

**GUIDELINES TO RESPOND TO THE CALL FOR
INTENDED EXPRESSION OF INTEREST FOR THE
ESTABLISHMENT OF A REGIONAL MULTI-ACTORS
RESEARCH NETWORK ON AGROECOLOGY
INSOUTHERN AFRICA DEVELOPMENT
COMMUNITY (SADC) REGION**

for

Co-applicants of RMRN Consortium

on

Agroecology in the SADC Region

I. OVERVIEW

1. **THE REGIONAL MULTI-ACTOR RESEARCH NETWORK (RMRN)** consortium aims to support and promote agri-food systems transition along the agro-ecological pathway in Southern Africa Development Community (SADC). These guidelines provide information on the RMRN consortium, and what CCARDESA would want to see in a proposal (priority topics), coupled with a well-defined outline and a set of selection criteria that will help CCARDESA to better determine which consortium proposal best suits the objectives of the RMRN on agroecology in the SADC Region.

II. COMPOSITION OF AN RMRN CONSORTIUM

2. **CCARDESA is the Grant Applicant**, and the co-applicants are the four categories of institutions listed in paragraph 5 below. CCARDESA will provide guidance and support to the RMRN members, facilitate communication, supervise the management of resources, and link the RMRN with Regional economic Communities policies and priorities. There will be a memorandum of understanding between the CCARDESA and the members of the RMRN. There will be a contract between one EU delegation and the CCARDESA Secretariat including the selected RMRN.
3. The **RMRN consortium** should be a group of **Institutions** and **Organisations** providing leadership in scientific processes and knowledge (co-)creation focusing on agroecological agri-food systems in the SADC Region. **RMRN consortia** are led by **SADC research organisations and universities**. RMRN consortium should include cohesive partnerships with (i) international organisations and/or European research organisations/universities and (ii) other organisations such as NGOs, private sector, Farmer Organisations, civil society, and public entities.
4. It is expected that the duration of the RMRN Consortium is a maximum of 48 months and will have a budget of a maximum of 4 million Euro. The exact budget and duration will be determined during the final proposal development phase. Additional funds will be provided to CCARDESA to play its role.
5. The composition of the RMRN shall include relevant multi-sectoral **co-applicants**; and indicative composition is given below:
 - 2-4 African research organisations and or,
 - 2-4 African universities and or,
 - 1-2 International/European research organisations and or,
 - 1-2 non-research organisations; for example, farmer organisations, private sector, extension services, or civil society and or
 - Other.

- However, the total number of co-applicants should be limited (6 to 8), and other grass root actors may be involved as sub-grantees.

III. WHO SHOULD APPLY TO LEAD, OPERATIONALISE AND COORDINATE RMRN CONSORTIUM

6. Research organisations and universities in the SADC region can apply to lead and coordinate the **RMRN consortium**. The applicant must meet the set criterion of eligibility as described hereafter. Without exception the consortium should demonstrate scientific expertise in agroecology.

IV. CONTENT OF RMRN SUBMISSION

The content of the RMRN Consortia submission will include.

a) Proposed/Intended work

The proposed work includes elements B to G in Part II of the submission form.

The proposed work should focus on innovative approaches to produce knowledge, to test or scale solutions conducive to an agroecological agri-food system transition, to strengthen capacity for researchers and other actors (practitioners, policy makers) as well as to develop effective link with higher education, should be a priority.

The response to the Call should:

- Provide information on multi-disciplinary **research methodology** focusing on the 13 Agroecology principles <https://www.agroecology-europe.org/wp-content/uploads/2023/03/Poster-13-principles-of-Agroecology-ENG.pdf>. (**Appendix 1**) or address new developments and cutting-edge innovation processes guided by agroecology principles.
- Develop **systemic/holistic approaches** to address the complexity of the food system transformation at different levels such as plot, farm, and landscape levels.
- Address the **different components of the innovation process** (namely knowledge generation, knowledge co-creation, technologies development, capacity strengthening, markets and policymaking) with a focus on knowledge intensive and frugal innovations adapted to the realities of local communities and small-scale farmers.
- Mobilize **different disciplines** including bio-physical and social sciences to be able to develop interdisciplinary research.
- Integrate **gender-sensitive approaches** in promoting women in Science – Technology & Innovation.

The potential and expected activities are, for example:

- produce knowledge, carry out quality research, develop scientific tools and methods,
- develop knowledge management systems,
- support PhD programmes,
- carry out scientific and technical training activities for researchers,
- strengthen networking among members of RMRN and other actors,
- contribute to higher education curricula,
- support knowledge and services to practitioners and policy makers,
- organise events and build up tools for awareness raising uptake and dissemination.

b) Linkages with on-going Agroecology initiatives in the SADC region.

