

## IFD/CTI

### **Job Title: Compete Caribbean Ag-Tech Maturity Assessment Study Consultant**

**Background:** Compete Caribbean is supporting the implementation of a project entitled Design and Implementation of a Regional Ag-Tech Pilot Project for the Caribbean. The objective of the project is to improve the capacity of public and private sector actors to collaborate in the design and implementation of commercial Ag-Tech solutions (viable technologies and the associated business models) for contributing to the improvement of agriculture sector productivity in the Caribbean. This consultancy will contribute important research to support the achievement of the overall project objective.

**The team:** On March 20, 2016, the IDB Board approved the creation of the Compete Caribbean Partnership Facility (CCPF) as a multi-donor Trust Fund jointly funded by the United Kingdom's Department for International Development (DFID), the Caribbean Development Bank (CDB), and the Government of Canada. The ultimate goal of the Compete Caribbean Partnership Facility is to support the Caribbean region in increasing productivity and Caribbean firms' contribution to economic growth. The specific objectives are to (i) support firms to grow, innovate and enter new sectors and markets; and (ii) to promote an environment that enables innovation and growth. The Facility supports productivity and economic growth in the Caribbean by focusing on two thematic pillars: (i) productivity and innovation in firms; and (ii) enhancing the business and innovation climate. The Facility is being executed by Inter-American Development Bank and henceforth all procedures related to operations and implementation thereof must comply with IDB policies.

### **What you'll do:**

- Develop a gender-sensitive Ag-Tech Maturity Assessment of a selection of Caribbean countries
- Benchmark the participating countries against ag-tech use cases across the world, including those drawn from small-scale male and female farmers in rural and other underserved areas
- Conduct a review of the policy, legislative and institutional framework to support ag-tech in the countries studied
- Rapidly assess potential demand among users all along the agricultural value chains for ag-tech solutions

### **Deliverables:**

- **1. Draft gender-sensitive Ag-Tech Maturity Assessment** (incl. benchmarks, policy, legislative and institutional framework review, and rapid demand assessment)
- **2. Final gender-sensitive Ag-Tech Maturity Assessment**

**Payment timeline:**

- Deliverable 1 – 70%
- Deliverable 2 – 30%

**Skills you'll need:**

**Education:** Bachelor's degree in:

- Agriculture, Agribusiness Management, Industrial Engineering, Business Administration, Project Management, or any other related field; and
- Certification in Information technology, computer science, software engineering, or related field

**Experience:**

- A minimum of 5 years of experience in analysis of production, consumption, and distribution of agricultural commodities and value-added products
- A minimum of 5 years of experience in ICT solutions development in a private sector or NGO setting; Experience using open source development technologies, as well as experience with database management and proper systems security best practices would be an asset.
- A minimum of 5 years of experience in conducting similar exercises; previous experience conducting an AgTech maturity assessment will be highly valued

**Languages:**

- Fluency in oral and written English

**Core and Technical Competencies:**

- Strong interpersonal and participatory stakeholder engagement skills
- Research-oriented, with strong evidence gathering and data analysis skills using qualitative, quantitative or mixed research methods
- Excellent communication skills to explain complex technical topics in an easily understandable manner

**Opportunity Summary:**

- **Type of contract and modality:** Products and External Services Contractual, Lump Sum
- **Length of contract:** 3 months
- **Starting date:** TBD
- **Location:** External consultancy which will be developed at the place of residence of the contractual. Approximately 25% of the consulting time will be spent on the ground in the participating countries.
- **Responsible person:** Galileo Solis Alhumada, Science and Technology Senior Specialist, Competitiveness, Technology and Innovation Division (IFD/CTI).

- **Requirements:** You must be a citizen of one of the [IDB's 48 member countries](#) or non-IDB member countries recognized by the Donors of the Compete Caribbean Partnership Facility as eligible, and have no family members currently working at the IDB Group.

**Our culture:** Working with us you will be surrounded by a diverse group of people who have years of experience in all types of development fields, including transportation, health, gender and diversity, communications and much more.

