

## TERMS OF REFERENCE

### CONSULTANCY SERVICES FOR WEBSITE DESIGN, DEVELOPMENT AND MAINTENANCE AS WELL AS TO ESTABLISH A SOCIAL MEDIA PRESENCE FOR THE TOLEDO CACAO GROWERS' ASSOCIATION IN BELIZE

#### **1. BACKGROUND**

1.01 Belize is a small, lower-middle income country. Forty-one percent (41%) of Belize's population was below the poverty line in 2013 with an unemployment rate of 10.4% in September 2019<sup>1/</sup>. Tourism is the country's most significant sector and accounted for 44.9% of Gross Domestic Product (GDP), 33.9% of employment and 43.1% of total exports in 2017<sup>2/</sup>. The coronavirus (COVID-19) pandemic has exacerbated an overall decline in economic activity over the last 15 months<sup>3/</sup>. Through continued diversification, the agricultural sector contributed 9% to Belize's GDP in 2017, employing just over 22,000 workers; and it remains one of the main pillars of the economy<sup>4/</sup>.

1.02 Food and agricultural products account for more than 80% of goods exports<sup>5/</sup>. However, Belize's agriculture sector suffers from significant production and value-addition constraints due to a range of factors. Until recently, agriculture sector strategies by the GOBZ, have tended to focus on sugar, citrus, and bananas, with little emphasis on supporting marginal cash crops like cacao<sup>6/</sup>.

1.03 To stimulate the expansion of exports, Belize developed a National Trade Policy (NTP) 2019–2030. The NTP identifies and seeks to address the constraints to export development. Building the capacity of business support institutions and exporters is a key component of the strategy. In pursuit of Objective #2: Improve Trade Performance, Diversify Production and Export Basket and Enhance Value Addition, the GOBZ has identified a number of sub-sectors in agriculture, including cocoa, as important drivers of diversification and increased export earnings.

1.04 Globally, cocoa beans (derived from the cacao tree), are a highly traded product and the main ingredient in chocolate manufacturing. Production is concentrated in developing countries with the requisite climate and soil for cultivation while processing and consumption are largely concentrated in developed countries. The industry in 2019 was valued at USD137.9 billion (bn) and is expected to increase

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<sup>1/</sup> Information on social indicators, poverty, and welfare for Belize is scant. The last Country Poverty Assessment (CPA) conducted was in 2009-10 supported by CDB. See also Carneiro, Francisco. (2016). *Belize Right Choices Bright Future: Systematic Country Diagnostic*. World Bank Group. Available online at <http://documents1.worldbank.org/>

<sup>2/</sup> Ministry of Tourism and Civil Aviation (Business Development Unit). 2020. *Tourism Consumption Study: Enhancement of Tourism Value Chain – Linking Local Farmers to the Tourism Market*. Available online at <https://tourism.gov.bz/>

<sup>3/</sup> Statistical Institute of Belize. *GDP For Second Quarter 2020*. Available online at <https://med.gov.bz/>

<sup>4/</sup> Belize Trade and Investment Development Service (BELTRAIDE). (2018). *Agriculture: The Foundation of Belize's Economy*. Available online at <https://belizeinvest.net/>

<sup>5/</sup> Food and Agricultural Organisation of the United Nations (FAO). (2019). *Developing and Enhancing Small Scale Agro Processing Capacity in Belize*. Available online at <http://www.fao.org/>

<sup>6/</sup> The terms Cacao vs. Cocoa are used in specific context in this document. In one sense, the two words mean the same thing as “cocoa” is the English adaptation of the word “cacao.” However, there are also important distinctions between the two. While cacao refers to cacao beans that have not been roasted, what is called cocoa is made of beans which have been roasted. Recently, manufacturers of raw vegan food products have adopted the more authentic spelling of the word in an attempt to distinguish their products from products which use roasted cacao beans, such as raw cacao powder vs. cocoa powder.

to USD182.09 bn by 2025<sup>7/</sup>. Notably, growing demand in artisanal chocolate offers new opportunities for niche suppliers in the high-value cocoa bean market.

