing appropriate development projects in collaboration with the beneficiaries and stakeholders. This process can take 6 months to a year to complete. Once the initial project/programme design has been mapped out, it will be important to undertake a problem tree analysis with the beneficiaries/stakeholders to ensure a logical flow between the overall goals, specific objectives, and results, along with the indicators of progress.

11.1 Implementation Strategy - Phased Approach

The Cacao Industry Strategy is designed to be implemented in three phases:

Phase I: Preliminary Project Design (2015-2017): The first phase involves design of a select number of sustainable development projects aimed at increasing production and value added activities, providing linkages to niche markets, and tourism events and market segments, focusing primarily on exports, cruise and stayover market segments, and the establishment of an organizational structure.

Phase II: Medium Term Transition (2017-2020): The transition phase involves increasing production, value-added processing etc. that is designed to help with the transition to a private sector-driven cacao industry framework.

Phase III: Long Term Transformation (2020-onwards): The transformation phase involves significantly increased production, etc. that transforms the cacao sector to commercial competitiveness within the Belize trade, agriculture and tourism portfolios.

The implementation plan presented below provides a step-by-step programme for execution of the Cacao Industry Strategy. At this stage, preliminary budgets have been provided for the first and second stages, involving designing and implementing a series of sustainable development projects (Cacao Development Programme). A budget range is provided for the third (transformation) phase, but it must be emphasized that this budget will depend on the results of the first two phases, and it is subject to review and decisions by the appropriate government authorities.

Investment by the public sector should focus on establishing the necessary project support and infrastructure (roads, site improvements, product development facilitation, market development, training, and capacity building). This in turn will create a positive environment for generating complementary investment from the private sector, ranging from farmers and site operators to tour operators and hotels and restaurants.

Table 17: Preliminary Budgets for each Phase

Phase	Year	Preliminary Budget
<i>Phase I: Preliminary Project Design</i>	2015-2017	US \$ 250,000
<i>Transition Phase II: Increased production, value-added processing & implementation of the Cacao Development Programme</i>	2017-2020	US \$ 500,000
<i>Transformation Phase III: Transformation of the cacao sector to commercial competitiveness (order of magnitude)</i>	2020- onwards	US \$3 to \$5 million

11.2 Cacao Industry Road Map

Positioning and phasing for project development and promotion of events is recommended to involve not only production support, but also chocolate processing and linkages to tourism through cacao farm tours, and events designed to enhance the appeal of farm tourism and help generate more tourism business for farmers. These activities are outlined in the attached Industry Road Map (See Annex 5).

11.3 Implementation Plan

The objectives and activities as envisaged are laid out in Table 18 below with short-term priorities indicated as one (1). The organisations that are responsible for addressing these activities are listed. Activities that have not yet started and support that is still required are also stated with suggestions as to which organisations should offer the support.

12.0 MONITORING, EVALUATION AND REPORTING

The Strategy will be monitored by the Cacao Oversight Authority under a joint committee co-chaired by MNRA and BELTRAIDE. An internal progress review should be undertaken every quarter, and a mid-term evaluation and final evaluation should be undertaken at the mid-point and termination of the initiative.

The Preliminary Summary of Expected Results (Table 16 in Section 8.6) includes a set of broad indicators that can be used to monitor and evaluate the results of the Strategy. A more detailed Results Matrix and Monitoring and Evaluation (M&E) Plan will need to be formulated to monitor the achievements of the projects/programme. The project/programme design process will involve formulating a set of indicators accompanied by baselines and targets that will need to be identified for each outcome. During the implementation phase, it will be important to review the Results Matrix, indicators and the M&E Plan several times throughout the project cycle.

The lead organization (MNRA or BELTRAIDE) will be responsible for monitoring and evaluating the implementation of the Strategy. Responsibility for monitoring and evaluating the individual projects/programme will rest with the specific implementing entity (e.g., TCGA). The Executive Committee should meet with the relevant stakeholders and

government departments twice a year to review progress and pitfalls in the implementation of the Strategy.

