

TERMS OF REFERENCE FOR

**APPSA PROGRAM EVALUATION IN ANGOLA
AND LESOTHO**

1. BACKGROUND

The Centre for Coordination of Agricultural Research and Development for Southern Africa (CCARDESA) is a subsidiary organisation of the Southern African Development Community (SADC). It was established in 2011 and started its full operations in 2013. CCARDESA has a mandate of coordinating agricultural research and development and contributing to better food security and livelihoods in the region. Among the Research and Development (R&D) programmes being coordinated by CCARDESA is the World Bank funded Agricultural Productivity Programme for Southern Africa (APPSA).

APPSA focuses on agricultural technology generation and dissemination within the context of a regional approach – a focus which is well aligned with the objectives of the World Bank’s Africa Strategy, which emphasizes the need for investments to improve the competitiveness and resilience of African agriculture. The Strategy identifies regional integration as an important mechanism to achieve higher rates of growth and poverty reduction. In the SADC region, the SADC Regional Indicative Strategic Development Plan (RISDP) identifies Regional Integration as the key to economic growth and poverty reduction. APPSA is therefore addressing the RISDP concerns, as well as the concerns of the third pillar of the World Bank’s Regional Integration Assistance Strategy (RIAS), which supports interventions to boost agricultural productivity; improving preparedness to analyze and respond to trans-boundary pandemics, other infectious diseases, and pests; and rationalizing regional research and tertiary education efforts. APPSA is a commitment by the International Development Association (IDA) to help countries enhance long-term availability of safe and nutritious food by providing a mix of short-term interventions designed to stimulate rapid supply responses and sustainable medium- and long-term investments in agricultural productivity, taking into account opportunities for food safety and nutrition enhancement.

APPSA started with three countries (Malawi, Mozambique and Zambia) in 2013 (First Phase) and expanded to Angola and Lesotho in 2019 (Second Phase). The main thrust of the programme is to improve agricultural technology generation and dissemination within and among participating countries, building capacity within national Research and Development (R&D) systems, and enhancing regional collaboration in agricultural research and development. The implementation of APPSA is based on partnerships and collaboration among SADC countries. Each country under APPSA establishes a Regional Centre of Leadership (RCoL) in a commodity area that distinguishes it as a leader in the region and beyond. So far, Zambia has established an RCoL in food legumes and legume-based farming systems, Malawi in maize and maize-based farming systems and Mozambique in rice and rice-based farming systems. In the current phase, Angola and Lesotho are establishing RCoLs in Cassava and Cassava-based farming systems and Horticulture and Horticulture-based farming systems, respectively.

2. PROJECT DESCRIPTION

The Project Development Objective (PDO) is *to increase the availability of improved agricultural technologies in participating countries in the Southern Africa Development Community (SADC) region.*

APPSA has four major components namely:

Component 1: Technology Generation and Dissemination

This component involves innovative R&D technology generation and dissemination activities associated with the commodity groups or technology themes being targeted by countries participating in APPSA. These include: (i) regional R&D activities developed in the initial set of APPSA participating countries in the areas of maize, rice, grain legumes, conservation agriculture/climate adaptation, and climate smart agriculture technologies; (ii) activities in horticulture and cassava as part of the expansion of regional collaboration, including Angola and Lesotho; and new frontier R&D activities to be developed over the course of implementation by participating countries.

Component 2: Strengthening the Institutional and Enabling Environment for Technology Adoption

This component involves: (i) upgrading of research infrastructure, including rehabilitation and construction of physical infrastructure; farm, laboratory, and office equipment; and information technology and knowledge management systems; (ii) upgrading of infrastructure for sanitary and phytosanitary (SPS) management and regulatory systems; (iii) improving institutional administration and performance management systems within RCoLs; (iv) developing human capital, with special focus on promoting women scientists, by providing scientific or technical training at post graduate level; by upgrading skills through short courses or targeted training, and scientific exchanges; (v) strengthening seed production capacity, seed regulatory functions, and related services; and (vi) improving national research regulatory system to facilitate National Agricultural Research Systems' (NARS) functionality and implementation of research and dissemination activities.