**About us:** At the Inter-American Development Bank, we're devoted to improving lives. Since 1959, we've been a leading source of long-term financing for economic, social, and institutional development in Latin America and the Caribbean. We do more than lending though. We partner with our 48 member countries to provide Latin America and the Caribbean with cutting-edge research about relevant development issues, policy advice to inform their decisions, and technical assistance to improve on the planning and execution of projects. For this, we need people who not only have the right skills, but also are passionate about improving lives.

**Payment and Conditions:** Compensation will be determined in accordance with Bank's policies and procedures. The Bank, pursuant to applicable policies, may contribute toward travel and moving expenses. In addition, candidates must be individuals from any IDB member country and non-IDB member countries recognized by the Donors of the Compete Caribbean Partnership Facility as eligible.

**Diversity:** The Bank is committed to diversity and inclusion and to providing equal opportunities to all candidates. We embrace diversity on the basis of gender, age, education, national origin, ethnic origin, race, disability, sexual orientation, and religion. We encourage women, Afro-descendants and persons of indigenous origins to apply.

## **TERMS OF REFERENCE**

### *Design and Execution of a Regional Ag-Tech Challenge and Supervision of Ag-Tech Pilot Project Implementation*

REGIONAL

RG-T3677

Design and Implementation of a Regional Ag-Tech Pilot Project for the Caribbean

#### **1. Background and Justification**

- 1.1. Recent discussions among several development partners<sup>1</sup> have pointed to a need to implement ag-tech solutions and promote the associated business models that can contribute to the improvement of agriculture sector productivity in the Caribbean. A Regional Ag-Tech Challenge is considered an effective mechanism for mobilizing a broad set of stakeholders all along key agriculture value chains and engaging them in the design, piloting and scaling of such ag-tech solutions. Prior to this Challenge, an Ag-Tech Maturity Assessment of a selection of Caribbean countries is being conducted. The development of this regional project is a collaborative effort of the Compete Caribbean Partnership Facility (CCPF), the International Telecommunication Union (ITU) and the Food and Agriculture Organization of the United Nations (FAO).
- 1.2. The Caribbean region faces major challenges to improve the competitiveness and sustainability of the agriculture sector. Growth in agricultural productivity has been slow (1.2% TFP growth rate across Latin America and the Caribbean between 1981 and 2012) and the sector suffers from high trade costs<sup>2</sup> and a low capacity to comply with modern food safety and quality standards. Therefore, the sector has been unable to adequately respond to rapidly growing demand for high-standard agri-food products from the tourism, processing, and retailing sectors – both within and outside the region. Instead, the growing demand by these sectors in the region is mainly fulfilled by imports. The region's agricultural sector is also constrained by large and increasing pressures on natural resources and a high vulnerability to climate change.
- 1.3. Historically, agriculture has played a central role in the Caribbean economies, but that importance has declined over time<sup>3</sup>. Large plantations of especially sugar and bananas produced agricultural commodities for exports which represented an important economic contribution. Today Caribbean agriculture is more diversified. Reforms of the EU agricultural policies had a dramatic effect on export demand for sugar and bananas and stimulated a restructuring of farming systems and a shift of exports from raw materials (agricultural products) to processed food products. Agriculture now makes up a smaller share of the economy in most states.
- 1.4. The increased design, development and deployment of technologies in the agricultural

---

<sup>1</sup> The Compete Caribbean Partnership Facility (CCPF), the Food and Agriculture Organization of the United Nations (FAO) and the International Telecommunication Union (ITU).

<sup>2</sup> According to FAO's (2019) *Study on the State of Agriculture in the Caribbean*, in the agricultural sector, trade costs in the Caribbean are between two and six times higher than in the US and Canada, and are also higher than in manufacturing across all Caribbean countries, with some countries facing a 100% premium on trade costs in agriculture as compared to manufacturing.

<sup>3</sup> On average, the contribution of agriculture to the GDP of Caribbean countries has declined by 2.8% over the past 20 years

sector (otherwise known as Ag-Tech), to support advisory services, improved market linkages, supply chain management, financial access and overall macro-sector intelligence, has the potential to address some of the key competitiveness constraints and promote modernization of the sector. In turn, a more competitive agricultural sector would contribute to increased production of fresh and processed products for local consumption, a decreased food import bill for many countries across the region, and increased food security. This objective is increasingly pertinent in light of the COVID-19 pandemic.

