

Consultancy: Landscape Analysis of Decision Support Systems (DSS) for pest and disease management/ pest forecasting together with the associated data ecosystem in Malawi Location: Africa Duration: 1.5 months



This assignment is perfect for someone looking to apply their experience and Knowledge within an organisation that is focused on helping to deliver 8 of the Sustainable Development Goals: (1) No Poverty; (2) Zero Hunger; (3) Quality Education; (5) Gender Equality; (12) Responsible Consumption and Production; (13) Climate Action; (15) Life on Land; and (17) Partnerships for the Goals.

We live in a world where the demand for multiple land uses constantly rises and climate change places additional stress on the sustainable use of natural resources. While solutions to issues such as hunger and poverty are now within our reach, how we act today will make a big difference to how we live tomorrow.

Background

Overview of the project

The Malawi Digital Plant Health Service (MaDiPHS) is a 5-year project led by the Norwegian Institute of Bioeconomy Research (NIBIO) and funded by the Norwegian Agency for Development Cooperation (NORAD). The project aims to establish an agricultural plant health service at a national level in Malawi, based on the coordination of internationally developed digital systems. The project will build and expand on the successes achieved by existing digital plant health systems such as PlantVillage Nuru (a pest and disease monitoring tool), the Norwegian Institute of Bioeconomy Research's VIPS pest prediction platform, a Farmer Interface Application (developed by the International Institute of Tropical Agriculture) and CABI Plantwise and Pest Risk Information Service (PRISE). Existing systems' data assets and outputs will contribute to a common International Platform which will feed into a national digital client (a locally-adapted digital system with a user interface that meets the local needs). Malawi will be the pilot country with the newly-established service being a model for other countries and regions to adapt and upscale.

Key goals and objectives

The main goal of MaDiPHS is to provide a tool for targeted and efficient pest and disease management of selected crops in Malawi.

This will be achieved through the following objectives:

- I. Ensure user interaction and capacity building by use of a co-production approach to define outputs of high relevance to the Malawi users.
- II. Identifying nationally and internationally relevant data, tools and services to be adapted for local conditions.
- III. Establish an international platform for integration and coordinated access to data from multiple existing digital systems.
- IV. Establish a national digital plant health service tailored to fit Malawi users, that is hosted and managed by a national government institution.
- V. Develop and validate decision support systems targeted at key pests and diseases in Malawi.

CABI is responsible for implementing Work Package 2 which includes Data Organization and Management, focusing on

ABOUT US

By sharing knowledge and science, CABI tackles global issues like poverty, hunger, education, equality, sustainability, climate change and biodiversity. We do this by helping farmers grow more and lose less of what they produce, combating threats to agriculture and the environment from pests and diseases. protecting natural habitats from invasive species, and improving access to scientific knowledge.

CABI is an international. inter-governmental, not-forprofit organization that improves people's lives worldwide by providing information and applying scientific expertise to solve problems in agriculture and the environment. Our approach involves putting information, skills and tools into people's hands. CABI's 49 Member Countries guide and influence our work which is delivered by scientific staff based in our global network of centres.

CABI is committed to making a difference, playing its part in creating a brighter, more equitable and sustainable future.

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enhancing access to data and information resources as part of the MaDiPHS ecosystem.

Specific objective

Within the overall objective of identifying nationally and internationally relevant data, tools, services and information resources to be adapted for local conditions and for use in the MaDiPHS project, the specific objective of the assignment would be to develop a comprehensive landscape analysis document on national and regional decision support systems for pest and disease management/pest forecasting together with the associated data ecosystem and how surveillance, early warning and response functions are delivered in Malawi.

Approach and methodology

- I. Desk research and Key Informant Interviews (KII).
- II. Literature review including review of the relevant documents, existing country documentation related to national agriculture policies and relevant data policies in Malawi.
- III. A national-level consultation/workshop with relevant stakeholders to obtain feedback and inputs from the stakeholders on the draft landscape analysis for finalization of the report.
- IV. Bilateral consultations with selected stakeholders for obtaining information/inputs and views preparatory to situation analysis.
- V. Compilation and submission of the final report to CABI.