The Executive Committee should be supported by Project/Programme Working Groups that will meet regularly (quarterly) with a purpose to monitoring progress and taking remedial action when the expected results are likely not to be achieved. The Project/Programme Working Groups will be coordinated by the MNRA/BELTRAIDE Executive Committee together with relevant line ministries involved in the project/programme area.

The Working Groups will send reports to the MNRA/BELTRAIDE Executive Committee based on the results of continuous reporting, monitoring and studies and surveys that may serve as input into the Annual Progress Reviews.

Monitoring and evaluation is a process that should be nationally owned. Representatives from the private sector and development partners can be invited by the MNRA/BELTRAIDE Executive Committee to be part of the Working Groups. Information sharing and transparency are critical to the success of the initiative. Cacao Facts & Figure reports should be circulated to stakeholders on an annual basis.

Table 18: Implementation Plan

Objective	Sub Objective	Activities	Activity No.	Priority	Action Type	Direct Beneficiaries	Existing National Measures		Additional Support Needed
							In Charge of Implementation	Actions in Progress	
1. Increased Quantity	1.1 Improve farming techniques	Training in pruning, soil amendments, grafting for increased yield	111	1	Production, Training	Growers	TCGA, MMC, IDB/MIF, IICA	2014	MNRA
	1.2 Attract more investors and growers	Support new growers with best practices, linkages, business models, reduced import duties	121	1	Production, Promotion, Information, Policy	Growers	TCGA, MMC	2014	BELTRAIDE/MNRA
	1.3 Improve infrastructure of roads	Maintain existing roads and build new roads to cacao farm areas	131	1	Public Services, Representation	All stakeholders	Public Works		MNRA
	1.4 Improve infrastructure of storage and warehouses	Maintain storage buildings to necessary standards for cacao	141	1	Production, Grants	Growers, Traders	TCGA, MMC		MNRA
2. Increased Quality	2.1 Improve quality at farm	Rewards for responsible handling of wet cacao beans	211	1	Collection, Training	Growers	TCGA, MMC		MNRA
		Incentives for quality drying and fermenting on farm or in village clusters	212	1	Production, Collection, Training	Growers	TCGA, MMC		MNRA
	2.2 Improve the variety of seed for fine flavor, high yield and disease resistance	Identify the flavor most desired by destination cacao buyers	221	1	Research, Agreement	Growers, Traders, Chocolate makers	MMC/USDA/FC I/Heirloom Chocolate/Univ. of Hawaii, TCGA, IXCACAO	2011	MNRA /University of the West Indies/University of Belize
		Identify the highest yield and disease resistant varieties	222	1	Research, Agreement	Growers, Traders	MMC, TCGA, universities	2011	International Cocoa Gene Bank

Value Chain Analysis and Industry Strategy for Belize's Cacao Sector

Objective	Sub Objective	Activities	Activity No.	Priority	Action Type	Direct Beneficiaries	Existing National Measures		Additional Support Needed
							In Charge of Implementation	Actions in Progress	
		Produce high quality grafted seedlings for increased demand	223	1	Production, Extension	Growers, Traders	MMC, TCGA	2011	MNRA
	2.3 Improve the grading and testing of beans	Train growers, field officers, certifying officers to recognize and improve poor quality beans	231	1	Production, Extension	Growers, Traders	TCGA, MMC	2010	MNRA
		Improve certification and quality control	232	1	Production, Regulations	All stakeholders	HACCP, Soil Assoc., IMO, USDA, FCI, Heirloom Chocolate, TCGA, MMC, BAHA	2013	BELTRAIDE/BBS
3. Diversify Products	3.1 Establish 'Brand Belize' fine flavoured cacao in world	Belize apply for membership with ICCO	311	2	Institutionalize	All stakeholders		To be started	Ministry of Foreign Affairs/MNRA
		Have Belize cacao tested by ICCO for fine flavoured status	312	2	Testing/analysis	All stakeholders		To be started	Ministry of Foreign Affairs/MNRA
	3.2 Target new bean-to-bar customers in US and EU	Farm to buyer linkages established	321	2	Promotion	All stakeholders	MMC	2009	BELTRAIDE/TCGA
	3.3 Expand range of value added cacao products	Develop first-stage added value products for export (nibs)	331	1	Technical Assistance, Agreement	Traders, TCGA Business Arm	TCGA	2015	BELTRAIDE
		Develop chocolate products for tourist market	332	1	Technical assistance, Pilot + Equipment	Chocolate makers, TCGA Business Arm	TCGA	2011	BELTRAIDE/Public Health/universities/Ministry of Trade

