A. BACKGROUND AND CONTEXT

CCARDESA is a SADC subsidiary created by Members States to coordinate regional cooperation in agricultural research and development in the SADC region. The organisation is implementing the Comprehensive Africa Agriculture Development Programme EX Pillar 4 (CAADP-XP4) Project on Agricultural Research and Innovation which is being implemented under the EU’s "Development Smart Innovation through Research in Agriculture" (DeSIRA) initiative. CCARDESA is implementing this project in partnership with other Ex-CAADP Pillar 4 Africa institutions comprising; African Forum for Agricultural Advisory Services (AFAAS), the Forum for Agricultural Research in Africa (FARA), the West and Central African Council for Agricultural Research and Development (CORAF) and the Association for Strengthening Agricultural Research in East and Central Africa (ASARECA). The CAADP-XP4 Project is financed through the International Fund for Agricultural Development (IFAD) for a period of four (4) years 2019 - 2023. Its implementation focus in Southern Africa is in 7 target countries (i.e. Botswana, Eswatini, Mozambique, Namibia, Tanzania, Zambia and Zimbabwe).

The CAADP-XP4 project supports a science-led and climate-relevant agricultural transformation in Africa and aims at strengthening the capacities of CCARDESA to deliver on their Agricultural Research for Development (AR4D) mandate and to collectively support African countries to 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 CAADP-XP4 project seeks to deliver key outputs that will contribute to an effective African agricultural research knowledge and innovation system, demand-driven public policies on agricultural research and extension services, and enhanced knowledge sharing and technology development for climate change adaptation and mitigation in agriculture and food systems. The African countries have generally lagged behind in terms of improving agricultural productivity. This underperformance is attributed to among others the low levels of investment in agricultural research and development in African countries.

To address this challenge, African countries in 2003 committed to increase agricultural
investments to at least 10 percent of their national budgets and subsequently set a yearly target to grow the agricultural gross domestic product (AgGDP) in countries where agriculture plays a dominant economic role by 6 percent under the Comprehensive Africa Agriculture Development Programme (CAADP) (Flaherty, 2011). Despite these targets, this author observed that total investments in public agricultural R&D in the Southern African countries increased slightly from the 1990s to 2008. Furthermore, that on the overall, the 2001–08 investment growth in these countries was lower than average growth in other subregions of the continent.

International Food Policy Research Institute (IFPRI) published the periodic reports on the agricultural science and technology and innovation (ASTI) indicators to track the level of investment in agricultural research and development. Science and Technology (S&T) indicators are useful tools for assessing the contribution of agricultural S&T to agricultural growth as they assist to measure, monitor the performance of agricultural S&T systems at the national and regional levels and to assess progress toward the successful implementation of national, regional and continental commitments (Flaherty, 2011). Undertaking periodic assessments of ASTI and identifying key obstacles is necessary to guide priority setting and policy making on S&T in agriculture including in the SADC region.

To compile the SADC regional status report of agricultural research, CCARDESA therefore wishes to hire the services of a regional competent and reputable consultant to carry out this assignment to profile the level of investment in the research and development in the region. The SADC regional findings will also be used to contribute towards the consolidation of a continental status report on agricultural research and development.

B. PURPOSE OF THE ASSIGNMENT

The objective of this assignment is to prepare a report giving regional perspective on the current status of agricultural research and development in the SADC member states.

C. SPECIFIC OBJECTIVES OF THE ASSIGNMENT

Specifically, the objectives of this assignment are to:

i. Define a methodology for collecting information on the level of agricultural research and development investment at regional and country level in all the SADC countries;

ii. Collect and collate relevant ASTI data in the individual SADC member states and produce a regional report;

iii. Generate comprehensive information on the state of investment with respect to the agricultural sector;

iv. Generate information towards developing a comparative approach covering SADC member countries in Southern Africa;

v. Synthesise, information on the current state of ASTI for countries in the Southern Africa region;

vi. Identify gaps/opportunities in relation to fostering development of agricultural science, technology and innovation in the SADC region.
D. SCOPE OF WORK

