TOR- Concept note for the development of an online knowledge repository

Partnership for Aflatoxin Control in Africa (PACA) at the Department of Rural Economy and Agriculture of the African Union Commission

# Background

Aflatoxins are highly toxic substances of fungal origin that cause cancer and are linked to immune system suppression, growth retardation, liver disease, and death in both humans and domestic animals. Aflatoxin and other food safety issues present critical constraints to sustainable agricultural growth, food security, health, and trade goals on the continent and to the attainment of Africa’s Malabo Declaration Commitments. The Partnership for Aflatoxin Control in Africa (PACA) is an innovative, flagship program of the African Union Commission (AUC) working with many partners, charged with coordinating and supporting aflatoxin mitigation and management across the health, agriculture and trade sectors, in many of the significantly impacted countries in Africa.

Aflatoxin control is knowledge intensive and the PACA Knowledge Management Strategy identified an online repository of aflatoxin literature, research tools and materials as an important tool to decrease fragmentation, and duplication of information storage, as well as to facilitate exchange of information, materials and resources among partners, PACA community and pilot countries.

# The Knowledge Repository

As has been articulated in the Knowledge Management and Communication strategies, PACA seeks to serve as a continental knowledge hub for aflatoxin related information by identifying, documenting, and disseminating best practices and effective technologies hub.

PACA recognizes the Knowledge Repository (KR) as one of the key platforms that should be implemented to enable users find, access, use/ re-use and share knowledge on aflatoxins in Africa. The KR will be a 'smart store' for the full text and metadata of the knowledge that will then be used in other PACA's systems thereby allowing a 'deposit once and use everywhere' approach to managing the information assets. The online repository will hold wide range of materials and knowledge products in different forms and formats. It will provide quick and easy access to various resources to specialists in Country Offices (COs) and to a wider PACA community, offering at the same time the opportunity to share with external audiences, the internally produced and synthesized materials, technologies and tools.

By developing and maintaining an online KR, PACA aims at the provision of effective access to and use of scientific data and information. The online KR has been envisaged, over and above the usual basic information and communication technology (ICT) infrastructure but as an open institutional repository for scientific evidence and information on aflatoxin control. The digital repository should be an online archive in which authors and academics can deposit their work, with the intention that it will be openly available in digital form, but also offers the long-term maintenance of digital resources and for making these resources available to the public or specified communities of users

In addition, the repository further seeks to provide the services of the PACA knowledge hub and resource centre, where users will access knowledge repositories and find relevant information related to aflatoxin control in Africa. This will include, but not limited to aggregation of evidence, gathering knowledge, and disseminating information to support country plan preparation and execution, as well as capture knowledge and information about best practices and research to support broader continental efforts.

# Rationale and Objectives

The PACA knowledge repository has the following objectives:

* Facilitate timely and open access to aflatoxin information and literature, by ensuring that key documents and information is available and accessible to all stakeholders
* Provide a long-term preservation of resources and provide perpetual access, re-use, generation and dissemination of knowledge.
* To bring knowledge to people who can use and apply it, to contribute to aflatoxin control.
* To be a preferred point of reference on aflatoxin literature, activities and information in Africa.

# Scope of Work and Deliverables

The scope of this assignment is to develop a knowledge repository to support PACA’s goal to become a knowledge and information hub on aflatoxin. The features of the repository should include; standard features that allows advanced search, browsable taxonomy by different categories, account management with different authentication levels, workspace management, discovery services, statistics on views and usage, RSS feed and social media, selective sharing and Multilingual features (English and French) among others.

Therefore, the resulting repository should meet PACA needs to manage aflatoxin literature and data, in both structured and unstructured formats; multimedia and both published and unpublished work. The repository should be developed on D-space (preferably) or any other available open source software. In the course of the assignment, the consultant is expected to achieve the following deliverables;

1. A work plan with timelines and a clear budget;
2. Submission of technical specification for customizing software module to PACA secretariat needs;
3. A metadata and taxonomy system (reflecting a structure on the type of documents, topic, the language, authors, year, etc.);
4. A short presentation on the collection of materials as per the agreed structure with the PACA secretariat;
5. Online repository created with all materials uploaded and searchable; and
6. Technical and User guideline/Manual on maintaining the repository, as well as guidance manual on the metadata and taxonomy system

# Technical approach to specific tasks of the assignment

The specific tasks of this assignment will take a four phased approach that will include but not limited to i) understanding the requirements, ii) design the structure of the repository that responds to PACA’s specific requirements, iii) implement and test, iv) and finally provide training and maintenance support.

1. **Requirements gathering and analysis:** This will be done with support from PACA secretariat, this will include;
   * Develop and submit a work plan with timelines and a clear budget
   * Develop and submit a detailed technical requirement specification document with budget, for developing software module and other implementation requirements
2. **System design** that will include content construction on the repository, i.e. how the content will be organized by category/theme, as will be agreed on between PACA secretariat and the consultant

* A metadata summary for the key categories of materials.
* Analyze requirement and design repository structure and interface
* Design various security level for access and dissemination of information
* Design an effective transferring mechanism/module that harness knowledge from various sources relevant to PACA repository
* Design a workflow process to be followed for the importation of information to repository

1. **System implementation and testing:** This should include;
   * The installation of the software and configuration of the software,
   * Customization the repository software tool preferably D-space
   * SMTP Integration and SSL Certificate setup (Optional),
   * Google Analytics Social Buttons setup
   * Data Migration of all resources currently on the website and offline PACA materials, as well as systematize and upload the various PACA materials e.g. audio and video materials that may need to referenced in digital formats
   * System testing to include: User Acceptance Testing and Final Testing
2. **Training and maintancence support:** this will include;
   * Training (both administrators and Editors),
   * Develop a PACA repository Policy with support from the Secretariat
   * Develop guidance manual for maintaining the repository, as well as a guidance notes on creating metadata and taxonomy (Technical and user manuals)
   * Guidance manual (online and printable) on Metadata and Taxonomy

# Reporting

The Consultant will report to the Program Manager of PACA, within the AUC-Department of Rural Economy and Agriculture (DREA), and will work closely the PACA Knowledge Manager on this assignment.

# Qualifications and Competencies Required

The consultant must have qualifications and experience of at least 5 years in knowledge management, information management or library management.

Extensive knowledge of web-based repositories and information management tools (familiarity with D-space, greenstone and SharePoint and other related software is desirable).

* Excellent analytical skills and innovativeness.
* Demonstrated ability to produce high quality results in a timely manner.
* Responsive to client requirements and feedback.
* Proven familiarity and experience working with the Africa Union is preferred.
* Initiative, passion and commitment to AU’s mission and professional values.

**Proposal**

Interested candidates should apply by submitting the following:

1. **An** updated CV, relevant skills, abilities and achievements; and references, including names and contact details ( e-mail addresses) of three referees, one of which must be a previous client of completed assignments.
2. A brief description of **two examples of knowledge sharing/information management websites, repositories or databases** that you have developed.
3. Detailed proposal for the PACA knowledge repository with budget of the proposed activities, timelines, rates, requests, sign-off and details of a standard SLA.

Proposals should be submitted by 20 August 2019 to: PACA Secretariat at: [PACA@africa-union.org](mailto:PACA@africa-union.org)