Value Chain Analysis and Industry Strategy for Belize's Cacao Sector

Objective	Sub Objective	Activities	Activity No.	Priority	Action Type	Direct Beneficiaries	Existing National Measures		Additional Support Needed
							In Charge of Implementation	Actions in Progress	
		Develop packaging, marketing, promotional campaigns for new products	333	1	Technical assistance	Traders, TCGA Business Arm		To be started	BELTRAIDE/ BBS/BTB/ universities/ Ministry of Trade
		Involve SMEs in cacao use in their product lines (bakers, soaps, etc.)	334	2	Pilot + Equipment	Traders, Women's Groups, Communities		To be started	TCGA/ BELTRAIDE/ Small business associations
		Strengthen linkages into distribution sector	335	1	Agreement	Grower Business Arm, Chocolate makers		To be started	BELTRAIDE
3. Diversify Products continued	3.4 Develop a range of cacao themed events to build Belize's reputation	Replicate the Chocolate Festival in other locations and times of the year	341	2	Promotion, Production	Chocolate makers, Tour groups, Women's Groups, Communities	TCGA	2009	BELTRAIDE, Small business associations, Women's Groups, BTB
	3.5 Cacao and tourism linkages strengthened	Conduct market research into visitor satisfaction with the sector	351	1	Research	All stakeholders		To be started	BTB, Ministry of Tourism, BELTRAIDE
		Improve farm tours and increase the number of farm tours	352	1	Training, Public Services, Grants	Growers, Tour Operators, Women's Groups	BTB	2013	Public Health, Ministry of Tourism, Tour Operators
		Expand tour facilities for cruise ship passenger in association with archeological and fauna sites	353	1	Grants, Training, Agreement, Public Service	Growers Business Arm, Tour Operators	TCGA	2015	BTB, BELTRAIDE, NICHE

Value Chain Analysis and Industry Strategy for Belize's Cacao Sector

Objective	Sub Objective	Activities	Activity No.	Priority	Action Type	Direct Beneficiaries	Existing National Measures		Additional Support Needed
							In Charge of Implementation	Actions in Progress	
		Build model farm and chocolate factory	354	1	Grants, Pilot + Equipment, Agreement	Growers Business Arm, Chocolate makers	TCGA	2015	BTB, BELTRAIDE
		Improve cacao craft and range of gift items for the tourist market	355	2	Training, Production	Women's Groups	Ixchel, other Women's' Groups		BTB, BELTRAIDE, NICHE, Small business associations
4. Governance	4.1 Improve national organization and transparency of the cacao sector	Form a National Oversight Authority	411	1	Institutionalize	All stakeholders	Industry Strategy/MNRA/ BELTRAIDE	To be started	Ministry of Trade
		Publish Fact & Figures of prices, costs, best practices annually	412	1	Survey, Information, Communication	All stakeholders	Sector Profile/MNRA/ BELTRAIDE	To be started	Customs/Statistical Institute of Belize/ /TCGA/ MMC/Chocolate makers/Tour operators
		Establish the standards and best practices for cacao growing and processing, including ISO, organic	413	1	Sensibilization Agreement, Regulation, Training	All stakeholders	TCGA/Soil Association, MMC/IMO, BAHA		BELTRAIDE/ MNRA/ BBS/ Public Health
	4.2 Improve grower representation and communication	Create effective village clusters with elected representative	421	1	Communication, Institutionalize	Growers	TCGA, MMC	Since 1996 and 2009	Co-operative societies/Credit unions
		Develop grower associations in Stann Creek and Cayo	422	2	Communication, Institutionalize, Training	Growers	To be started	To be started	TCGA/ MMC/ Co-operative societies/ Credit unions

