

TERMS OF REFERENCE

CONSULTANCY SERVICES – ICT SPECIALIST FOR THE DESIGN OF A WEB-BASED SANITARY AND PHYTO-SANITARY INSPECTION MANAGEMENT SYSTEM FOR BELIZE

1. BACKGROUND

1.01 Belize is a small, lower-middle income country heavily reliant on agricultural exports and tourism. Fifty-two percent (52%) of Belize's population was below the poverty line in 2018, up from 41% in 2013. In addition, around 9% were living in extreme poverty and 11% were identified as vulnerable to falling into poverty. Income inequality also increased over the period, with the Gini coefficient moving from 0.38 to 0.49^{1/}.

1.02 Unsurprisingly, joblessness remains a concern; the April 2021 Labour Force Survey (LFS) showed a national unemployment rate of 11.2%^{2/}. The LFS confirmed that labour conditions continued to be dramatically affected by the novel coronavirus (COVID-19), with more than 19,000 persons who had lost their jobs as a result of the pandemic still without work more than a year later. The tourism industry accounted for the largest share or one third of job losses due to the pandemic. The rate of joblessness among females was 17.4%, compared with 7% for males. Women's poorer performance on labour market indicators and increased caregiving responsibilities mean that they are disproportionately represented among those bearing the impact of the pandemic.

1.03 Additionally, employed persons worked fewer hours per week on average and a substantial proportion was engaged in informal employment. Belizeans continued to experience the fallout from the pandemic. Based on the June 2021 Consumer Price Index, inflation rose 3% (from 100.5% to 103.5%) since June 2020.

1.04 As part of economic policy responses to COVID-19, regional governments, including GOBZ, have been exploring opportunities for increased investments in the export sector to gain access to new markets. This focus by GOBZ is underpinned by the National Trade Policy (NTP) 2019-2030^{3/}, which succeeded the National Export Strategy (NES) 2015-2019. The NTP seeks to address critical constraints to export development, chief among which is the inability to meet internationally accepted quality standards critical for increased market access, and trade facilitation. This is in congruence with the National Food and Agriculture Policy (2015-2030) which prioritises increased agricultural exports^{4/}, through among other things improving the institutional framework for animal health and food safety.

1.05 By virtue of its membership in the World Trade Organisation (WTO), Belize is also signatory to the WTO Agreement on the Application of Sanitary and Phyto-sanitary (SPS) Measures. SPS measures are applied by governments to control food safety, plant health and animal health risks, and to prevent incursions of exotic pests and diseases. In turn, such measures act to protect human health, promote agricultural productivity and facilitate international marketability of agricultural and food products. The basic aim of the SPS Agreement is not only to maintain the sovereign right of any government to provide the level of health protection it deems appropriate, but to ensure that these sovereign rights are not misused

^{1/} Statistical Institute of Belize - [PovertyStudy2018.pdf \(sib.org.bz\)](https://sib.org.bz/PovertyStudy2018.pdf)

^{2/} Statistical Institute of Belize.

^{3/} <https://www.dgft.gov.bz/wp-content/uploads/2019/03/National-Trade-Policy-2019-2030.pdf>

^{4/} According to the Statistical Institute of Belize the export of food and live animals accounted for 88% of total exports in 2019.

for protectionist purposes and do not result in unnecessary barriers to international trade. The Agreement, while permitting governments to maintain appropriate SPS protection, encourages consistent decision making. It requires that SPS measures be applied only to ensure food safety and protecting or safeguarding animal and plant health. In particular, the agreement clarifies which factors to consider in the assessment of risk. Measures to ensure food safety and to protect the health of animals and plants should be based as far as possible on the analysis and assessment of objective and accurate scientific data.

1.06 The biggest challenge for developing countries such as Belize is achieving and maintaining the required compliance capacity to facilitate agri-food exports. Inherent in this is the imperative to ensure that the necessary infrastructure and resources are in place so that animal health, plant health and food safety services are provided efficiently and consistently without undue delays to trade facilitation.

1.07 Compliance with SPS measures has gendered impacts that are rarely considered in SPS policy and programming in developing countries. Hanson (2018) and the United Nations Economic Commission for Europe (2019) noted that women struggle to comply with trade-related SPS measures because they lack access to information and knowledge-sharing networks; lack skills; and/or face greater difficulties than men in accessing technical, productive and other resources^{5/}. Women are active participants of global value chains that are critical to compliance with SPS measures. Consequently, success in achieving compliance is dependent on addressing the barriers they face. In addition, whilst trade related SPS measures can sometimes present opportunities for the economic empowerment, women are often unable to successfully exploit these prospects^{6/}. Integrating a gender lens in SPS responses can aid women's empowerment, gender equality and overall progress towards the SDGs.