Component 3: Contingency Emergency Response

The activities under component 3 are only triggered when there is need to respond to emergencies. These activities include consultations with SADC Disaster Risk Reduction (DRR) and other DRR actors, development of emergency action plans and facilitating and monitoring activity implementation.

Component 4: Project Management, Monitoring & Evaluation and Regional Coordination

This Component involves financing national level research coordination and management including planning and budgeting, management and administration, monitoring and evaluation, safeguards compliance, and regional engagements. Where necessary, APPSA finances consultants to ensure that all essential project coordination activities are carried out effectively.

Theory of Change. APPSA will achieve the establishment of a regional system for generating and disseminating improved technologies by supporting research and development of improved technologies, ensuring that mechanisms exist to make improved technologies available across countries, and that farmers are able to adopt improved technologies in all countries participating in APPSA. The key inputs required to drive the change will include generating new technologies through research, commercialization in partnership with private

sector, raising awareness on new technologies through Lead Farmers and other extension agents, and dissemination of technologies to farmers and end users.

APPSA will achieve the regional harmonization of policies and regulatory systems by establishing the RCoLs for the commodities beneficial to countries in the region. In addition, to achieve regional harmonization, building capacity at country-level to meet quality assurance at regional level will be supported. The key inputs needed to drive the regional harmonization include improving research facilities and investing in advancement of scientists and technical staff, with especial emphasis on women in agricultural sciences. APPSA will ensure regional facilitation and coordination by providing technical assistance through CCARDESA to countries and at regional scale. This will include technical quality control of R&D sub-projects, joint systems for M&E and results tracking, and analytical and feasibility studies.

APPSA has a consolidated *higher-level results framework* as reflected in the Project Appraisal document, with the following PDO indicators:

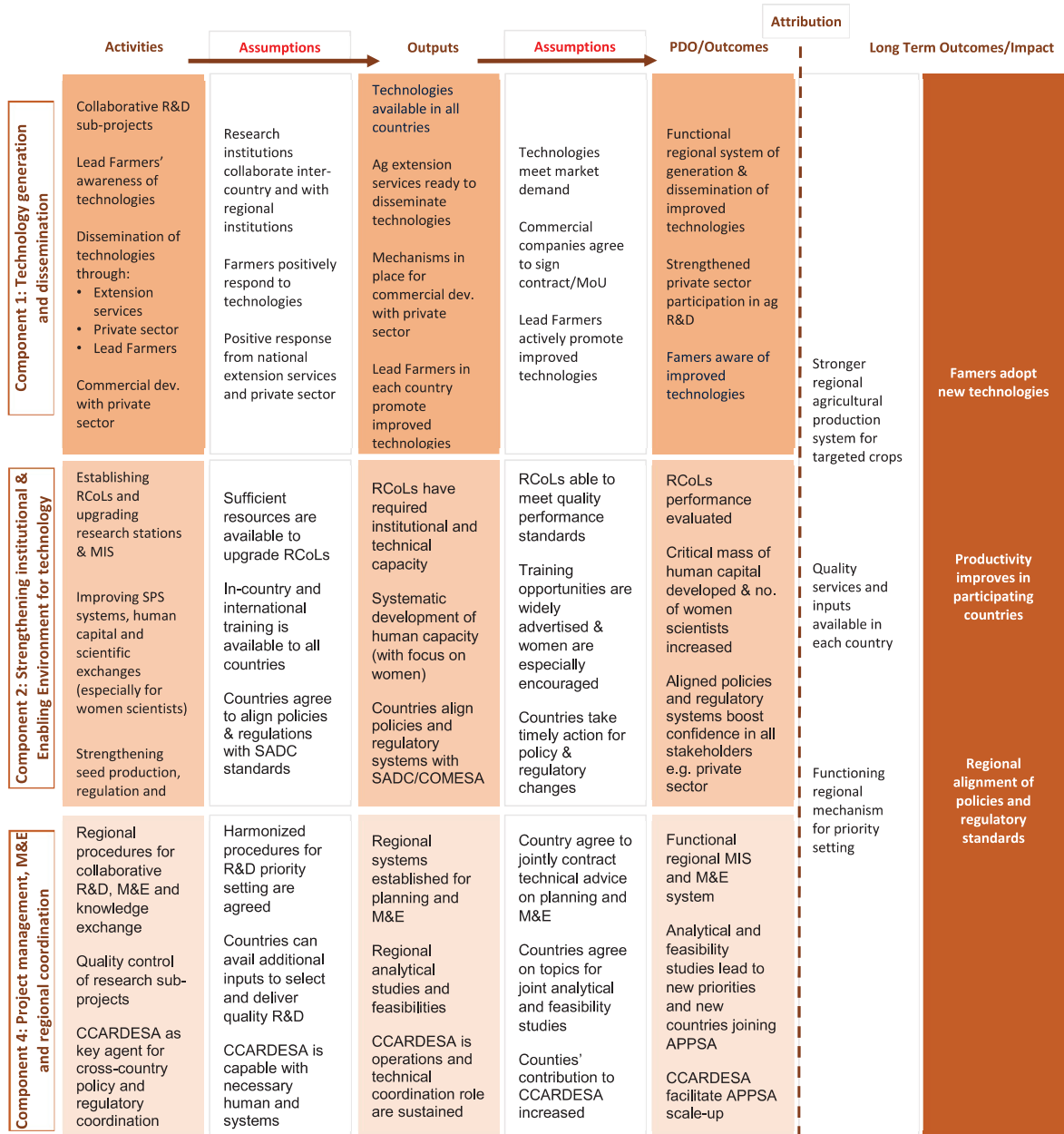
- Number of technologies that are being made available to farmers and other end users
- Percentage of Lead Farmers in targeted areas who are aware and adopt an improved technology promoted by the Project
- Number of technologies generated or promoted by the Project in one participating country that are released in another participating country
- Direct Project beneficiaries (number) of which female (percentage)
- Farmers reached with agricultural assets or services