Value Chain Analysis and Industry Strategy for Belize's Cacao Sector

Objective	Sub Objective	Activities	Activity No.	Priority	Action Type	Direct Beneficiaries	Existing National Measures		Additional Support Needed
							In Charge of Implementation	Actions in Progress	
	4.3 Improve the business activities of the farmer organization	Separate the marketing and value added functions with a limited liability company	431	1	Structuring, Training, Institutionalize	Growers	TCGA	2015	Registrar of Companies/MNRA /BELTRAIDE

PART IV –RECOMMENDATIONS FOR MNRA & BELTRAIDE

MNRA and BELTRAIDE have multiple roles to play in the cacao sector ranging from assisting with extension support, facilitating investment and investors, participating in trade missions, assisting SMEs, etc. Currently, Belize's cacao sector is small but very much in demand. The primary constraint is the need to increase production, responsibility for which should rest with MNRA. This is an important consideration for the people in southern districts who have the greatest dependence on agriculture and the highest poverty rates.

Belize has the potential to increase production, export and value addition in the cacao sector, but MNRA has not provided any support and other government services such as BELTRAIDE and BTB have provided sporadic support primarily through donor funded projects. BELTRAIDE's small business section has not had a strong link with the people of southern Belize. Small business owners were not aware of support in training from BELTRAIDE in financial management, legal requirements, education in standard requirements for organic, ethical trade, food safety, tax obligations on imports. These areas should be more evident for the growth of the cacao sector.

What MNRA and BELTRAIDE are doing in the cacao sector:

- BELTRAIDE took on the initiative suggested by the CEO of Agriculture to support the cacao sector from a trade, private sector and foreign investment perspective
- BELTRAIDE has provided SME support initiatives that fit the needs of cacao stakeholders
- BELTRAIDE proposed a cacao consortia at the trade meeting in Peru 2014 for Latin American and Caribbean countries
- Both MNRA and BELTRAIDE recognize the potential linkages between the agriculture and tourism sectors and that the tourist market in Belize is an export market
- BELTRAIDE staff usually attend stakeholder meetings with visiting consultants
- BELTRAIDE offers training in HACCP and ISO certification
- BELTRAIDE guides business investors in Belize
- MNRA maintains an agricultural office in Toledo, staffed by several extension officers, but does not currently provide support to the cacao sector

What MNRA and BELTRAIDE are doing but can improve:

- SME support in southern Belize; cacao stakeholders in the south feel they would benefit from more support from BELTRAIDE in HACCP, ISO certification, business planning, financial management, information on importing supplies and equipment for trade, labeling, and chocolate making, transparency of production and trade information and support in attending trade shows
- MNRA maintains a presence in Toledo and should appoint a designated officer for cacao in southern Belize as a primary contact point. Sincerity and continuity are needed to build trust and acceptance among the Maya

What MNRA and BELTRAIDE must do in the Preliminary Phase:

- Decide on the immediate actions to be taken in designing and developing a series of sustainable development projects or a larger programme for the cacao sector
- Convene a meeting of the Economic Development Council to determine the best approach to facilitate a medium term transition and long term transformation of the sector using a private sector led approach
- MNRA and BELTRAIDE should co-chair an over-arching entity, perhaps called the Cacao Oversight Authority (COA) to look after the interests of the sector for Belize. The COA would be an over-arching entity that would not trade in cacao but would

