

# REQUEST FOR EXPRESSIONS OF INTEREST CONSULTING SERVICES

Selection #: RG-T3126-P001 Selection Method: Simplified Competitive Selection Country: Regional Sector: Competitiveness, Technology, and Innovation (IFD/CTI) Funding – TC #: ATN/CO-16418-RG Project #: RG-T3126 TC name: Project Development Support – Assistance to More Vulnerable Countries and Optimizing Pace of Program Implementation Link to TC document: <u>EZSHARE-423488762-6</u>

# Description of Services:

# Design of a Regional e-Agriculture Pilot Project for the Caribbean

A Regional e-Agriculture Strategy for the Caribbean is being developed <sup>1</sup> to identify areas where common/regional digital investments in terms of applications, regulations, infrastructure, capacity development, etc. will benefit several countries leading to a better Return on Investment (RoI) and greater impact, while allowing each country to focus its own limited resources on its "specific" needs. Development of the Strategy will be informed by research conducted in Jamaica, St. Kitts & Nevis, Trinidad & Tobago, and Guyana. The development of this regional strategy 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).

In the Caribbean, the agriculture sector makes an important contribution to national GDP varying from 1-4% in countries such as Barbados, Saint Kitts and Nevis, and Trinidad and Tobago to as high as 15-19% in other countries such as Guyana, Dominica, and Belize<sup>2</sup>. In most Caribbean countries, agriculture has either declined or stagnated in recent years, primarily because of the contraction in traditional exports. The erosion of European Union trade preferences has exposed the underlying competitiveness challenges that are limiting access to global markets. The sector today across the region is largely characterized by declining productivity levels, low skill accumulation and innovation levels, limited market access and persistent undercapitalization in comparison to other sectors <sup>3</sup>. Nonetheless, the agricultural sector remains a significant employer throughout the region engaging more than 4 million persons in agricultural related activities<sup>4</sup>.

The increased design, development and application of information and communication technologies (ICTs) in the agricultural sector (otherwise known as e-agriculture), particularly at the production and marketing levels, has the potential to address some of these key competitiveness constraints and promote modernization of the

<sup>&</sup>lt;sup>1</sup> This work is being undertaken under a separate consultancy, guided by the "National e-agriculture Strategy Guide" developed by the Food and Agriculture Organization of the United Nations (FAO) and International Telecommunication Union (ITU). The main components of an e-agriculture strategy developed using this Guide are: a Vision; an Action Plan; and a Monitoring and Evaluation Framework.

<sup>&</sup>lt;sup>2</sup> ILO, Rural Employment and Rural Development in the Caribbean, 2016, <u>https://www.ilo.org/wcmsp5/groups/public/---americas/---ro-lima/---sro-port\_of\_spain/documents/publication/wcms\_533997.pdf</u>

<sup>&</sup>lt;sup>3</sup> Caribbean Development Bank, Enhancing Productivity & Growth in the Caribbean: Working Paper, 2017; FAO, SIDS: Agricultural production and trade, preferences and policy, 2004.

<sup>&</sup>lt;sup>4</sup> ILO, Agricultural development and employment in the Caribbean: Challenges for the future, <u>https://www.ilo.org/wcmsp5/groups/public/---americas/---ro-</u> <u>lima/---sro-port\_of\_spain/documents/meetingdocument/wcms\_306202.pdf</u>

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, and increased food security.

A holistic national approach to e-agriculture that can be scaled up and coordinated at the regional level will help to improve the coordinated planning and funding of e-agricultural development, avoid duplication and the wastage of resources. Systemic effort in planning and setting up a regional e-agriculture approach would result in streamlining of public and private sector efforts, ensuring the judicious use of scarce resources and providing a clear direction to the private sector, donors and other stakeholders.

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.

