



Terms of Reference for CCARDESA Website Maintenance and upgrades of the core development platform - Drupal 7

**COMPREHENSIVE AFRICA AGRICULTURE DEVELOPMENT
PROGRAMME ex-Pillar 4 CAADP-XP4 & CLIMATE RESILIENCE IN
NATURAL RESOURCES MANAGEMENT (C-NRM) PROGRAMME**

Terms of Reference

July 2022

1. BACKGROUND AND CONTEXT

The Centre for Coordination of Agricultural Research and Development for Southern Africa (CCARDESA) is a sub-regional organisation that was established by SADC member states to coordinate agricultural research and development (AR&D) among its 16 member states. Since its establishment, CCARDESA has been building its capacity to deliver on its mandate of empowering smallholder farmers to improve production efficiency and generate higher incomes through increased market engagement by supporting the uptake of sustainable agricultural practices in the face of worsening climatic conditions. The main objectives of CCARDESA are;

- Coordination of Agricultural Research & Development among 16 SADC member states, knowledge transfer, as well as developing new knowledge and communications products for different audiences;
- Facilitating collaboration among stakeholders of the national agricultural research and extension systems (NARES);
- Promoting public-private partnerships in regional agricultural R&D; and
- Improving agricultural technology generation, dissemination and adoption in the region through collective efforts, training and capacity building.

2. THE COMPREHENSIVE AFRICA AGRICULTURE DEVELOPMENT PROGRAMME EX-PILLAR 4 (CAADP-XP4)

The CAADP-XP4 project supports a science and innovation-led and climate-relevant agricultural transformation in Africa and aims at strengthening the capacities of the organizations (AFAAS, ASARECA, CCARDESA, CORAF, and FARA) to deliver on their Agricultural Research for Development (AR4D) mandate and to collectively support African countries implement relevant programmes of the Comprehensive Africa Agriculture Development Programme (CAADP) through: inclusive regional and international partnerships; production and exchange of climate relevant agricultural knowledge; effective communication, monitoring and evaluation; promotion of systemic and effective use of science, knowledge and innovation; and representation of the Sub Regional and National Organizations at Continental level. The expected outcome is improved effectiveness of African knowledge and innovation systems, demand-driven public policies on agricultural research and extension services, and enhanced knowledge sharing and technology development for climate change adaptation and mitigation of agriculture and food systems. On the deliverables of CAADPXP4 is centered in its 4 thematic area of Knowledge management which envisages having a Strengthened knowledge management and communication systems for decision support, sharing innovation and advocacy related to climate relevant agriculture transformation. This thematic area also responds to the DeSIRa's output No 4 on Knowledge Management for advocacy and decision support and Communication. One of the requirements for CAADPXP4 is to develop, operationalize and maintain an interoperable knowledge management platform hence the need for this consultancy which will provide maintenance on the CCARDESA Website.

3. CLIMATE RESILIENCE IN NATURAL RESOURCE MANAGEMENT (C-NRM) PROGRAMME

The GIZ/SADC Climate Resilience in Natural Resource Management (C-NRM) Programme whose main objective is mainstreaming of climate change in agriculture and strengthening cross-border management of natural resources in the SADC region is a new initiative to build on the foundation laid by the GIZ Adaptation to Climate Change in Rural Areas in Southern

Africa (ACCRA) programme in continuing with building the capacities of SADC member states to integrate climate change aspects into agricultural programmes and investments. The C-NRM project is funded by the the German Ministry for Economic Development and Cooperation (BMZ) and has the following outputs;

- i. The strategic planning framework for mainstreaming climate change into cross-border NRM is strengthened
- ii. The dissemination of knowledge on climate smart agriculture (CSA) and climate sensitive natural resource management (CSNRM) is strengthened
- iii. CSA and CSNRM measures are implemented in selected Trans-frontier Conservation Areas (TFCA's)
- iv. Priority COVID-19 sensitive measures of the SADC TFCA Tourism Programme are implemented in a climate-sensitive way.