Belize Agricultural Health Authority

1.08 The Belize Agricultural Health Authority (BAHA) was established in 2000 by the Belize Agricultural Health Authority Act^{7/}. BAHA is recognised as the competent authority for agricultural health and food safety in Belize and comprises four departments: Plant Health, Animal Health, Food Safety and Quarantine. It is designated as the WTO SPS Enquiry Point for Belize and hosts the contact points for the International Plant Protection Convention, the World Organisation for Animal Health, and Biosafety. Commensurate with its mandate, BAHA operates SPS inspection at eight seaports, two land borders and the Philip Goldson International airport. There are also three internal control points. As part of its mandate, BAHA has executed several donor-financed projects including a loan from the Inter-American Development Bank to modernise agricultural health services and recently a grant funded project from the United Nations Environment Programme to implement a national biosafety project.

1.09 Since the inception of BAHA, Belize has made considerable progress in the evolution of its SPS system in accordance with international best practice, with a view to safeguarding public health and creating the enabling environment to facilitate improved market access for its agri-foods. Specifically, the legislative and regulatory framework has been modernised through the establishment of a single competent authority responsible for animal health, plant health and food safety. Belize approved its National Biosafety Policy^{8/}

^{5/} ICTSD 2018 Issue Paper: Gender and Sanitary and Phyto-sanitary Measures in the Context of Trade: A Review of Issues and Policy Recommendations. See also UNECE (2019) Gender-Responsive Standards at [ECE TRADE 445E.pdf \(unece.org\)](#)

^{6/}

ibid.

^{7/} Belize Agricultural Health Authority Act- <http://extwprlegs1.fao.org/docs/pdf/blz33172.pdf>

^{8/} [NATIONAL BIOSAFETY POLICY \(caribbeanbiosafety.org\)](#)- policy provides the framework to protect the natural resources of Belize and the health of the people living in the country from the adverse effects that may arise from the development and application of GMOs and its derived products including pharmaceuticals.

In 2009 and is a party to the Cartagena Protocol^{9/}. Testing services at national laboratories have been expanded and a number of food standards have been adopted and operationalised. Despite the progress made, certain critical elements of the SPS system remain underdeveloped and negatively impact border surveillance and clearance times for the import and export of agriculture and food products.

Absence of an ICT-enabled SPS Inspection Management System

1.10 Absence of a risk-based food inspection framework of agri-food results in costly delays at the ports of entry due to multiple and in some cases duplicative inspections. BAHA's systems are mostly paper based and supported by independent databases for the generation of export and import permits. The lack of an ICT-enabled system leads to lengthy processes and delays that severely impact the import and export of agri-food products. These delays ultimately reduce the ease of doing business while increasing transaction costs to importers and exporters alike. Various agencies and departments involved in the processes also have their own ICT systems and procedures that further complicate the issue.

1.11 Even as the Belize Customs and Excise Department (BCED), a key partner, has undergone significant reform with the introduction of the ASYCUDA World customs management system^{10/} to facilitate an accelerated customs clearance, the SPS clearance procedures mandated by BAHA are not integrated into this system. Thus, the absence of an ICT-enabled inspection system constrains effective surveillance and monitoring at the nine points of entry resulting in BAHA being unable to make timely decisions in respect of goods whose status may have changed after the issuance of the import permit and prior to the good's arrival at the port of entry.

1.12 For the import process, each Department has designated officers who function as Import Permit Officers. The application forms to apply for a Sanitary, Phyto-sanitary or Food Safety Import Permit can be completed online via the Authority's website (www.baha.org.bz) and then emailed to the respective department in BAHA for processing. The alternative is to visit the BAHA office and complete the application form on site. Some companies purchase application books from BAHA and complete it at their companies' offices and then send the completed application form either via email as a portable document format (PDF) document or in person to the Authority's respective office.