1.05 Belize’s cacao industry has historical linkages to the indigenous Mayan culture, a defining feature of which is the continued use of traditional farming methods, excluding inorganic fertilisers, and pest and disease control methods. Participation in the cocoa-chocolate global value chain (CCGVC) totalled less than USD600,000 in 2016 (UNComtrade, 2017), making the country a small producer in this industry. Cocoa beans accounted for nearly 98% of Belize’s cocoa-chocolate exports. An estimated 55% of the beans are exported to the United States of America (USA), while other key markets include Japan and the EU. Most of the cacao beans are sold to artisanal and chocolate manufacturers. For example, Cadbury’s Green and Black, now owned by Mondelez, historically sourced beans from TCGA in Belize. Similarly, Maya Mountain Cacao, another large domestic buyer, sells its beans to artisanal chocolate manufacturers in the USA and Europe via its parent company—Uncommon Cacao.

1.06 Smallholders are the largest group in local cacao cultivation; and about 15,000 persons are dependent on the industry. An estimated 500 smallholders are concentrated in Toledo district, in southern Belize. However, a few farmers cultivate small plots in the Stann Creek and Cayo districts. Approximately 3,000 acres of cacao is currently cultivated.

#### *Toledo Cacao Growers Association*

1.07 TCGA is a not-for-profit organisation that was established in 1986, and is registered under the Belize Company Act, Chapter 250. The Association was in good standing in 2020 with the Registrar of Companies. TCGA has 407 members, of which 26 are women. Its mission is “to improve the socio-economic standard of living of its members through competitive and diversified systems of production, which incorporate sound ecological practices.”

1.08 Historically, TCGA has been the primary actor in Belize, representing cacao farmers, pooling crops, and negotiating sales to international buyers. It provides technical support in cacao production through training, extension services, and demonstration farms, and offers high quality fine flavour cacao beans. Over the last ten years, TCGA has made a concerted effort to capitalise on opportunities from moving up the CCGVC. To date, two studies exploring the dynamics of the CCGVC, have indicated that moving up the value chain has two essential components<sup>8/</sup>: (i) increasing the production of, and the ability to guarantee high quality cacao beans, in particular, beans that could be classified as *fine and flavour cocoa*<sup>9/</sup> (FFC); and (ii) value addition to cacao beans through processing.

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<sup>7/</sup> [https://www.researchandmarkets.com/reports/5138783/global-chocolate-market-forecasts-from-2020-to?utm\\_source=BW&utm\\_medium=PressRelease&utm\\_code=j79btp&utm\\_campaign=1472980+-+Global+Chocolate+Market+Report+2020%3a+Market+to+Reach+US%24182.090+Billion+by+2025%2c+Increasing+from+US%24137.599+Billion+in+2019&utm\\_exec=chdo54prd](https://www.researchandmarkets.com/reports/5138783/global-chocolate-market-forecasts-from-2020-to?utm_source=BW&utm_medium=PressRelease&utm_code=j79btp&utm_campaign=1472980+-+Global+Chocolate+Market+Report+2020%3a+Market+to+Reach+US%24182.090+Billion+by+2025%2c+Increasing+from+US%24137.599+Billion+in+2019&utm_exec=chdo54prd)

<sup>8/</sup> See International Development Consultants Ltd. (2015). *Value Chain Analysis and Industry Strategy Development for Belizean Cacao*, Report submitted to BELTRAIDE. Available online at <https://www.agriculture.gov.bz/>; and Hamrick, Danny and Fernandez-Stark, Katrina. (2018). *Belize in the Cocoa-Chocolate Global Value Chain*. Duke Global Value Chains Center, Duke University. Available online at <https://www.gvcc.duke.edu/>

<sup>9/</sup> “Having the status recognised as fine flavour gives you a leg up in marketing your product to potential customers”, Ed Seguíne, Chair International Cocoa Organisation panel on FFC.