The Inter-American Development Bank (IDB) is executing the above-mentioned operation. For this operation, the IDB intends to contract consulting services described in this Request for Expressions of Interest. Expressions of interest must be delivered using the IDB Portal for Bank Executed Operations (<u>http://beo-procurement.iadb.org/home</u>) by: **13 March, 2019**, 5:00 P.M. (Washington D.C. Time).

The consulting services ("the Services") include the following activities to be implemented over a 3-month period: developing, using a very participatory approach, a project proposal to pilot the implementation of priority e-Agriculture solutions that are in alignment with the "Regional e-Agriculture Strategy for the Caribbean". The pilot is meant to develop, test and validate the e-agriculture solutions and their attendant business models, with support from CCPF, ITU, FAO, governments of the region and the agricultural research and development community.

Eligible consulting firms will be selected in accordance with the procedures set out in the Inter-American Development Bank: <u>Policy for the Selection and Contracting of Consulting firms for Bank-executed</u> <u>Operational Work</u> - GN-2765-1. All eligible consulting firms, as defined in the Policy may express an interest. If the Consulting Firm is presented in a Consortium, it will designate one of them as a representative, and the latter will be responsible for the communications, the registration in the portal and for submitting the corresponding documents.

The IDB now invites eligible consulting firms to indicate their interest in providing the services described below in the <u>draft summary</u> of the intended Terms of Reference for the assignment. Interested consulting firms must provide information establishing that they are qualified to perform the Services (brochures, description of similar assignments, experience in similar conditions, availability of appropriate skills among staff, etc.). Eligible consulting firms may associate in a form of a Joint Venture or a sub-consultancy agreement to enhance their qualifications. Such association or Joint Venture shall appoint one of the firms as the representative.

Interested eligible consulting firms may obtain further information during office hours, 09:00 AM to 05:00 PM, (Washington D.C. Time) by sending an email to:

Inter-American Development Bank Division: Competitiveness, Technology, and Innovation (IFD/CTI) Attn: Kieron Swift 1300 New York Ave, NW, Washington DC 20577, USA Tel: +1 246 627 8548 Fax: +1 246 629 8869 E-mail: <u>kierons@iadb.org</u> Web site: <u>www.iadb.org</u>

# Draft Summary of Terms of Reference

The scope of services includes the following:

- Reviewing the potential high priority e-Agriculture solutions proposed in the **Regional e-Agriculture Strategy for the Caribbean**, and benchmarking them against other successful solutions from around the world
- Conducting detailed feasibility assessments of the top five (5) ranked solutions, according to perceived opportunity and feasibility
- Designing a pilot project to validate the technical and business model feasibility, and environmental sustainability of at least one high priority e-Agriculture solution per participating country
- The technical and functional requirements for the proposed solutions should be developed using an Enterprise Architecture<sup>5</sup> methodology to ensure integration with each other, and with other e-Agriculture infrastructure and applications that are in use, or are being developed, in each participating country.
- Developing a detailed strategy for the scaling up and integration of the solutions.
  - The strategy for scaling up and integration of the e-agriculture solutions must include a detailed business model, including but not limited to: the value propositions of the solutions, potential revenue streams (e.g. service and subscription fees), cost structure (e.g. equipment, marketing and advertising costs, salaries and management fees), key partner agencies, detailed customer segmentation (incl. differentiation between paying customers and non-paying users of the solutions, as well as other stakeholders in the ecosystem), key resources required (e.g. broadband infrastructure, software developers and specialist technical extension officers), and key activities to be undertaken (e.g. training and promotion).
- Knowledge transfer to, and capacity building of, regional counterparts, in relation to methods for determining the feasibility of, prioritizing, and piloting e-Agriculture solutions.

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

• Review background documents, including but not limited to the **Regional e-Agriculture Strategy for the Caribbean**, and liaise with the regional expert team and various stakeholders that are active and relevant to e-agriculture development, including the Ministries of Agriculture in each of the target countries, to develop a more in-depth understanding of the assignment, the challenges facing the agriculture sector, and potential e-agriculture solutions for improving sector competitiveness.