1.13 In recent years, with funding from the Republic of China (Taiwan), the Belize Electronic License and Permit System (BELAPS) an online application process for licences and permits issued by the Supplies Control Unit, the Fisheries and Forestry Departments and BAHA was developed. The scope is limited to products regulated by the Supplies Control Unit, and as such, excludes the majority of products regulated by BAHA. This internet-based procedure is expected to expedite the issuance of permits and licences and will also interface with ASYCUDA World. The Government hopes to launch BELAPS by 2022. The delayed launch was due to attempts to resolve the concerns raised by BAHA in the development process. The system was initially designed solely for the issuance of licences, however in the latter phase a decision was made to include BAHA. This system only facilitates the import permit application process in BAHA but does not accommodate receipt of applications for export certification, a major challenge for BAHA and its stakeholders.

1.14 The processes, vary, depending on the commodity for exportation and is also largely paper-based. Plant products for example are inspected and then certified if they meet the importing country's SPS requirements. In recent years, the Plant Health Department developed a database; but it is solely for keeping a record of all phyto-sanitary certificates issued by BAHA.

^{9/} The Cartagena Protocol on Biosafety to the Convention on Biological Diversity is an international agreement which aims to ensure the safe handling, transport, and use of living modified organisms (LMOs).

^{10/} ASYCUDA is a computerised customs management system that covers most foreign trade procedures.

1.15 The Food Safety Department has developed an application form for export certification. All exporting facilities must be registered with the Food Safety Department as per Statutory Instrument No. 25 of 2001. This regulation also mandates that those facilities be certified by the Department for Hazard Analysis and Critical Control Points (HACCP), which is a food safety management system. In submitting a request for a Sanitary Certificate, these facilities submit their completed application form via electronic mail and the Certificate is then processed, signed and issued if the facility has been approved for export.

Absence of a risk-based food inspection framework of agri-food results in costly delays at the ports of entry due to multiple and in some cases duplicative inspections

1.16 Belize does not have a risk-based food inspection framework for agri-foods. A critical feature of the WTO SPS Agreement is that SPS measures must be based on a risk assessment^{11/}. Article 2.2 of the WTO SPS Agreement requires SPS measures to be maintained with sufficient scientific evidence. Furthermore, these measures must be based on appropriate assessments of the risks to human, animal or plant life or health. The risk assessment must consider, but is not limited to, scientific evidence, relevant processes and production methods, relevant inspection, sampling and testing methods, prevalence of specific diseases or pests, existence of pest or disease-free areas, relevant ecological and environmental conditions, and quarantine or other treatment.

1.17 Several border agencies are present at the points of entry in Belize with a mandate to regulate both imports and exports. The absence of a single window or the incorporation of the respective risk management elements into the risk management component of ASYCUDA World has resulted in multiple inspections of the same consignment. Customs risk management focuses mostly on security threats and tax evasion, while other entities such as BAHA are concerned with potential introduction of risks to plant health and human and animal life and health. As a result, each border agency inspects the respective consignments to ensure compliance with their regulatory regime. BAHA is one of the few agencies with quarantine inspectors at all major points of entry including land, sea and the airport. Additionally, there are three internal control points to monitor illegally imported goods which pose a risk to Belize's agricultural health status.

1.18 In conformity with the Trade Facilitation Agreement, the Customs and Excise Department implemented the "Trusted Traders" Programme, however, due to ASYCUDA World's non-inclusion of the risk categorisation used by BAHA, the Authority was not able to participate in the programme. Thus, even if an importer has received approval from the Customs and Excise Department, he/she still needs to process the goods, just like any other importer with BAHA. The incorporation of risk categorisation for goods regulated by BAHA that interfaces with ASYCUDA would enhance BAHA's risk management regime and function as a trade facilitation measure.

1.19 Compounding the foregoing challenges is the fact that importers frequently apply for import permits after the consignment has already been paid for and is enroute to Belize or in other cases when the consignment arrives. Consultations with importers and exporters have revealed that the fines applied by BAHA for non-compliance with import requirements are so low that it is often cheaper to be non-compliant. This concern has been raised on numerous occasions to BAHA, especially by compliant traders. Since many countries globally are now exploring e-certification, BAHA believes that this may increase compliance for products imported into Belize and for exports and decrease export certification time.

^{11/} Risk assessment is defined in paragraph 4 of Annex A to the SPS agreement: The evaluation of the likelihood of entry, establishment or spread of a pest or disease within the territory of an importing Member according to the sanitary or phytosanitary measures which might be applied, and of the associated potential biological and economic consequences; or the evaluation of the potential for adverse effects on human or animal health arising from the presence of additives, contaminants, toxins or disease-causing organisms in food, beverages or feedstuffs.