### *Constraints to Increased Production*

1.09 The largest natural threat to Belize cacao production is the monilia fungus, which has seriously affected production in the past. The pathogen *Monilia*, is a powdery mildew fungus that is spread by insects and which can decrease production by 90% if it is not managed. When properly controlled, production can be increased to 85%<sup>10/</sup>. During the period 2011–2015, TCGA received assistance from the EU and the Inter-American Development Bank’s Multilateral Investment Fund (IDB-MIF) and was able to rehabilitate over 1,000 acres of cacao, that was infested with the monilia fungus. As a result of this intervention, production was increased from 75 metric tons (MT) to 130 MT annually. However, production levels remain constrained by low output levels. When compared to the Dominican Republic, the world’s largest producer of organic cacao, yields in Belize are nearly four times less<sup>11/</sup>.

1.10 Cultivated using traditional practices in agroforestry systems, cacao in Belize is grown under a canopy of trees which provide shade, income and food<sup>12/</sup>. Production is labour intensive with modest infrastructure investment. Farmers practice slash-and-burn agriculture, which entails shifting cultivation and careful management and integration into agroforestry systems, to maintain biodiversity and avoid environmental degradation. There are several constraints to productivity including poor agricultural practices (for example-tree and shade management), irregular land tenure, lack of availability of disease resistant planting material and poor propagation. These constraints also affect TCGA’s ability to maintain its IMOCert<sup>13/</sup> and Fairtrade<sup>14/</sup> certifications.

### *Value Addition to Cacao Beans*

1.11 Belize’s participation in the CCGVC is almost exclusively in the production segment, with the harvesting of cocoa beans and initial processing (fermentation and drying)<sup>15/</sup>. A simplified illustration of the process is represented in Figure 1.

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<sup>10/</sup> However, management for disease calls for regular visits by agriculture extension services and inspectors, as well as periodic training for growers to ensure that each grower properly maintains a file and is aware and compliant with the latest market regulations.

<sup>11/</sup> Donovan, Jason et al. (2008). *Towards a sustainable cocoa sector in Belize: An action plan based on analysis of production systems, rural livelihoods, and market environment*. Report submitted to CATIE, Belize Ministry of Agriculture and Fisheries (MAF) and the Regional Unit for Technical Assistance (RUTA).

<sup>12/</sup> Common shade species which also offer market opportunities for other products include fruit and timber trees such as banana, plantain, palm, and various timber species like Salmwood.

<sup>13/</sup> IMOCert is an international certification body with headquarters in Bolivia, that operates in more than 20 countries in Latin America and the Caribbean. As an organic control body, it has been accredited for many years in accordance with European Union Regulations 834/2007 and 889/2008 by the Dakks (national accreditation body for Germany), in accordance with ISO/IEC 17065. See further <https://imocert.bio/>

<sup>14/</sup> Fairtrade is the most globally recognised ethical label. The Fairtrade mark means the producers and businesses have met the stringent Fairtrade social, economic, and environmental standards. FLOCERT, is the main independent certifier for Fairtrade, which inspects producers and traders to ensure they comply with Fairtrade Standards. Following a successful certification for a producer organisation, a three-year certification cycle starts. During this time, up to two confirmation audits normally take place depending on FLOCERT’s assessment of the organisation’s individual situation. This assessment is based on monitoring of routine data, as well as the individual organisation’s set-up. FLOCERT also conducts unannounced audits if there are indications of additional risk, such as specific allegations, expansion of the organisation’s certification scope, or product- or country-specific risks. See <https://www.fairtrade.net/>

<sup>15/</sup> A few small producers engage in value-added activities and produce chocolate bars and products for the local market and tourists. However, these firms are small in size and are not participating in export markets to a significant extent.

