

Terms of Reference for a consultancy task to develop digital M&E and information exchange platforms for MOYESH Program

Category:Consultancy & TrainingLocation:Addis Ababa, EthiopiaDeadline:31st January 2020

Background:

The International Centre of Insect Physiology and Ecology (*icipe*) is embarking on the implementation of the MOre Young Entrepreneurs in Silk and Honey (MOYESH) program in Ethiopia. The program aims to create jobs for 100,000 male and female youth in the Tigray, Amhara, Oromia, and SNNP Regions. The programs is supported by Mastercard Foundation (MCF).

Reaching 100,000 youth effectively and tracking their activities and other stakeholders requires establishing a robust digital M&E system. Such a system will enable the program team to systematically collect, manage, and process raw data and disseminate program outputs at reduced transaction costs, and have real-time and two-ways information exchange of MOYESH program activities and lessons learned for broadening and improving effectiveness of the program. The consultancy is therefore to establish the MOYESH Information platform, which shall be used to register and profile the 100,000 youth and other beneficiary stakeholders, provide real-time technical and market information, and serve as platform for stakeholders' interaction, and collect performance data for measuring the program impact in real time.

Objective of the consultancy:

The overall objective of the consultancy is to establish digital data collection, management and information dissemination platforms. The platforms will help to map targeted youth, and certified input suppliers and outputs buyers, facilitate exchange of information among actors along the value chains, monitor and evaluate progress of the program implementation and lay foundation for assessing the performance of the program against the goal of creating jobs for 100, 000 youth in beekeeping, sericulture and associated businesses. Specifically, the consultant will:

1. Develop an interactive, geo-referenced, web- and mobile-based data management platform and tools for data collection and management,

- 2. Lay the foundation for the program M&E system for carrying out periodic program performance assessment. The system should enable to capture different types of data including pictures and videos. The tools for publishing data to the platform should be able to work online and offline.
- 3. Establish two-ways technical and market information exchange platform using feature mobile phone, to provide a "WhatsApp" like application.
- 4. Develop cost-effective and straightforward micro-website to operate within the *icipe* website for the program to promote and disseminate its achievements.
- 5. Establish linkage of the platform database and warehouse with M&E tools for quick analysis and display of information in form of numbers and graphics.
- 6. Upload the applications into the Internet, review of the functionalities of the platforms with checklist and obtain the approval of *icipe* for deployment.

The major tasks of the consultant:

The consultant is expected to accomplish the following tasks:

- Build an all-inclusive platform for supporting the MOYESH program in Ethiopia
- Enable data in the platform to be geo-referenced and be displayed both on the web-and on feature mobile platforms
- Develop tools for big real-time data collection, management, aggregation, curation, visualization, analysis, and storage.
- Develop a cost-effective and straightforward mobile-based market and technical information exchange platform that can serve multiple clients and also allow sending and receiving information to and from different types of users.
- Enable the database and warehouse to display at any time all program Young Entrepreneurs and partners segregated by stage of intervention and region.
- Enable the database to provide multilingual support (in English, Amharic, Oromifa, and Tigrigna) with inbuilt capacity for getting community feedback link to social media;
- Establish a link of the platform to *icipe* website.
- Write a User Guide and Operational Manual
- Enable the platform to generate graphic digital information and videos from both web- and mobile-based platforms in the four languages (English, Amharic, Oromifa, and Tigrigna).
- Document the complete source codes of geo-reference web-and mobile-based platform and tools, which will be handed-over to *icipe* at end of the consultancy.
- Test and demonstrate all systems to relevant *icipe* staff and accommodate feedbacks.
- Configure a Cloud server; load the platform and tools into the Internet review of the functionalities of the Portal with checklist and obtain the approval of *icipe's* IT & DMMG units and MOYESH program implementation team for its full deployment
- Provide comprehensive training to nominated *icipe* staff on how to administer the platform.

Qualification:

The Consultant should be a well-established ICT company with the know how in system, platform, Portal and mobile phone application development that meets the following key criteria:

• Proven experience in delivering medium-sized to complex software projects.

- Proven capacity to work at offshore or on-site location.
- Proven experience in delivering services on the following technologies:
 - User interface / experience design (Web/Mobile);
 - Expert knowledge of XML-RPC, NET-RPC, JSON-RPC, NGINX, Bootstrap, Node.js, Python, Less, D3.js, SOAP and MVC;
 - Comprehensive Dynamic Workflow Builder;
 - Cloud development (Microsoft Azure);
 - Cloud development (Amazon Webservices);
 - Business Intelligence using open source BI tools such as Pentaho Business Intelligence;
 - Health Information Systems (DHIS2);
 - Geospatial Analytics (ArcGIS);
 - Databases development and administration (Open Source);
 - Cenit module for integration with other modern systems or integration tool
 - Web development (Python, Django);
 - Two Factor Authentication;
 - QR code with CRC16 Checksum on all generated documents
 - Proven ability to work and communicate in English.

Applications process:

Interested consultants are required to provide information indicating that they are qualified to perform the services, together with description of similar previous assignments, experience in similar conditions, availability of appropriate ICT skills, etc.

Eligibility criteria, establishment of the short-list and the selection procedure shall be in accordance with the *icipe* Procurement Policy.

Interested consultants may obtain further information **on the detailed ToR** from Dr. Henri Tonnang (<u>htonnang@icipe.org</u>) and Menale Kassie(<u>mkassie@icipe.org</u>).

Expressions of interest may be delivered to the following address on or before on **31**st **January 2020**, and mention "EOI for the development of a digital data collection and Information exchange platforms for the MOYESH program.

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