2. OBJECTIVES OF THE CONSULTANCY

2.01. The objective of this consultancy is to design a web-based SPS Inspection Management System for Belize.

3. SCOPE OF CONSULTANCY SERVICE

3.01. The Consultant will conduct the following but not be limited to:

- (a) Conduct a virtual meeting with representatives of the Client (BAHA) to detail the objectives of the assignment. After meeting with Client, prepare Inception Report that presents the findings from background research and start-up meeting.
- (b) Review and document the current business processes associated with SPS inspections for import and exports from application for import or export certificates to border clearance.
- (c) Comprehensive review of BAHA's ICT infrastructure and capacity including human resources.
- (d) Through virtual consultations with relevant stakeholders, including importers and exporters, customs brokers, BAHA personnel, identify the functionality required by the SPS Inspection Management System.
- (e) Conduct a validation workshop to present and receive sign-off on the proposed functionality of the system. Mode of workshop (virtual/face to face) to be determined by BAHA and consultant.
- (f) Based on the review of the ICT infrastructure, the desired functionality and international best practices propose a system design with the estimated costs of building and implementing the desired system. In so doing, the consultant should ensure the following are considered and presented:
 - (i) options for the hosting of the solution;
 - (ii) phased build-out;
 - (iii) inter-operability;
 - (iv) use of smart devices at inspection points;
 - (v) bespoke versus off-the-shelf system; and
 - (vi) recommendations for institutional capacity building required to support the proposed solution, especially in relation to equipment and human resources management and development.
- (g) Stipulate the specification and supervise the Procurement of Equipment and Software for the web-based SPS Inspection Management System. The acquisition process shall comply with Procurement Policy for Projects Financed by CDB (November 2019), and the Procurement Procedures for Projects Financed by CDB (January 2021) and should include market review of likely providers, and the technical specifications to be used in the procuring, configuring and implementing of the proposed solution.

- (h) Develop and implement the web-based SPS Inspection Management System for Belize.

4. DELIVERABLES AND REPORTING REQUIREMENTS

4.01 The Consultant will report to the Project Coordinator and will be required to submit/deliver the following:

Deliverables	When
An Inception Report detailing the consultant's understanding of the assignment, initial work plan and methodology.	Within 14 days after commencement of assignment.
Draft Diagnostic Report to include a business process analysis of the BAHA processes for import, transit and export and a review of the current capability of the ICT infrastructure.	Within eight weeks after commencement of assignment.
Final Diagnostic Report.	Within one week of receiving comments from BAHA.
Draft Proposal for System Functionality.	Within 12 weeks after commencement of assignment.
Final Proposal for System Functionality.	Within one week of receiving comments from BAHA and Validation workshop.
Develop, test and implement the web-based SPS Inspection Management System	Within 16 weeks after commencement of the assignment.
Final approval of web-based SPS Inspection Management System	Within 4 weeks of receiving feedback and approval from BAHA and its stakeholders.
Draft Terms of Reference including technical specifications as per 3.01(h) above.	Within 16 weeks after commencement of the assignment.
Final Terms of Reference as per 3.01(h) above.	Within one week of receiving feedback and approval from BAHA.
Monthly reports on the progress of the development and implementation of the SPS Inspection Management System.	No later than the 15 th day of each month, commencing one month after the start date of the development consultancy.

5. QUALIFICATIONS AND EXPERIENCE

5.01 The assignment will be carried out by an individual who should possess the following:

- (a) Master's Degree in computer science or post graduate professional qualification in computer science or related field.
- (b) At least ten years of experience in developing, evaluating and advising on IT systems for business operations.

- (c) Professional certification in Project Management, Networking, Servers, Data Centre Management, ICT Security Audit, Quality Management or IT Service Management.
- (d) Thorough knowledge of process automation, project management and ICT.
- (e) Training or demonstrated security audit, infrastructure and network design.
- (f) Experience in designing/reviewing solution architecture as well as managing/ implementing IT projects including generic software / custom solutions, hosting of systems and servers, providing network services, etc.
- (g) Excellent knowledge of Information Systems, ICT Best Practices, and current application development methodologies.

6. SUPERVISION OF THE CONSULTANT

6.01 The Consultant will report to the Project Coordinator. BAHA will facilitate the work of the Consultant and make available all studies, reports, and data relevant to the Project.

6.02 It is estimated that this consultancy will require 100 person-days over a period of 12 calendar months.