Through a grant agreement, CCARDESA is implementing output area number 2 which mainly addresses knowledge management on behalf of the Climate Resilience and Natural Resource Management (C-NRM)-Project.

4. JUSTIFICATION

CCARDESA aims to disseminate high quality climate-smart agricultural information to the SADC member states and to be a reliable source, broker and facilitator of the free movement of agricultural information in the region. CCARDESA has built a regional Information Communication & Knowledge Management (ICKM) system which strengthens its capacity to manage and facilitate access to and the brokerage and sharing of agricultural information.

Its website was developed to meet specific needs of its target audiences. It uses open-source technologies built on LAMP (Linux, Apache, MySQL, PHP) platform. This platform is the most popular platform for hosting websites in the world taking some 80% of the Internet market. The website is visible to the public via URL (Uniform Resource Locator) or website address. The website has been optimised to work in 4 major Internet browsers, i.e. Internet Explorer, Firefox, Chrome and Safari, as well as major platforms such as Windows, Mac OS X and Linux. The website shall be rendered in mobile browsers similarly, i.e. IOS, Android and similar.

The CCARDESA website requires a **Consultancy Firm** to upgrade its website from Drupal 7 to the latest version available, revamp the website and mobile app including the knowledge hub. CCARDESA also wants to develop funding and training institutions databases and also redesign its expert database so that it is interoperable with other databases. It seeks to improve the accessibility, attractiveness and user-friendliness of the available and new information and wants to include new information formats i.e. uploading of short videos or cooperation interlinking to organisations which provide such information on their websites.

CAADXP4 is hopeful that the outcome of this assignment will present the CCARDESA website, mobile application, Knowledge hub, funding and training institutions databases including expert database as second to none, thereby making it a regional one-stop centre for agricultural information.

5. OBJECTIVE OF THE ASSIGNMENT

The main objective of this assignment is to upgrade the website from Drupal 7 to the latest version available, revamp the website and mobile app including the knowledge hub. The other objective is to develop funding and training institutions databases and also redesign its expert database so that it is interoperable with other databases.

6. SPECIFIC OBJECTIVE OF THE ASSIGNMENT

The specific objectives of this consultancy include to:

- i. Upgrade the website and CCARDESA mobile App from Drupal 7 to the latest version of Drupal
- ii. Advise CCARDESA in the improvement of its website
- iii. Provide maintenance and upgrades, technical assistance, telephonic assistance, content management, minor changes and fixes regular local backups on the CCARDESA website and mobile application on climate smart agriculture and natural resource management so that it represents CCARDESA well to its end users.
- iv. Develop, populate and maintain the training institutions database
- v. Develop funding database with entry options for proposal uploads and funding opportunities.
- vi. Redesign the Experts Database to include a customized user page
- vii. Help redesign a newsletter which is send to different user groups like the Dgroup members of the website and others.

A. Scope of work : Website Revamp and maintenance

- i. Maintenance and upgrades of the core development platform - Drupal 7.
- ii. Maintenance and upgrades of contributed modules required for providing various website's and mobile app functionalities.
- iii. Revamp the website to have new features as requested by the CCARDESA team and as stipulated in the revamp report.
- iv. Telephonic assistance to website content managers.
- v. Actual content management as and when required by CCARDESA (Required for both website and the mobile app as the website is information storage for the app.)
- vi. Regular local backups of the web site's database and file system (and mobile app). The database at least once per week and file system at least once per month.
- vii. Modest-scale fresher training sessions for the existing CCARDESA content managers or new staff members.
- viii. Support and liaison with the hosting company as and when required.
- ix. Advise on possible changes of design and functionality to improve attractivity and user-friendliness.
- x. Small changes and adjustments or new content development for the mobile app
- xi. More complex changes on the app if required and requested due to upgrades of the Android and iOS platform.