The results framework is being operationalized through a detailed disaggregated *regional M&E framework* that was adopted by the two participating countries. For each project component a set of output indicators contributing to the intermediate outcome and outcome indicators have been defined and data has been collected accordingly.

Component 1 is implemented through a portfolio of 43 sub-projects which apply a common set of results indicators as per the regional M&E framework. Baseline data was collected in both countries and a mid-term evaluation was completed in 2022.

The Theory of Change is depicted in figure 1.

Figure 1. Theory of Change for APPSA



3. OBJECTIVES AND SCOPE

3.1 Objectives

The project comes to the end of its implementation at the end of January 2025. The proposed evaluation aims at assessing the achievement of the project development objective (PDO) and the changes that have occurred as a result of the project's intervention, important lessons that have been learnt and recommendations for future design and implementation.

3.2 Scope of the Assignment

The assignment will apply the six OECD/DAC evaluation criteria (*relevance, coherence, effectiveness, efficiency, sustainability and impact*) and include checking for *scientific credibility* of research and development activities. The evaluation should demonstrate how APPSA has been: (i) Relevant to the Angola, Lesotho and regional context; (ii) coherent internally among participating countries and externally with other interventions; (iii) achieving its objectives and delivering results in an efficient way; and (iv) making sustainable positive impacts. The evaluation will also look at cross-cutting issues such as *gender* and *nutrition*. The evaluation will be guided by the following evaluation questions:

Evaluation Questions

Scientific credibility

- how robust and rigorous have the research methodologies and the capabilities of researchers and research teams been? Outputs like publication in peer-reviewed journals, characterization of germplasm, varietal release would be one measure of scientific credibility.
- Is there evidence that scientific quality has improved over the project period?

Relevance

- Are the sub-projects financed under APPSA doing the right thing? Is the intervention well-designed to address relevant national and regional priorities/needs?
- Are the technologies promoted by the sub-projects important for achieving (i) agricultural development priorities of participating countries and (ii) regional harmonization of policies and technology transfer?
- Are the technologies selected for dissemination responding to farmers' needs and priorities?
- How relevant was the establishment of RCol for Cassava and Horticulture for aligning policies and regulatory systems in the region?

