

NOARA

Network of Organic Agriculture Researchers in Africa

RÉSEAU DES CHERCHEURS EN AGRICULTURE BIOLOGIQUE EN AFRIQUE

شبكة الباحثين في الزراعة العضوية بإفريقيا

www.noara.bio, noaraafrica@gmail.com

Term of Reference
NOARA/RES/2024/01

EVALUATION OF THE IMPACT OF AGROECOLOGICAL AND CONVENTIONAL
FARMING SYSTEMS ON BIODIVERSITY WITHIN FARMLANDS IN EASTERN AND
WEST AFRICA

September 2024

1. BACKGROUND INFORMATION

Africa's biodiversity is of global importance. The continent represents 20.2% of the Earth's surface and is home to a quarter of the world's mammalian species, about a fifth of bird species and a sixth of plant species. The continent has 8 of the 36 biodiversity hotspots identified worldwide. They are the richest and most biologically threatened places on the planet, home to many endemic species (found nowhere else in the world). Thus, there is a need to ensure sustainability of this rich biodiversity in Africa, as it has a positive impact on agricultural activities towards food security and sovereignty of the continent.

Africa's natural wealth, combined with her indigenous and local knowledge is the central element of sustainable development and a strategic asset for achieving sustainable development. It is a fact that richness of biological diversity and ecosystem diversity generate flows of essential goods and services to meet the needs for food, water, energy, health and stable livelihoods. This is the situation in Africa with little information on its biodiversity (AdeOluwa, 2013). These tangible and intangible assets represent a strategic asset for the continent's sustainability. Thus, conservation of African biodiversity and ecosystems through environment-friendly agricultural practices improves adaptive capacity, enhances resilience and reduces vulnerability to climate change. This can greatly contribute to the sustainable development that is essential to preserve the future of the African continent.

After more than four years of negotiations, repeated delays due to the Covid-19 pandemic and talks, nearly 200 countries signed an agreement at the UN Biodiversity Conference (COP15) that took place recently in 2022, co-hosted by Canada and China, to put humanity on a path to living in harmony with nature by the middle of the century. In an extraordinary plenary that began on Sunday evening and lasted for more than seven hours, countries wrangled over the final agreement. Although the deal of COP 15 was struck, some African countries opined that the deal left out some important components that can ensure protection of Africa's biodiversity. Amid plummeting insect numbers, acidifying oceans filled with plastic waste, and the rampant overconsumption of the planet's resources as humanity's population grows wealthier and soars past 8 billion, the agreement, if implemented, could signal major changes to farming, business supply chains and the role of Indigenous communities in conservation. Thus, there is a need for more enlightenment in Africa regarding the pros and cons of biodiversity conservation in the continent and possible effects on the food system and livelihoods of citizens of the continent.

Agroecological and conventional agricultural practices are part of agricultural practices of farmers in Africa. These practices have their impacts (positive and negative) on biodiversity of farm lands and implications thereof. Comparative assessment of the agroecological and conventional agricultural systems of farming on biodiversity in Africa is very necessary to provide more empirical data for policy makers. Such data could help Africa substantiate her stand in the COP15 deal.

2. BRIEF BACKGROUND ABOUT NOARA

The Network of Organic Agriculture Researchers in Africa (NOARA) is established to unite and coordinate scientific and technical activities of researchers in the field of organic and ecological agriculture focusing on Africa. It was established by African organic research stakeholders in 2012, during the 2nd African Organic Conference at Lusaka, Zambia and later re-organized by the African Organic Network (AfrONet) in 2019. NOARA is a membership not-for-profit Network that draws members from stakeholders within and outside Africa, focusing on addressing food security and improvement in livelihoods of Africa through cutting-edge research outputs in organic and ecological agriculture. Its leadership structure consists of a Board of Trustees and Governing Council with members from different regions of Africa and has over 400 members across 28 countries within and outside Africa. Its Continental Secretariat is domiciled at the Department of Soil Resources Management, University of Ibadan, Ibadan, Nigeria. The Network is mostly funded with membership dues and grants.

For further details about NOARA, please visit www.noara.bio

A. NOARA Vision

Africa with zero hunger, poverty eradicated, improved livelihoods and sustained ecosystem through innovative organic and ecological agriculture research.

B. NOARA Mission

To generate and disseminate sound evidence-based scientific organic agricultural knowledge that can ensure healthy, ecological, fairness and care of organic agriculture actors in Africa for sustainable livelihood and ecosystem, leading to food security, incomes and sustainable development.

C. Thematic areas of NOARA

Thematic area 1: Research and Training

- i. Lead research agendas on organic and ecological agriculture in Africa
- ii. Coordinate organic and ecological agriculture training and research in Africa
- iii. Support or initiate research activities that will contribute to the social, cultural and economic productivity of Africa's smallholder farmers, processors and marketers, particularly, women and youths who have been largely marginalized
- iv. Demonstrate success stories useful for up scaling organic and ecological agricultural practices

Thematic area 2: Policy and Stakeholders' Engagements

- i. Promote collaboration among organic and ecological agriculture researchers, practitioners, farmers and policy makers in Africa
- ii. Foster improved ecological organic agriculture database, to influence policy development in Africa

- iii. Advocate for the mainstreaming of organic and ecological agriculture into agricultural research and innovation to enhance food security in Africa
- iv. Engage organisations producing organic and ecological inputs in confirmatory and adaptive research for possible recommendation of their products to end users in Africa and beyond