B. Scope of work : Develop, Digitize and Maintain a TFCA Training Institutions Database.

- i. Develop a training database for TFCA training institution in the SADC region, which allows uploading and regular updating of information by the training institutes
- ii. Populate the training database working closely with TFCA training institutions in the SADC region
- iii. Develop a basic manual for the training data base
- iv. Develop a standard operating procedure video on how to input content into the training data base
- v. Conduct a virtual database input workshop for the concerned institutions

C. Scope of work : Develop and maintain Funding Database

- vi. Develop and maintain a funding database from available data, , which allows uploading and regular updating of information by the training institutes
 - i. Design the Funding page to include more entry options i.e
 - ii. Develop a basic manual of the funding database
 - iii. Train funding database users on the use of the funding database

D. Scope of work Expert Database Redesigning

- i. Redesign the database in the similitude to other databases i.e. similar to other SROs especially CAADP-XP4 institutions for easy interoperability and interfacing.
- ii. Develop it to take more details from the experts including customised user page
- iii. Provide a basic user manual for the expert database
- iv. Support CCARDESA staff to use it through training

Note: All the three data bases should have the following features;

- i. Data dictionary management;
- ii. Data storage management;
- iii. Data persistence;
- iv. Data transformation and presentation;
- v. Security management,
- vi. Backup management,
- vii. Recovery management;
- viii. Data integrity management,
- ix. Transaction management

7. Deliverables, working schedule and duration

The consultancy services shall deliver on an ongoing basis:

1. A fully functional up-to-date and maintained CCARDESA website and mobile app on Climate Smart Agriculture; and
2. Local back-ups of the website's and app's data base
3. A training institutions database with entry options
4. Fully functional funding database page with entry options
5. Updated and improved expert database.

The consultancy service shall also deliver:

1. Major modifications on website and mobile app;
2. More complex changes in case of upgrades of the Android and iOS platform;
3. Managed content;
4. Additional staff institutions trainings; and
5. Coordination with the hosting company and training institutions
6. Any unforeseen issues that may arise during the period of the contract

8. EXPERIENCE AND QUALIFICATIONS OF THE CONSULTANCY FIRM

For the successful implementation of this assignment, CCARDESA is looking for a consultancy firm with the following knowledge and experience:

- At least ten years of work experience in developing websites, information systems and mobile applications for international or public and private organisations;
- At least 10 years' experience in data base development
- Programming expertise using Drupal and other cutting-edge software products;
- Should have all the necessary expertise, software and equipment in-house;
- Experience in working with the Southern African Development Community (SADC) Secretariat and/or its subsidiary organisations highly desirable;
- Experience in the field of agricultural research and development, including climate change; resource management and transboundary related projects.
- Excellent written and oral English communication skills;

The consultancy firm is expected to specify other areas of expertise required, as deemed necessary and appropriate to accomplish the task based on his/her professional judgment. The firm should also at least two experts with the following skills

i. EXPERT 1

- Master's Degree in Information technology
- Programming, training database development knowledge would be an added advantage
- Excellent working knowledge of current IT technologies, applications and best practices
- Familiarity with IT hardware and software, IT network systems, database software, intranet and basic understanding of specific IT software.
- At least 7 years working with Drupal websites for international Institutions
- Traceable experience in developing funding and experts or professional database
- At least 5 years' experience in Mobile App development and content management
- Good knowledge of English. Knowledge of other SADC languages will be an added advantage

ii. EXPERT 2

- BSc in Computer Science/Information Technology or similar
- Current IT industry certifications (e.g. MCSA, MCSE, CCNA, CompTIA A+ and N+) are an asset
- At least five years in training users in the use of data base and development of Standard Operating (SOPS) Manuals.
- Experience in hosting and training users on zoom, teams and other virtual platforms
- Familiarity with website integration and migration
- Good knowledge of English. Knowledge of other SADC languages will be an added advantage

9. DURATION

The assignment should take place between 1st September 2022 and 30th September 2023 and requires a total of 160 expert days.

10. REPORTING

During the assignment, the consultant will provide regular feedback to CAADP-XP4

Programme coordinator and will work closely with the IT Support Officer , Information and Knowledge Management Officers and other technical staff at the Secretariat.