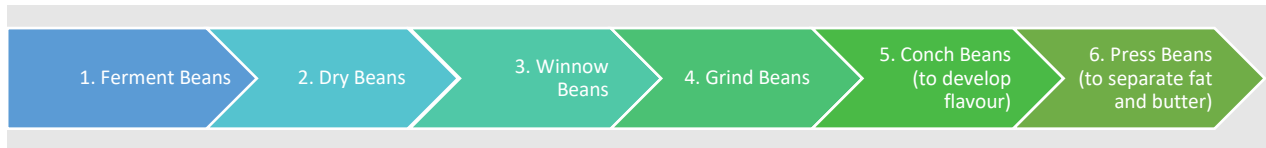


Figure 1: Simplified Cacao to Chocolate Process

1.12 At present, the majority of cacao farmers in Toledo can get to step two (drying beans); and a few are able to winnow their beans (step three)<sup>16/</sup>. Many farmers prefer to sell wet beans without roasting. For the most part, farmers deliver their beans in sacks at the side of the road, where they are collected by TCGA for sale. During the value addition process, the first step, is in the sorting of beans and there is currently no facility at which that can be done. TCGA is pursuing re-certification with IMOCert and Fairtrade. Even as this process advances, maintenance of the certification and sustained value addition will be dependent on the consistency and quality of the supply of Fine Flavour Cacao through the establishment and maintenance of traceability systems<sup>17/</sup>.

## 2. OBJECTIVE

2.01 The objective of this consultancy is to design, develop and manage a website and social media presence for TCGA to provide an online marketing presence and visibility for cacao products. The intended users of the website include, but are not limited to cacao farmers, buyers of cacao and cocoa products, tourism visitors and development partners.

## 3. SCOPE OF SERVICE

3.01 The Consultant shall design, develop and manage a user friendly, cost effective online web platform which meets the criteria set out below. The tasks to be completed will include, but not be limited to the following:

- (a) Understand users' needs and identify corresponding user interface requirements.
- (b) Based on the requirements obtained in section (a) provide website design options in PSD/PDF format which are:
  - (i) Interactive and appealing.
  - (ii) User-friendly.
  - (iii) Responsive (Designs should consider Mobile, Tablet and Desktop viewing).
- (c) Implement the approved PSD/PDF designs in a Content Management System (CMS) considering the following:
  - (i) The implemented system must be compatible with Firefox, Microsoft Edge, Safari and Chrome.

<sup>16/</sup> To bring out the chocolate aroma, the beans are roasted over an open fire. After roasting, the cacao beans are cooled and their thin shells, which have become brittle by roasting are removed. 'Winnowing' the beans, is the process of removing the shell after roasting and extracting the inner "meat" or "nib". The nibs contain about 53% cacao butter and are ground between two large grinding stones to create a fine cocoa powder. The cocoa powder usually begins to liquify from the frictional heat while grinding the nibs, which produces a cocoa paste.

<sup>17/</sup> A system to track a product from production to consumption.

- (ii) The implemented system must render appropriately on a wide variety of different browsers, optimised for tablet and smartphones, and must be efficient in internet bandwidth use.
- (iii) The Navigation and viewing should be available on Macs, PCs and mobile devices and should adjust appropriately and automatically.
- (iv) The Content Management System used should be one of the most common and well used in the industry namely Joomla, Drupal, or WordPress.
- (v) The Content Management System must allow non-technical users to create, remove, edit, and publish content without the aid of the consultant or web development specialist.
- (vi) The Content Management System must have Search Engine Optimisation safe URLs enabled to allow easy indexing by search engines.
- (vii) All pages of the implemented design should pass the following test:
  - (aa) The Google mobile friendly test - <https://search.google.com/test/mobile-friendly>.
  - (bb) Web Accessibility test - <https://www.webaccessibility.com>.
- (d) The implemented system should address the following security concerns:
  - (i) Use of a valid Secure Socket Layer (SSL) Certificate.
  - (ii) Ensure the selected hosting provider adheres to security best practices which include:
    - (aa) Daily Backups
    - (bb) Network monitoring
    - (cc) SSL/TLS and Firewall
    - (dd) DDoS Attack Prevention and Mitigation
    - (ee) Access restriction from external server and systems
    - (ff) Facilitates – SSL, SFTP and has FTP access disabled
    - (gg) Prevents against SQL injection
    - (hh) Enforces Strong password rules
    - (i) Maintain up-to-date versions of software such as PHP and MySQL versions.