<sup>&</sup>lt;sup>5</sup> For the purpose of this document, Enterprise Architecture (EA) is understood to be a methodology to describe technical requirements for a set of integrated information and communication technology applications in such a way as to facilitate successful achievement of strategic objectives. The technical and functional design of the priority e-agriculture solutions, done using an EA approach, will describe where there are commonalities across different applications that need to be built and developed only once rather than being duplicated in each country. The EA will also describe the specific domain applications that need to be developed for specific needs in each country.

- Conduct a benchmarking exercise to identify and assess the potential of e-agriculture solutions based on the performance of such solutions in countries and contexts (no fewer than four) that are similar to the participating countries.
- Prepare a draft Inception Report that: (a) discusses the Consulting Firm's understanding of the challenges facing the sector; (b) evaluates the potential e-agriculture solutions identified in the **Regional e-Agriculture Strategy for the Caribbean**; (c) recommends changes to the list based on the benchmarking exercise; and (d) proposes a detailed methodology and work plan for completing the assignment
- Present the draft Inception Report to stakeholders during a webinar, obtain the stakeholders' feedback and finalize the Inception Report
- Conduct a training workshop that includes the regional expert team and other key stakeholders to transfer knowledge on the methodology for evaluating the feasibility of e-Agriculture solutions and, using a participatory process, to prioritize and shortlist the proposed solutions.
- Prepare a draft Interim Report that presents a prioritized short list of e-Agriculture solutions, which reflects consideration of filtering the solutions through the opportunity-feasibility matrix.
- Present the Interim Report to stakeholders via a webinar, obtain the stakeholders' feedback as well as feedback from the regional expert team that is developing the Strategy, CCPF, ITU and FAO, and finalize the Interim Report incorporating all feedback acquired
- Conduct a design thinking workshop to design a pilot project<sup>6</sup> that will test the technical and business model feasibility, and environmental sustainability of at least one high priority e-Agriculture solution per participating country, and finalize the design using insights co-created at the workshop

Contractual teams should have specific expertise and knowledge, which will be the main criterion for their selection. It is anticipated that the team would comprise of individuals with strong competencies in the below areas but this is not meant to restrict team compositions to exact roles described below.

# A. Team Leader / e-Agriculture Specialist

Academic Degree

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

With an advanced degree (Master's degree or equivalent) in one of the fields

# Experience

- A minimum of 10 years of experience in developing, leading and delivering complex multi-stakeholder projects, preferably in the agriculture industry
- 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.
- Experience designing and delivering training and delivering technical advice aimed at improving production practices of both large and small-scale farmers
- Experience in designing pilot projects, including systems for monitoring and evaluation, preferably with prior experience in e-agriculture projects
- Proven history of generating innovative and effective solutions using agile development methodologies

<sup>&</sup>lt;sup>6</sup> The solutions to be piloted must be designed in such a way to anticipate the base level of enterprise architecture (business process, application, data and physical infrastructure) that each of the participating countries agrees to adopt as part of the Regional Strategy.

# Other Skills

- Strong inter-personal and participatory stakeholder engagement skills
- Proven ability to develop, lead and deliver large-scale, technology-enabled exploratory projects on schedule and within budget
- Excellent interpersonal communication skills to explain complex technical topics in an easily understandable manner
- Ability to improve group dynamics and group cohesion
- Training/facilitation skills
- Fluency in oral and written English.

# B. Agricultural Economist

# Academic Degree

• Advanced university degree (Master's degree or equivalent) in Economics, Agribusiness Management or other related field

#### Experience

• A minimum of 7 years of experience in analysis of production, consumption, and distribution of agricultural commodities and value-added products

# Other Skills

- Research-oriented, with strong evidence gathering and data analysis skills using qualitative, quantitative or mixed research methods
- Fluency in oral and written English.