Coherence

- How compatible is APPSA with other interventions and programs in the region?
- How did CCARDESA help to strengthen and facilitate internal coherence (synergies and interlinkages among the 5 participating countries) and external coherence (i.e. consistency of the program with other actors' interventions in the same context).
- How was harmonization of regional seed policies advanced or achieved?

Effectiveness

- To what extent was the PDO achieved and is it attributable to the activities support by the project? In other words, is there robust evidence for an increase in the availability of improved agricultural technologies¹ in participating countries in the Southern Africa Development Community (SADC) region?
- Have established targets for each indicator been achieved? If not, why? And how does the project monitoring system produce reliable information?
- Is the APPSA Theory of Change plausible as well as practical? Are the assumptions made during design valid and relevant? How well have the stated key drivers of change: (i) regional system for generating and disseminating improved technologies; (ii) harmonization of policies and regulatory systems; and (iii) regional facilitation and coordination contributed to the achievement of the PDO?
- How successful was the project in strengthening the institutional and enabling environment for technology adoption through the investments made through component 2 (i.e., infrastructure and human capacity development)?
- Did the project help to close the gender gap in agriculture R&D? Were R&D sub-projects sensitive to gender-differentiated priorities as these relate to household food security and nutritional sufficiency?
- What are lessons learnt from the design and implementation process for project effectiveness?

Efficiency

- How well have resources and inputs been converted into project results?
- What are the estimated economic returns of the APPSA dissemination efforts?
- Are there design and implementation aspects that either contributed to or reduced efficiency (e.g., implementation delays, staff turn-over, procurement issues, cost overruns)?

Impact

- To what extent has APPSA generated or is expected to generate significant positive or negative, intended or unintended, higher-level effects, i.e., adoption of technologies and productivity gains?
- How plausible and what is the likelihood that farmers were made aware of improved technologies (through the sub-projects)? What is the likelihood that farmers will eventually adopt the technology in the medium to long-term? Are there important local barriers to adoption and productivity gains that have not been considered in the design of sub-projects?

¹ "Availability" being measured by whether farmers have access to the improved technologies (e.g., improved seed varieties, inputs, knowledge about improved management practices etc.) developed by any of the regional APPSA R&D Project.

Sustainability

- To what extent will the net benefits of component 1 and 2 interventions continue, or are likely to continue? What mechanisms were put in place for assuring sustainability of the investment made (e.g., management and maintenance of infrastructure investment, continued financing of re-instated breeding programs, seed-multiplication activities, the RCoL, etc)?

4. METHODOLOGY

The program evaluation will be conducted by an external independent firm and will cover the timeframe of APPSA (Phase 2) from inception to the present (2018-2024). The firm should provide a detailed methodology for the program evaluation, as well as a detailed timeline for completion in the inception report. This should describe the overall approach to addressing the key evaluation questions in terms of methodology for applying the indicated evaluation criteria, gathering and analyzing information, consulting stakeholders, deriving findings, and presenting conclusions and recommendations with supporting evidence.

At a minimum, it is expected that the evaluation would be undertaken using a combination of:

- End-line survey of (i) lead farmers; (ii) follower farmer groups (iii) local input markets/agrodealer/seed growers and (iv) local extension / advisory programs in target regions of sub-projects for assessing PDO indicator 1 and 2 (-> evaluation criteria: *effectiveness, impact, sustainability*);
- Portfolio analysis of all sub-projects using (i) the APPSA regional indicators with their definitions, (ii) sub-project documentation and (iii) key informant interview (including PIs and co-PIs for a sample of sub-projects) - (-> *scientific credibility, efficiency and effectiveness*) Desk assessment for all interviews (sample of sub-projects);
- Training satisfaction survey (online) of scientists that received short-term and long-term training financed by the project’;
- Desk-review of project documentation and evidence about variety release, registration, seed harmonization records in all 5 APPSA countries for assessing achievement of PDO 3 (-> *effectiveness, coherence*);
- Field visit to the new RCoL infrastructure financed by the project in Angola and Lesotho and key informant interviews (-> *relevance, effectiveness, efficiency and sustainability*); and
- Desk-review and key-informant interviews about of strengths and weaknesses in project management, M&E, environmental and social safeguards, gender sensitivity, partnerships, communication and visibility, coordination and supervision (-> *coherence, efficiency, effectiveness, sustainability*)