This should be summarised and in compliance with the guidelines provided in the template for preparing the submissions.

c) Knowledge Management, Innovations, Scaling up.

The response to provide the broad Knowledge Management approaches, including expected innovations and scaling up / exit strategies.

V. CRITERIA TO ASSESS RMRN SUBMISSION

The assessment will be based on five criteria (**Appendix 2**). These are:

- 1. The Legal Status of the RMRN Member:** The legal status of incorporation in the country of registration as per the clearly defined categories; African research organisation, African university, International/European research organisation, non-research organisations; for example, farmer organisations, private sector, extension services, or civil society; and other.
- 2. The track record of the Consortium members** in terms of their (a) experience, specialization in Agroecology Research covering the 13 agroecological principles and (b) the implementation of relevant specific technology and innovation supported by consortium members.
- 3. Intended work:** This is the pillar of what responders to the Call are expected to pay extra attention. Indeed, the intended activities will be based on solid background, clear goals, and objectives; well described target groups, specific to be implemented under well-defined components, intended knowledge generation initiatives and lastly full alignment with agroecology principles.
- 4. Linkages between intended project activities and other agroecology initiatives in the region:** Specifically, identification of the initiatives, and how partners will be mobilised. The key initiatives include inter alia partnerships with implementers of specific DeSIRA Initiatives in the Region and other agroecology projects (agri-food value chain actors' farmers, farmers organisations and agri-agencies) and specific linkages with CCARDESA-implemented CAADP XP4 Programme
- 5. Knowledge Management, innovation, sustainability:** the approaches for knowledge management and sharing to be used, to which extent the proposal is innovative, how to address the sustainability of the intervention (RMRN and other interventions)

VI. PRIORITY TOPICS

- a) Agrobiodiversity to support agroecological processes: Agrobiodiversity** (crops, animals, mycorrhiza/bacteria) is key to support ecological processes towards healthy soils, diversified cropping and farming systems for better production and resilience, diversified landscapes to provide ecosystemic services. By addressing technical, economic, social and policy dimensions, specific emphasis could be put on (I) neglected and under-utilized crops including evolutionary breeding and seed systems management, (ii) the diversity of animal landraces to enhance the resilience of the livestock system and to strengthen mixed-farming systems, (iii) agroforestry (selection and association of trees, interactions with crops) with specific challenges depending on the agroecological area (humid, dry, irrigated).

- b) Soil health to improve production and eco-system services:** Soils are the basis of food and non-food production and generate eco-system services (water cycle, carbon storage, etc.). There is a need to address knowledge gaps regarding ecological processes and the development of solutions based on ecological processes (including bio- and organic fertilisers). For economic and environmental purposes, practitioners and farmers require support (tools, models, advisory services) with a holistic perspective to manage soil health including the cycle of the main nutrients (N, P, K) with different sources (on and off-farm organic fertiliser, inorganic fertiliser, legumes, agroforestry, etc.). The effective and inclusive management and governance of agricultural and pastureland are key to ensure that soil can provide eco-system services.
- c) Integrated pest management based on agroecological processes:** Pest and diseases are challenging production in Africa. Developing new solutions based on ecological processes is a priority to avoid an overwhelming dependence on chemical pesticides. Specific emphasis should be put on the development of effective and reliable solutions making use of natural enemies monitored and stimulated within and around the plots or produced and disseminated. An alternative solution is the development of bio-inputs by addressing technological, regulatory and market issues with specific attention to potential risks on human and ecosystem health.
- d) Water management to address climate change:** In the context of increasing climate change, the need for better monitoring and innovative solutions is more and more important to deal with risks (drought and flood) and to manage water for agricultural production. Beyond large, irrigated schemes, the R&I should help actors develop new practices (soil management, identification of adapted crops and cropping systems, adapted agroforestry systems, etc) and technologies including drip-irrigation and the mobilisation of renewable energy, new participatory water management processes, etc.
- e) Adapted mechanisation for small-scale farmers to increase productivity and farmers' incomes:** Low labour productivity is a key issue to be addressed to improve production and make farmers activities more attractive and less painful especially for youth and women. Agricultural production and processing require adapted mechanisation for small-scale farmers and processors. Animal traction is still the most effective option in many African countries, but a few R&I programmes are working on developing alternative solutions. Small tractors and adapted implements are also needed to support agroecological systems with local capacities for production and maintenance. This raises issues of technologies, institutions, and policies.
- f) Digitalisation for agroecology:** Digital tools are developed and more and more used in the agricultural sector in Africa to monitor crops and manage resources such as pasture or water, to facilitate access to markets (price information, traceability, etc.) and services (inputs, advisory services, etc.). They are used by farmers and more often by practitioners. However, there is a lack of attention paid to digital tools for agroecology no matter how critical they are to co-create and share knowledge (agroecological practices and farm management, access to inputs for agroecology, development of economic and social services) adapted to local contexts and based on local and scientific knowledge. Beyond technology development, issues at stake relate to capacities (farmers, advisers) at individual and organisation levels and to governance of data (privacy, sharing of property rights, etc.)
- g) Value chains to scale agroecology:** It is a priority to scale agroecology through value chains able to valorise agricultural production based on agroecological principles to increase farmers' incomes.