The Consultant will work closely with technical staff from CCARDESA as well as the FARA consultant and technical staff for partner organisations at country level to facilitate wider analysis at regional and selected partners at target countries’ level. In executing this assignment, the Consultant will undertake the following specific tasks:

i. Develop an appropriate methodology for carrying out the assessment of investment in agricultural investment looking at the past five (5) years within the SADC countries. The detailed methodology will be included in the technical proposal;

ii. Using the assessment approach to evaluate the level of investment in agricultural research and development, identify gaps and interventions needed to drive technological development and innovation in selected national and regional institutions of SADC countries. At national level, the studies will assess the capacity in terms of infrastructure, funding and personnel and operational environment (policy and organizational coordination frameworks);

iii. Analyze generated datasets and synthesize into a report in collaboration with the FARA consultant and discuss the findings with CCARDESA;

iv. Consolidate sub-regional synthesis reports and share them with CCARDESA

v. In consultation with CCARDESA, convene meetings to validate findings of the reports;

vi. Consultation with CCARDESA Technical Staff and come up with consolidated regional reports for sharing with CCARDESA.

vii. Develop knowledge products on research investment in agriculture in the region targeting relevant stakeholders.

E. METHODOLOGY

The Consultant is expected to propose a methodology for undertaking the assignment which should be detailed in the inception report. The assignment will cover all the SADC countries. Broadly, the assessment will focus on agricultural science and technology indicators. The consultant is therefore expected to come up with a suitable methodology as well as the tools for carrying out the assignment. The Consultant, in liaison with CCARDESA is expected to review any proposed consideration from FARA to come up with a reliable tool for carrying out the assessments including addressing issues unique to the SADC region and to include the minimum elements needed for the continental report.

F. Location of the Assignment

The assignment will be home-based. The desk-top study will cover agricultural science and technology indicators for all the SADC countries. In view of the COVID-19 restrictions on travel and meetings, the assignment will be done virtually. However, where the COVID-19 lockdown regulations permit, face-to-face meetings at CCARDESA Secretariat may be considered. A validation of the reports is to be done virtually with the effective participation of the relevant stakeholders.
G. DELIVERABLES

The key deliverables are:

(1) An **inception report** as part of the proposal spelling out the proposed technical approach, the assessment tool, time scale, resources and validation plan for the delivery of the final regional report as well as outlines for the report;

(2) A **draft Regional Agricultural Status Report** (based on an agreed outline) 5 weeks after signing of the assignment contract. This shall also include:
   - An analysis on the level of investment in agricultural research and development sector in the target CAADP-XP4 countries.
   - To include key challenges and opportunities in the agricultural sector for the crops, livestock, forestry and aquaculture sub-sectors.
   - Findings are to include the identified gaps/ opportunities
   - Recommendations on addressing addressing gaps, improving policy formulation, policy analysis and policy advocacy, and capacity strengthening;

(3) A **final regional Status Report** 8 weeks after the signing of the assignment contract incorporating comments received from CCARDESA and its respective key stakeholders; a regional synthesis produced to facilitate continental consolidation (all completed by week 7 after signing of the assignment contract).

(4) Provide relevant data to enable development of a **database of regional ASTI information**.

(5) **Knowledge products** (1) on ASTI based on the regional assessment.

H. SUPPORT TO THE CONSULTANT

CCARDESA will support the Consultant by providing guidance during the implementation of the assignment. Therefore, the Consultant will work very closely with the contact persons at CCARDESA Secretariat in the delivery of this assignment.

I. QUALIFICATIONS AND WORK EXPERIENCE OF THE CONSULTANT

(a) Have at least a Master’s degree in Agricultural Economics, Agriculture Science or Agronomy, Development Studies or related fields.

(b) At least 10 years’ post-graduate experience in the agricultural development sector; preferably familiar with agricultural research and science and technology indicators.

(c) Experience on the development of survey tools, data collection methodologies including online data collection techniques.

(d) Have demonstrable ability to write concise technical papers and synthesis reports.

(e) Proven ability to work independently.

(f) Experience in working in Southern African countries.
J. DURATION

The assignment is expected to take a total of 15 input days.

K. REPORTING

The consultant will report to the CAADP-XP4 Regional Programme Coordinator, who will be responsible for the daily technical and administrative issues for the assignment.