5. EXPECTED OUTPUTS/DELIVERABLES

The primary deliverables will include:

- a) Inception report covering the overall evaluation design with an evaluation matrix (i.e., detailed list of evaluation questions in relation to the evaluation criteria of *relevance, coherence, effectiveness, efficiency, outcome/impact, sustainability* and evaluation of scientific credibility, detailed description of the methodology with the approach to generate responses to each evaluation question, including indicators or benchmarking if appropriate, type of data and other evaluative information to be collected and the methods for collecting should be specified for each evaluation question or group of questions), detailed schedule for the tasks to be undertaken; activities to be implemented, deliverables, roles and responsibilities of the evaluation team.
- b) End-line Survey sampling frame and survey instruments
- c) End-line survey report of lead farmers, follower farmers and local input markets/agrodealers and local extension / advisory programs with descriptive statistics
- d) A draft Evaluation Report for review by stakeholders.
- e) Validation workshop and summary workshop proceedings
- f) Final Evaluation Report that incorporates comments from stakeholders.

All reports should be submitted in English and Portuguese.

6. TIMELINE

This assignment is planned over a period of 7 months. The end-line survey work is expected to be undertaken between July and September after the end of harvest in both countries. It will be carried out in 4 phases and the actual timing of the phases will be agreed between the consultant team and CCARDESA Secretariat at the time of contract negotiation and award.

An indicative schedule of deliverables is provided below. Modifications may be made during the Inception Phase, but this should not alter the quality of the proposal and substance of the delivery.

Key Deliverable	Tentative date
Inception report	June 28 2024
Survey sampling frame and survey instruments	July 31
End-line survey report of lead farmers, follow-farmers and local input markets/agro-dealers/seed producers with descriptive statistics	September 30
Draft evaluation report	October 30
Validation workshop	November 15
Final Report	December 20, 2024
Total Period	7 months

7. QUALIFICATIONS AND WORK EXPERIENCE OF THE FIRM

- a. The Firm is expected to have at least 15 years of experience and expertise in conducting monitoring and evaluation of agricultural development projects/programmes.
- b. The consulting team should have experience and/or be qualified in the following areas: agricultural research, extension, agribusiness and agricultural investment appraisal.

Agricultural Scientist/Team Leader

- (i) The Team Leader should be an Agricultural Research Expert.
- (ii) A PhD in Agricultural Sciences, preferably in agronomy or plant breeding.
- (iii) He/she should have at least 12 years of post-PhD experience in agricultural research, preferably in Sub-Saharan Africa.
- (iv) At least 10 years' experience in evaluating donor supported agricultural research and development projects.
- (v) Proven ability and experience in project management and leading consultancy teams.
- (vi) Proven ability in producing technical evaluation reports for donor funded agricultural development projects.
- (vii) Have a traceable publication record in reputable peer-reviewed and accredited publications.
- (viii) Experience in working with Regional Organisations is highly desirable.
- (ix) Knowledge of and involvement in programmes supported by regional and international organizations such as the World Bank Group, EU, and AfDB is also desirable.

Agricultural Extensionist

- (i) At least a Master's degree in Agricultural Extension or related field.
- (ii) At least 12 years of post-MSc experience in agricultural extension with at least 10 years on technology generation and dissemination projects, preferably in Sub-Saharan Africa.
- (iii) At least 7 years of experience working with farmer field schools and agricultural innovation systems.
- (iv) At least 10 years of experience in evaluating donor supported agricultural research and development projects.
- (v) Proven ability in producing technical evaluation reports for donor funded agricultural development projects.
- (vi) Have a traceable publication record in reputable peer-reviewed and accredited publications.
- (vii) Experience in working with Regional Organisations is highly desirable.
- (viii) Knowledge of and involvement in programmes supported by regional and international organizations such as the World Bank Group, EU, and AfDB is also desirable.