- 1.5. A holistic regional approach to Ag-Tech will help to improve the coordinated planning and funding of agricultural development, avoid duplication and the wastage of resources. Systematic effort in planning and setting up a regional Ag-Tech approach would result in the streamlining of public and private sector efforts, ensuring the judicious use of scarce resources and providing a clear direction to the private sector, development agencies, donors and other stakeholders.
- 1.6. The intention of this consultancy, therefore, is to design and execute a Regional Ag-Tech Challenge through which several designs for ag-tech pilot projects will be collaboratively developed by stakeholders from across the Caribbean; and capacity and momentum will be built for the piloting of these designs. After an evaluation process a selection of the pilot projects will be provided with grant financing to support implementation. The results of the completed pilot projects will be used to provide evidence of the types of ag-tech solutions that are sustainable and valued by farmers, agro-processors and other stakeholders in the Caribbean, including their underlying business and operational models; assessment of the scalability and repeatability of the solutions.
- 1.7. On March 20, 2016, the IDB Board approved the creation of the Compete Caribbean Partnership Facility (CCPF) as a multi-donor Trust Fund jointly funded by the United Kingdom's Department for International Development (DFID), the Caribbean Development Bank (CDB), and the Government of Canada. The ultimate goal of the Compete Caribbean Partnership Facility is to support the Caribbean region in increasing productivity and Caribbean firms' contribution to economic growth. The specific objectives are to (i) support firms to grow, innovate and enter new sectors and markets; and (ii) to promote an environment that enables innovation and growth. The Facility supports productivity and economic growth in the Caribbean by focusing on two thematic pillars: (i) productivity and innovation in firms; and (ii) enhancing the business and innovation climate. The Facility is being executed by Inter-American Development Bank and henceforth all procedures related to operations and implementation thereof must comply with IDB policies.

## **2. Objectives**

- 2.1. The objectives of this consultancy are to design and execute a Regional Ag-Tech Challenge; provide technical support to prospective applicants via participatory approaches such as design thinking workshops; participate in the evaluation of submitted proposals; supervise and monitor the implementation of the selected pilot proposals; and

transfer know how to, and build the capacity of, sector stakeholders to sustain the piloting of solutions.

### **3. Scope of Services**

3.1. The scope of services includes the following:

- 3.1.1. Conducting secondary research to better understand the agricultural productivity issues in the Caribbean, including reviewing the Ag-Tech Maturity Assessment Study that will be executed prior to this assignment
- 3.1.2. Designing and executing a Regional Ag-Tech Challenge for the Caribbean
- 3.1.3. Attracting participation in the Challenge from relevant stakeholders including farmers, agro-processors, extension officers, policymakers, technocrats, developers, and private investors.
- 3.1.4. Supporting the development of project proposals through several capacity building events; and transferring know how and building the capacity of stakeholders to sustain such events.
- 3.1.5. Raising awareness of potential collaborations, including donors, of all the proposals developed and influencing a wider piloting of Ag-Tech solutions.
- 3.1.6. Participating in the evaluation of submitted project proposals
- 3.1.7. Supporting the implementation of the selected pilot projects
- 3.1.8. Reporting on project implementation progress
- 3.1.9. Analyzing and providing a final report upon project completion that includes recommendations for expanding and sustaining the piloting of Ag-Tech solutions, coordinating pilots and sharing results.

### **4. Key Activities**

The Consulting Firm will carry out the following key activities that will facilitate the achievement of the objective:

- 4.1. Review background documents and liaise with various stakeholders that are active and relevant to ag-tech, including the Ministry of Agriculture in each of the participating countries, members of the agricultural research and development community, and producers of primary commodities and value-added agro-processed products, to develop a more in-depth understanding of the assignment, the challenges facing the agriculture sector, and potential ag-tech solutions for improving sector productivity.
- 4.2. Design and support the execution of a communication strategy, including educational webinars, to promote the Ag-Tech Challenge in all participating countries
- 4.3. Design and execute a call for proposals (which must specifically target women-owned firms), application guidelines and selection criteria (including measures to ensure that the selected pilots come from different countries)
- 4.4. Design and execute participatory capacity building activities using methodologies such as design thinking to provide technical support and transfer know how to stakeholders in participating countries for designing and providing initial validation of pilot project proposals that address specific gaps in agricultural value chains of interest to the participating countries. Each project proposal should include a description of a problem

to be solved and an Ag-Tech solution to be tested, specifications of technologies to be used, business and operating models, public-private partnership model (indicating whether the private sector will be represented by a lead anchor firm or a cluster of firms), an implementation roadmap and a monitoring and evaluation plan.