Several options should be envisaged. First, valorising agricultural products with different mechanisms to be assessed and improved (organisational set-up, policies, capacities) such as urban markets for short value chains or certification schemes including participatory ones. Secondly, improving processing and trading based on circular economy and renewable energy, aligned with a green transition, and addressing technological, economic, and institutional challenges. Thirdly, strengthening specific value chains with high ecological and economic potential such as legumes (soybean, beans, forage trees, etc.) or agroforestry products (shea, cocoa, etc.) at different steps of the value chain: production in integrated and diversified farming systems, processing to adapt to market needs, and consumption.

- h) Innovation service supports:** Farmers need support to develop and improve agroecological farming systems in a changing context. However, advisory services and other innovation support services (incubators, innovation platforms, etc.) are to be adapted or strengthened to provide relevant and effective services with a holistic farm approach, based on the principles of agroecology and aimed at strengthening capacities and valorising local knowledge. There are open questions about the methods to be used and the capacities required to provide services, about the governance and funding mechanisms that should be in place and finally about the performance of the agricultural innovation systems at local, service and policy level.

- i) Institutions and policies as drivers for agroecological transitions:** The food system transition depends on the institutional and policy landscape. Global, continental, and national policies drive the food systems transition and may shape an enabling environment to scale agroecology. However, there is a need to assess and support these policies to effectively contribute to changes. The agroecological transition requires new indicators (economic, social, and environmental) and adapted monitoring systems to assess the performance of food systems based on agroecological principles. Modelling tools at farm or country levels are also useful to assess to what extent and under which conditions agroecology can address current challenges (food security, climate change, biodiversity loss, etc.). Dialogue with key stakeholders (farmers, civil society, private sector, policy makers) is a key step to define relevant questions, shape the analytical framework, discuss the results, and propose solutions.

APPENDIX 1: 13 PRINCIPLES OF AGROECOLOGY

Improve the efficiency of resource use:

1. Recycling: Focus on local renewable resources and close, to the extent possible, the cycles of nutrient and biomass resources.
2. Reduction of inputs: Reduce or eliminate the screw-in dependence on purchased inputs and enhance self-reliance.

Building resilience:

3. Soil health: Guarantee and improve the health and functioning of the soil to promote plant growth, through the management of organic matter and the intensification of the biological activity of the soil.
4. Animal health: Improve the health and welfare of animals.
5. Biodiversity: Preserve and increase species diversity, functional diversity, and genetic resources to maintain the overall biodiversity of agroecosystems over time and space at field, farm, and landscape levels.
6. Synergies: Foster positive ecological interactions, synergies, integration, and complementarity among the elements of agroecosystems (animals, crops, trees, soil, and water).
7. Economic diversification: Diversify farm incomes by ensuring that small farmers enjoy greater financial independence and can create added value while enabling them to meet consumer demand.

Ensure equity / social responsibility:

8. Co-creation of knowledge: Strengthen the co-creation and horizontal sharing of knowledge, including local and scientific innovation, through exchanges between farmers.
9. Social values and types of diet: Create food systems that are based on the culture, identity, tradition, social equity, and gender equality of local communities, and that ensure healthy, diverse, seasonally, and culturally appropriate diets.
10. Fairness: Ensure dignified and reliable livelihoods for all stakeholders involved in food systems, especially smallholder farmers, through fair trade, fair working conditions and fair treatment of intellectual property rights.
11. Connectivity: Guarantee proximity and trust between producers and consumers through the promotion of fair and short distribution channels and the reintegration of food systems into local economies.

12. Governance of land and natural resources: Strengthen institutional structures to improve the recognition and support provided to family farms, small farmers and peasant who ensure sustainable management of natural and genetic resources.
13. Participation: Encourage social organization and the increased participation of food producers and consumers in decision-making to promote decentralized governance and local adaptive management of agricultural and food systems.

APPENDIX 1: CRITERIA TO ASSESS THE PROPOSAL

Legal status Consortium Members	5
Track Record Consortium Members	20
Intended Research work	50
Linkages with national and regional agroecology initiatives	10
Knowledge Management	15
Total Score	100