



TERMS OF REFERENCE

Intra-ACP Global Climate Change Alliance Plus (GCCA+) Project

DEVELOPMENT OF CLIMATE SMART AGRICULTURE TRAINING MATERIALS



INTRA-ACP GCCA+ PROGRAMME An initiative of the ACP Group of States funded by the European Union's European Development Fund

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A. Introduction

The Southern African region is vulnerable to climate change and it has experienced unusual weather events in the recent past, including floods, intense rainfall, high temperatures and droughts. Climate Change has affected food systems in Southern Africa at the production level as well as throughout the post-harvest phase of the commodity value chains. Measures need to be taken to improve the resilience and stability of agricultural production system under climate change conditions in order to minimise the pressure on these systems. If left unattended to, climate change has the capacity and potential to destabilise the livelihoods of millions of people who depend on agriculture in Southern Africa.

In 2008, the European Union established the Global Climate Change Alliance Plus (GCCA+) programme as a mechanism for assisting the world's most vulnerable countries to address climate change and reduce impacts on various sectors, including agriculture. In Southern Africa, the SADC Intra-ACP Global Climate Change Alliance Plus (GCCA+) programme seeks to strengthen the capacity of SADC Member States (MS) to mitigate and adapt to the effects of climate change, in support of the objectives of the Regional Indicative Strategic Development Plan (RISDP), Africa Agenda 2063, Sustainable Development Goals (SDGs), and other initiatives.

CCARDESA is among the four regional organisations selected to implement the SADC Intra-ACP GCCA+ programme whose objective is to strengthen the capacity of SADC countries to undertake regional and national adaptation and mitigation actions in response to the challenges of climate change and climate variability. The SADC Intra-ACP GCCA+ programme is being implemented in Botswana, Malawi, Namibia, Zambia and Zimbabwe by a consortium of four organisations, namely: CCARDESA, SADC Centre for Renewable Energy and Energy Efficiency (SACREEE), Southern African Regional Universities Association (SARUA) and the Global Water Partnership Southern Africa (GWP SA). At country level, the four organisations have established strong partnerships with the NARES and the local communities.

CCARDESA's inputs will go towards building the capacity of SADC countries to integrate climate change aspects into agricultural programmes and investments through the promotion of Climate Smart Agriculture (CSA) technologies. Demonstration sites have been established in Botswana, Malawi, Namibia, Zambia and Zimbabwe on 4-hectare pieces of land where farmers will be producing various vegetables. These sites use the Water-Energy-Food (WEF) Nexus approach to conduct the agricultural activities.

The project will provide water through sinking of boreholes or drawing from existing water bodies, use renewable energy to take the water to the fields, and use CSA principles to produce nutritious horticultural crops. Communities are expected to benefit through acquisition of knowledge and skills for practising CSA, access to nutritious crops and generation of income through sales.

CCARDESA is also implementing a World Bank supported project called 'Accelerating Impacts of CGIAR Climate Research for Africa (AICCRA)' which aims at managing and reducing climate risks for agriculture. CCARDESA intends to capacitate farmers and value chain actors on the use of CSA for reducing risks to farming approaches and food systems.

Implementation of these two projects requires that farmers are capacitated in the principles and practices of CSA as part of preparing them for smart production approaches. Using simple yet effective approaches, the farmers will be guided through a process of appreciating CSA,

its role in sustainable production and conserving soil fertility, the basic practices and the benefits to the farmers.

B. OBJECTIVE OF THE ASSIGNMENT

The objective of this assignment is to develop training materials for Climate Smart Agriculture, which should be comprehensive enough to be used for training of farmers and value chain actors.

C. SERVICE REQUIRED AND SCOPE OF WORK

In order to meet the objective of this assignment, CCARDESA is seeking the services of a highly experienced individual to develop a set of systematic course materials for climate smart agriculture which should, among other issues, highlight the Water Energy and Food security Nexus concept. The training materials will be organized into modules, to cover among other things, the following:

1. Introduction to Climate Change
2. Farming systems of Southern Africa and their limitations under climate change
3. Understanding Climate change and its impact on water supply, energy and food sectors
4. Approaches to improving resilience to climate change – role of CSA
5. Existing CSA technologies and practices with potential in Southern African Farming Systems
6. Case studies of CSA and local application
7. CSA and sustainability of production
8. Gender, youth and social inclusion
9. Monitoring and Evaluation system for CSA

The training materials will need to strike a balance between the level of technical complexity and simplicity for use by extension officers. Therefore, they should be clear, concise, and easy to be understood and applied to local conditions.

D. Location of the Assignment

The assignment will be home-based. The consultant will gather the information and package it into one document. Each topic will form a chapter, supported by diagrams and pictures if possible, in order to make the notes clear.

E. DELIVERABLES

The deliverables of this assignment will include an inception report demonstrating how the assignment will be undertaken in relation to the ToRs. Ultimately the Consultant will develop a set of training materials arranged in a form of lecture notes covering all the topics under section C or as agreed at the start of the assignment. Visual illustration in form of picture and drawings among others will be necessary input of the deliverables. In addition, the consultant will be required to submit weekly short progress reports indicating the progress towards producing the training materials.

F. QUALIFICATIONS AND WORK EXPERIENCE

The minimum academic qualifications and work experience are as follows:

- (a) Have at least a Master's degree in Agricultural Sciences, or a closely (relevant) related field;
- (b) At least ten years' experience in the agricultural development sector;
- (c) Proven experience in training materials, or lecture materials or manuals in agriculture
- (d) Demonstrable experience/familiarity working on CSA issues within the agricultural sector in Southern Africa;
- (e) Proven ability to work both independently and as part of a team;

F. DURATION

This assignment be for a period of 17 billable workdays (spread within 25 days) and will commence on the day on which the individual signs the agreement.

G. REPORTING

The consultant will report to the CCARDESA Programmes and Grants Manager who will be responsible for daily technical and administrative issues for the assignment. The consultant will be required to constantly update the Programmes and Grants Manager on the progress of the assignment and any challenges encountered.

H. REMUNERATION

The consultant will be remunerated based on CCARDESA consultancy rates.