Thematic area 3: Conferences and Information Dissemination

- i. Organize conferences and meetings for the exchange of information on organic and ecological agriculture
- ii. Publish research and technical results on organic and ecological agriculture
- iii. Organise consortia of experts to address specific or emerging issues relating to organic and ecological agriculture in Africa

Thematic area 4: Networking, Advocacy and Awards

- i. Enhance partnerships for organic and ecological agriculture research in Africa and beyond
- ii. Map out like-minded organisations
- iii. Honour distinguished members as fellows of the network
- iv. Represent the interest of organic and ecological agriculture researchers within and beyond Africa

3. OBJECTIVES OF THE STUDY

The objective of this study is to comparatively evaluate the impact of the agroecological and conventional practices on biodiversity in farmlands in Eastern and West Africa.

Specific Objectives

- I. Compare the influence of agroecological and conventional farming on flora and microbial biodiversity
- II. Evaluate the potential of agroecological contribution to biodiversity conservation and possible effects on the food system and livelihoods of specific farmer groups
- III. Develop actionable recommendations for policymakers, farmer organizations, and other stakeholders to support the effective implementation and scaling of agroecological practices. This should include suggestions for policy adjustments, capacity-building, and support mechanisms
- IV. Highlight successful models and practices of agroecological farming that can be replicated or adapted to different contexts within Africa
- V. Present the results from the study in a regional workshop

2. METHODOLOGY

The approach by the Network of Organic Agriculture Researchers in Africa (NOARA) in addressing this study is to evaluate conventional and organic agricultural lands in at least two

countries each of Eastern and West Africa, targeting four countries in total with two consortia per region. NOARA is calling for appropriate researchers in the regions to submit proposals that must reflect:

- I. Evidence of up-to-date financial members of NOARA by at least the consortia lead persons
- II. Evidence of capacity to handle the project with access to appropriate equipment and past published articles
- III. Each consortium consists of a team of researchers, lead persons of farmer groups (agroecological and conventional) and a high-level policymaker (preferably from the national agricultural research council)
- IV. Background information addressing the objectives of the study
 - V. A proper understanding of agroecological and conventional farming
- VI. Methodology to map both the flora and microbial biodiversity in proposed study sites and statistical analysis
- VII. Study sites (a minimum of two agroecological and conventional farms)
- VIII. Activities based on maximum budget of USD4,250 per research-consortium/country
- IX. Timeline for implementation of the research and submission of report (max of 6 months)

3. FURTHER REQUIREMENTS

3.1 The independent consultant-researcher lead persons should have the following minimum qualifications to spearhead this assignment:

- I. Must be an African citizen residing in Africa in the region of focus (Eastern or West Africa)
- II. Must have at least a Master's Degree academic background relating to agriculture or environmental science
- III. Evidence of practical experiences (at least 5 years) in carrying out similar assignments for farmer organizations is a plus
- IV. Strong analytical, facilitation and communication skills
 - V. Provide evidence of understanding of critical issues and challenges in agroecology, the African agriculture sector and agricultural policies in particular
- VI. Excellent writing and presentation skills
- VII. Ability to work efficiently and deliver on committed outputs under the assignment within the agreed timeline and budget

3.2 Duties

The expertise is under the direct supervision of the Continental Coordinator of NOARA. The expected duties and responsibilities, among others, will comprise:

- I. Conduct research
- II. Collaborate with the farmer-groups to collect data
- III. Consolidate and synthesize research findings
- IV. Develop a study report and data visualizations for NOARA
- V. Develop a common position paper from the study outcomes

- VI. Proactively identify and propose alternatives to improve the performance and accuracy of the data

4. PAYMENT SCHEDULE

Activities based on maximum budget of USD4,250 per research-consortium/country.

Submission of a detailed proposal for implementation of the research	1 month	50%
Conduct the research	3 months	0%
Present the study's main findings and facilitate the workshop to present the outcomes of the research	1 month	0%
Submit the final report and synthesis which will be validated by the NOARA.	1 month	50%

Note: The six months should be between 1 December 2024 – 31 May 2025. Details about the assignment's terms and conditions will be incorporated in the contract award given to the best applicants.

5. APPLICATIONS PROCESS

Submission deadline: 19 October 2024.

Successful applicants shall be communicated on or before 8 November 2024.

Submission: Submission is strictly online via <https://forms.gle/CrDXRPGDVTDHUxzL6>

Documents to be submitted as attachments should be only PDF documents:

- I. A cover letter
- II. A technical proposal stating the research methodology
- III. Resume of consortium members in a single Word document
- IV. Professional references and list of publications by the applicants, as well as any other relevant supporting documents

6. EVALUATION, CONFIDENTIALITY AND COPYRIGHT

NOARA Team will conduct an internal evaluation of all applications. Only short-listed applicants will be communicated if necessary for additional documents. If necessary, an interview will be organized. The evaluation will be based on qualifications of applicants, experience in similar exercises and communication skills. NOARA shall ensure the confidentiality of submissions and owns the rights to all of the materials that will be produced under this research.

Continental Coordinator,

Network of Organic Agriculture Researchers in Africa (NOARA)

Website: www.noara.bio

Email: coordinator@noara.bio ; noaraafrica@gmail.com

Tel/WhatsApp: +2348035709365