Monitoring and Evaluation Expert

- (i) At least a Master's degree in development studies, agriculture, social sciences, or related field. A Post graduate qualification in Monitoring and Evaluation is desirable.

- (ii) At least 10 years of post-Master's degree experience in monitoring and evaluation of international donor supported agricultural development projects, preferably research and development projects.
- (iii) Understanding of theory of change and logic models and ability to facilitate development of SMART indicators, an indicator reference manual and results frameworks is required.
- (iv) At least 10 years of experience in quantitative, qualitative, and/or mixed methods research and use of Management Information Systems (MIS).
- (v) Proven ability in producing technical evaluation reports for donor funded agricultural development projects.
- (vi) Have a traceable publication record in reputable peer-reviewed and accredited publications.
- (vii) Experience in working with Regional Organisations is highly desirable.
- (viii) Knowledge of and involvement in programmes supported by regional and international organizations such as the World Bank Group, EU, and AfDB is also desirable.

Statistician

- (i) At least a Master's degree in statistics, population studies or related field.
- (ii) At least 10 years of post-Master's degree experience in planning and managing all processes involved in the design and execution of agricultural surveys (including farm household surveys) for agricultural project impact evaluation.
- (iii) Demonstrated experience in the drafting of methodological guidelines on agricultural surveys.
- (iv) Demonstrated experience in working with researchers and other users of statistics on agriculture related activities.
- (v) Have strong quantitative or analytical and data management skills.
- (vi) Proven knowledge and experience with the use of different statistical softwares for processing survey data.
- (vii) Proven ability to manipulate and present data by using standard tabulation and statistical software packages.
- (viii) Proven ability in producing technical evaluation reports for donor funded agricultural development projects.
- (ix) Have a traceable publication record in reputable peer-reviewed and accredited publications.
- (x) Experience in working with Regional Organisations is highly desirable.
- (xi) Knowledge of and involvement in programmes supported by regional and international organizations such as the World Bank Group, EU, and AfDB is also desirable.

Agricultural Economist

- (i) At least a Master's degree in Agricultural Economics or related field
- (ii) At least 10 years of post-Master's degree experience in conducting programme/project impact evaluation and cost-benefit analysis (financial and economic) of agricultural development projects.
- (iii) Proven evidence of past assessment of financial and economic returns to investment in agricultural research and development in Sub-Saharan Africa.

- (iv) Proven ability in conducting studies on the uptake and scaling of improved agricultural technologies/ innovations.
- (v) Proven ability in designing and conducting impact assessments of donor funded agricultural development programmes using options including randomised assignment, instrumental variables, regression discontinuity design, difference-in-differences or matching.
- (vi) Proven ability in producing technical evaluation reports for donor funded agricultural development projects.
- (vii) Have a traceable publication record in reputable peer-reviewed and accredited publications.
- (viii) Experience in working with Regional Organisations is highly desirable.
- (ix) Knowledge of and involvement in programmes supported by regional and international organizations such as the World Bank Group, EU, and AfDB is also desirable.

8. ASSIGNMENT MANAGEMENT

The Consultant will report to the APPSA Regional Coordinator who will be responsible for daily technical and administrative issues for the assignment. CCARDESA will work in collaboration with APPSA National Project Coordinators and designated focal persons for the assignment in each country to supervise the assignment.

9. KEY DOCUMENTS FOR THE EVALUATION

The evaluation team is expected to identify and obtain any other documents worth analysing, through its interviews with people who are or have been involved in the design, management and supervision of the project. The list of key documents includes but is not limited to the following:

- (i) Country strategies and policy documents
- (ii) APPSA Project Appraisal Document –Regional Results Framework
- (iii) Project Implementation Manuals, including indicator reference guide
- (iv) Project semi-annual and annual progress reports
- (v) Sub-project proposals, progress and completion reports; research protocols
- (vi) Implementation Support Mission Reports and Aide Memoirs
- (vii) APPSA Self-Assessment Report (2022)
- (viii) Mid-term evaluation report (2022)
- (ix) Other sources of information, e.g. baseline survey reports, specific studies or analyses of specific issues etc