- (e) Training on an introduction to content management and digital marketing
- (f) Uploading content provided by TCGA.
- (g) Social Network Integration, links to Facebook, Twitter, etc.
- (h) The hosting account should facilitate secure email hosting.
- (i) Site Statistics/Management Reports: The solution should provide authorised users with a number of relevant reports, for example user registration, site usage, key interests/topics being discussed within the collaborative spaces and other relevant statistical data.
- (j) Prepare a user manual detailing all components of the website and deliver on-going training for at least two TCGA staff on content management, routine system maintenance.
- (k) Subscribe the Website to an alerting platform which monitors the following and provides immediate alerts on factors which affect uptime:
  - (i) Keyword monitoring.
  - (ii) Site response error codes errors, i.e., 404,500
- (l) Provide progress reports on Website and training and analytics to inform current and future content strategies.
- (m) Provide technical support via: Trouble Shooting, Technical Assistance, Remote Support, Bug Fixes, periodic automated testing to check for broken hyperlinks etc.
- (n) The website should include at least the following features:
  - (i) Profile of TCGA, the product(s) and services, their customers and value proposition, the customer journey.
  - (ii) Storytelling – Develop a narrative that embeds the green / sustainability and social aspects that are at the core of the business.
  - (iii) Sustainability labels – develop content on TCGA’s organic and Fairtrade certification labels, as well as transparency and traceability.
  - (iv) Submission button/online form to allow visitors to submit initiatives.
  - (v) Search engine to search for and locate content based on keywords and key phrases.
  - (vi) Administration section.
  - (vii) Google analytics integration.
  - (viii) Blog/News section.
  - (ix) Resource centre (Gallery, videos, documents, etc.).

- (x) Allow project staff to create forms which can be used for collecting information i.e., RFPs, Surveys and Polls.

3.01 The consultant will be responsible for providing the tools needed to perform the assigned tasks. TGCA will provide the documents and background information via electronic means and will use remote communication techniques where necessary during the consultancy.

#### **4. DELIVERABLES AND REPORTING REQUIREMENTS**

4.01 The Consultant will report to the Manager, TCGA (Project Coordinator), and will be required to submit/deliver the following:

<b>Deliverables</b>	<b>When</b>
Inception Report containing a work plan and indicating consultant's understanding of assignment.	Within one week after commencement of assignment.
Pre-conceptualisation of the website and social media tools validated.	Within four weeks after commencement of assignment.
Validated elaborated content and the mock-up with the web design and social media design.	Within eight weeks after commencement of assignment.
Registered domain.	Within one month after commencement of assignment.
Live and interactive website launched.	Within four months after commencement of assignment.
User manual and training for the support staff to perform content upload, system maintenance and administration.	On-going to end of assignment; dedicated training session at least once a month
Support and maintenance: Administrative and technical support, quality control.	The maintenance phase shall continue for 12 months after the platforms are established.
Monthly progress reports on the implementation of the assignment. The reports should be no more than two pages in length and submitted in the electronic format.	On-going beginning within one month after website goes live.
Quarterly training report on the capacity of TCGA staff member to perform all tasks relevant to creating and managing an online presence. The reports should be no more than four pages in length and submitted in the electronic format.	On-going beginning within three months after website goes live.
Source code handover: Full source code including all developed libraries handed over to TCGA	Within six months after commencement of the assignment

Deliverables	When
Report on the website site design, launch and operation. This report should detail the assignment's successes, challenges, recommendations for improvements and lessons learned.	Within two weeks before completion of the assignment.

**5. DURATION**

5.01 This assignment shall be implemented within 50 workdays over a period of 5 months.

**6. QUALIFICATIONS AND EXPERIENCE**

6.01 The consultant should have at least:

- (a) A Bachelor's degree in an Information Technology-related field.
- (b) Five years' practical experience in developing common and widely used open-source platforms, such as Drupal, Joomla, WordPress, etc. and a track record in web site design; security and administration and Google analytics.
- (c) An understanding of 'End Users' needs to match with adequate technical solutions such as Search Engine Optimisation for general use is also required.
- (d) Knowledge of analytics tools and social networking will be an advantage.