- offer certification, research, testing, nurseries, incentives, best practices, standards and business models.
- MNRA and BELTRAIDE should engage in a formal arrangement to provide support and efficiency to the cacao sector's rapid growth, in order to stimulate both the growth in production and support to chocolate processors and other SMEs
 - To facilitate increased investment in cacao farmland, BELTRAIDE can offer investors business models
 - MNRA can provide best practices for production and post-harvest handling
 - BELTRAIDE can support BBS in forming a working committee on cacao standards to be adapted or adopted suited to local conditions and premium markets
 - On value added processing, BELTRAIDE can facilitate investment in cacao by pushing for policy such as duty exemption on inputs in production and chocolate making, either based on a time-limited basis or a maximum revenue-based model.
 - MNRA can collect data to publish an annual report on Belize Cacao Facts & Figures that can be used to guide policy, development and investment; data should be collected on gender
 - MNRA should provide support to cacao growers to assist them to increase quantity and quality of production and productivity
 - MNRA and BELTRAIDE should bring together the supporting government ministries required to resolve the constraints identified in the VCA; Public Health for licenses to meet tour requirements, Ministry of Education for skill needs in the sector, Ministry of Tourism for cross cutting issues to increase stay over tours and cruise ship tours
 - MNRA should streamline the steps for obtaining organic certification with the current systems used by MMC and TCGA to get cost effective support from Agriculture Field Officers, other required players and supportive NGOs
 - MNRA should offer further training to growers in the organization of farm clusters perhaps with support from co-operative societies, companies registrar or credit unions
 - BELTRAIDE should provide further training in SME best practices, financial literacy, record keeping, tax compliance, loan management, partnerships and alternatives for mobilizing funding
 - BELTRAIDE should work with BTB and other stakeholders to:
 - Develop an action plan for the cruise tours and chocolate factory – this includes a feasibility plan and business plan which could be done simultaneously
 - Brand the tours and value added products – i.e. though “Every’ting Cacao” as a strategic promotion plan; in addition, a brand name like “Unique Cacao” could be used as a branding strategy (links with Unique Belize)
 - Build marketing partnerships with cruise ship operators, tour operators, key hotels etc. very early on, for support
 - BELTRAIDE should establish training for improvements in all sectors requiring it – chocolate making (find experts), development of chocolate fragrances (find experts), training for sales and marketing people who will be responsible for supporting initiatives, work with BTB on training gift shop staff and guides
 - BELTRAIDE should assist in obtaining the necessary licenses for the projects, i.e. Chocolate factory, etc.
 - BELTRAIDE should choose cacao products from the “Every’ting Cacao” matrix and nurture the development with relevant small producers from southern Belize
 - BELTRAIDE should design and make at least one “Every’ting Cacao” kiosk as an example – perhaps at Harvest Caye or the airport
 - BELTRAIDE should liaise with the Ministry of Foreign Affairs to examine the possibility of Belize becoming a member of ICCO and developing legislation for the cacao industry

Leading a two-pronged approach involving a private sector driven initiative together with a sustainable development programme in Southern Belize will be a very difficult undertaking. The above actions may require MNRA and BELTRAIDE to examine ways of improving their leadership, capacities and management. BELTRAIDE and MNRA should determine which organization has the most appropriate mandate, leadership and capacity to take the lead on the various initiatives identified ranging from governance, production of cacao and providing support for the small business sector. A careful examination of the requirements needed to lead a private sector initiative in the agriculture sector should be undertaken with MNRA. Capacity will need to be strengthened in order to manage a complex development project in the south. It may be decided that TCGA should manage the development project directly, as opposed to building capacity within MNRA and BELTRAIDE. Human resource capacity in MNRA and BELTRAIDE requires significant strengthening to participate fully in the projects, consultations, training and implementation that they have already undertaken, and increased responsibilities that are proposed.