- 4.5. Transfer knowledge to regional stakeholders on how to run such participatory capacity building activities (e.g. design thinking workshops) in the future.
- 4.6. Participate in the evaluation of submitted project proposals
- 4.7. Design and host online events and at least one public-private forum, as well as use other methods to disseminate information that presents the selected project proposals to regional stakeholders and promotes wider piloting. The forum should be targeted to potential funders of additional pilots, beyond those that will be funded by Compete Caribbean.
- 4.8. Provide technical support and guidance to the project teams as they proceed through implementation of their pilot projects
- 4.9. Provide periodic reports on implementation progress of the pilot projects indicating status of achievement of project milestones
- 4.10. Upon completion of the pilot projects, write a pilot evaluation report that analyzes and comments on the project results, including but not limited to: participant experiences; assessment of results achieved; lessons learnt; project sustainability; value to stakeholders; recommendations for improving and/or scaling the pilots.
- 4.11. Design and host online events or otherwise disseminate information on project results to regional stakeholders, including specific information on the roles of the respective partners and the policy implications for scaling up the piloting and adoption of Ag-Tech solutions. At least one event should focus on the public sector and the policy implications of plans for scaling up and increasing rate of Ag-Tech adoption.

## 5. Expected Outcome and Deliverables

- 5.1. The expected outcome of this consultancy is a collection of preliminary evidence of Ag-Tech solutions that are sustainable and valued by farmers, agro-processors and other stakeholders in the Caribbean, including their underlying business and operational models; assessment of the scalability and repeatability of the solutions.
- 5.2. Expected deliverables include:
  - 5.2.1. **Deliverable 1:** Communication Strategy for the Regional Ag-Tech Challenge
  - 5.2.2. **Deliverable 2:** Capacity Building Plan
  - 5.2.3. **Deliverable 3:** Three (3) Quarterly Progress Reports
  - 5.2.4. **Deliverable 4:** Final Pilot Evaluation Report

## 6. Project Schedule and Milestones

- 6.1. The project is expected to begin upon contract signing and to be completed eighteen (18) months thereafter.



**7. Reporting Requirements**

- 7.1. Every report must be submitted to the Bank in an electronic file. The report should include cover, main document, and all annexes. Zip files will not be accepted as final reports, due to Records Management Section regulations.

**8. Acceptance Criteria**

- 8.1. All deliverables will be reviewed by IDB/CCPF. Comments will be provided by written email. The consulting firm is expected to provide written feedback on how comments were addressed.
- 8.2. Approval of quality deliverables will be provided in writing by email from the Team Leader of the project.

**9. Supervision and Reporting**

- 9.1. The consultancy will be supervised by Galileo Solis Ahumada, Team Leader at the Inter-American Development Bank, and coordinated by the Compete Caribbean Partnership Facility.

**10. Schedule of Payments**

- 10.1. Payment terms will be based on project milestones or deliverables. The Bank does not expect to make advance payments under consulting contracts unless a significant amount of travel is required. The Bank wishes to receive the most competitive cost proposal for the services described herein.
- 10.2. The IDB Official Exchange Rate indicated in the RFP will be applied for necessary conversions of local currency payments.

<b>Payment Schedule</b>	
<b><i>Deliverable</i></b>	<b>%</b>
1. <b>Deliverable 1:</b> Communication Strategy for the Regional Ag-Tech Challenge	20%
2. <b>Deliverable 2:</b> Capacity Building Plan	20%
3. <b>Deliverable 3:</b> Three (3) Quarterly Progress Reports	30% (10% each)
4. <b>Deliverable 4:</b> Final Summary Report	30%
<b>TOTAL</b>	<b>100%</b>