Expected deliverables and timelines

- 1. The consultant will produce a document containing a comprehensive landscape analysis of the decision support systems for pest and disease management/pest forecasting together with the associated data ecosystem in Malawi highlighting:
 - I. The current stakeholders involved in pest and disease surveillance, early warning and response and their roles in Malawi/ within the MaDiPHS ecosystem.
 - II. The decision support systems (DSS) for pest and disease management/pest forecasting that are available, their features, the flow of data and information resources that can be integrated with the MaDiPHS Platform.
 - III. The data sharing laws and regulations in Malawi.
 - IV. Current cultural, institutional, and technical barriers to data access.
 - V. Current data flows between stakeholders and existing relationships.
 - VI. Recommendations for improved data sharing.
- 2. Facilitate a national-level consultation/workshop with the relevant stakeholders to obtain feedback on the draft report when it is ready. The feedback to be received in

the consultation/workshop will be taken into consideration for the finalization of the situation analysis report.

3. Have key informant interviews with the relevant stakeholders for gathering information.

All written documentation is to be submitted in English using Microsoft Word in both soft and hard copy. The main body of all reports should be written in simple, non-technical language, with any technical material to be presented in annexes.

Timelines

The study shall begin no later than **27 March 2023**, with the Consultant expected to take 25 working days over one and a half months (from the day of contracting to complete the assignment).

Workplan

Deliverable	No. of working days
Inception report with the design of the methodologies and a work plan with time schedules to conduct the situation analysis	2
Stakeholders' consultations, meetings and simultaneous desk review of literature, reports, data, documents etc. preparatory to the analysis	10
Drafting report	5
Obtaining feedback on the draft report from the stakeholders' consultation/workshop	4
Draft report revised based on the feedback and inputs received from the consultation/workshop	2
Final report incorporating CABI's feedback	2
Total	25

Management and implementation responsibilities

The Consultant shall be responsible for:

- Design and implementation plan, including developing a detailed methodology.
- Developing study tools- checklists.
- Conducting all desk reviews and data collection.
- Organizing (working with CABI) the validation workshop.
- Catering for all his /her expenses.
- Regular progress reporting to CABI, including responding to any comments or technical inputs within the agreed timeframe.
- Producing deliverables within agreed timelines, and in accordance with quality requirements from the project management team.
- Seeking comments and feedback from CABI.
- Producing the final report.

CABI shall provide:

- Guidance and technical support as required throughout the analysis.
- Review, comments and feedback on, and approval of all deliverables, within agreed timelines.

Required qualifications and experience

- Advanced University degree; Masters/M. Phil or PhD in the relevant field.
- At least six years of experience in policy development/ policy research, data sharing policies, conducting policy reviews and/or review of crop protection projects, plant health decision support systems and any mix of these.
- Experience working in the area of sector-wide approach; developing data sharing policies and the environment that enables effective data sharing and writing situation analysis/program documents will be an added value.
- Familiarity with the working of the government partners, especially agricultural sector partners, Development Partners, private sector, NGO and civil societies. Experience working with these partners as a consultant, or staff directly or through development partners will be an advantage.
- Technical expertise in conducting research, designing questionnaires, analytical skills and writing skills evident by high-quality publications in agriculture.
- Abilities to conduct stakeholders' workshops/interviews at national and sub-national levels.
- Experience working on agricultural sector policies/ data sharing policies/ landscape analysis in Malawi will be an advantage.

Competencies

- Excellent oral and written communication and writing skills in English.
- Knowledge and ability to use the computer for research and report writing.
- Must display a high standard of ethical conduct and exhibit honesty and integrity.
- Gender-sensitive behavior and attitude.

How to apply

Interested individuals must submit the following:

- 1. **CV**, indicating past experience from similar assignments, as well as the contact details (e-mail and telephone number) of the candidate and at least three (3) professional references;
- 2. **Technical proposal**, specifying the candidate's qualifications and relevant experiences, and preferably attach sample(s) of accredited publication(s);
- 3. Financial proposal, specifying the professional fees for this assignment.
- 4. **Copy of a recent contract** to be submitted as evidence of daily fees offered to the candidate for a similar assignment.

Interested individuals must submit aforementioned documents to CABI procurement through email ID: procurement-africa@cabi.org by close of business 10th March, 2023.

Equal Opportunities:

We are a thriving international organisation attracting a diverse range of talented people from around the world. Our staff currently comprises over 30 nationalities and as an equal opportunity employer, we welcome applications from candidates irrespective of age, gender, race, colour, nationality, ethnic or national origin, disability, religion, sexual orientation or marital status. No applicant will be disadvantaged by conditions which cannot be shown to be justified and selection will be based on merit.

STAFF FEEDBACK:



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