



#### SUPPORT TO REGIONAL CENTRES OF EXCELLENCE (RCoE) RELATED TO GREEN TRANSITION

#### FARA/RUFORUM COMPONENT ON AGROECOLOGY

Working Session at Desira R&I Conference

Date: 13<sup>th</sup> March 2025

**Brussels-Belgium** 

Presented by: Kwaku Antwi

Support to Regional Centres of Excellence related to Green Transition - FARA/RUFORUM component on agroecology







Funded by the European Union





Information about the Support to Regional Centers of Excellence on Agroecology

- Consortium Partners 2 (FARA and RUFORUM) Coordination and Technical Functions
- Associated Partners EC-JRC (ISPRA) Technical support
- Funded By European Union through DG-INTPA.
- Project Duration 36 Months (Jan 2024 Dec. 2026).







the European Unio



BJECTIVE

## **Project Objectives**



**Overall Objective (Impact)** 

To contribute to Sub Saharan Africa green transition through enhanced Science Technology and Innovation (STI) capacities and policy support for agroecology.

**RCoE Contribution to Continental and Global Goals** 









the European Unior





#### **Specific Objectives (4 main Outcomes)**



- To support the generation and dissemination of transformative quality research and scientific knowledge in agroecology.
- To support the use of digital technologies and information systems (earth observation technologies) to support agroecology practices in Africa.
- To support the formulation and implementation of evidence-based inclusive agroecology policies in Africa.







# Project Implementation





FARA

#### Work Pages – 4 Work packages

- 1. Capacity building and skills development (RUFORUM/FARA)
- 2. Agroecology Scientific Knowledge/Information Generation and Dissemination (RUFORUM/FARA)
- **3.** Agroecology Policy and Advocacy support (FARA/RUFORUM).
- 4. Project coordination, management, Monitoring, Evaluation and Learning (FARA/RUFORUM)

Support to Regional Centres of Excellence related to Green Transition - FARA/RUFORUM component on agroecology









## **Observations from Inception Meetings**



- Desire for change towards regenerative approach to enhancing food systems.
- A lot of similarities exists in the actions of the 3 RMRNs – opportunity to build synergies.
- Similar stakeholders within consortium
- Similar actions
  - Capacity building (training for researchers and students).
  - Knowledge generation and dissemination
  - Platform for exchanges and experience sharing
  - Policy engagement and stakeholder engagements

Support to Regional Centres of Excellence related to Green Transition - FARA/RUFORUM component on agroecology







Funded by the European Unior



### Observations from Inception Meetings



- Some differences exist in activities.
- Curriculum development.
- Learning networks.



- Private Sector Engagement
- Champions for Advocacy
- Exchanges with other continental initiatives and Networks

Support to Regional Centres of Excellence related to Green Transition - FARA/RUFORUM component on agroecology







the European Union



#### **Continental Project Focus**



• Support RMRNs to research and generation of transformative knowledge products on Agroecology.



- Disseminate high impact knowledge products on agroecology.
- Organise continental short-term exchange visits for the 3 RMRNs.
- Organise continental Policy Dialogues
- Train Researchers and Scientists on economic models for policy analysis to support Agroecology.









#### **Continental Project Focus**



- develop decision-support information systems (serving science-policy interfaces at sector level.
- Support identification and engagement of Agroecology Champions to advocate for AE.
- Support private sector engagement
- Awareness creation to support practitioners, scientists, policy .
- Organise continental Policy Dialogues







the European Unior



Xamman O aman

### Year 1 Activities



RUFORUM Working Document Series (ISSN 1607-9345), 2024 No. 23:165-195 Available from http://repository.ruforum.org

Research Application Summary

#### How can agroecology contribute to improving food security in Africa?

<sup>1</sup>Kwaku, A., <sup>2</sup>Majaliwa, J.G.M., <sup>3</sup>Callenius, C., <sup>3</sup>Rembold, F., <sup>3</sup>Nakayiwa, F.M., <sup>3</sup>Paracchini, M.L., <sup>1</sup>Ama, P., <sup>1</sup>Vesta, N., <sup>2</sup>Artur, F. & <sup>2</sup>Yamungu, A. B.

<sup>1</sup>Forum for Agriculture Research in Africa, Acera, Ghana <sup>1</sup>Regional Universities Forum for Capacity Building in Agriculture, Kampala, Uganda <sup>1</sup>Joint Research Center, Brussels, Belgium \*Corresponding email: majalivam@gmail.com

#### Abstract

This discussion paper aims at exploring the potential of agroecology to improve food security, nutrition and the overall wellbeing in Africa in the face of the challenges posed by the growing population, climate change, rising cost of living, sociocultural and environmental pressure on the continent. Based on the FAO High Level Panel of Experts (HLPE) definition and the principles of agroecology, by using desk reviews and webinar series as the main methodology. The paper summarizes evidence-based benefits and challenges for the adoption of agroecological practices and explores open research questions on agroecology. The paper contributes to the support of FARA and RUFORUM to the Regional Multi-actor Research Networks (RMRN) in agroecology that will promote food and nutrition security and sustainable agriculture across Africa.

ar la potential de l'agrada la gia deux l'améliaration de la

Keywords: Agroecology, FARA, Food and nutrition security, JRC, RUFORUM

#### Résumé





Support to Regional Centres of Excellence related to Green Transition - FARA/RUFORUM component on agroecology







Funded by the European Union

#### Scientific evidence on Agroecology provided ISIN 1831-942 based on recent JRC work on Agroecology



New study (forthcoming) climate

change mitigation and adaptation potential of agroecology



Link to the

studies

#### Use of Earth Observation related to agroecology

Testing of crop diversity indexes from EO crop type mapping (e.g.Copernicus4GEOGLAM)

 Automatic mapping of shade trees in cocoa plantations for the characterization of different agroforestry systems

Support to FAO TAPE (Tool for Agroecology Performance Evaluation)

- Tree counting in farmland areas as a proxy for agroecological practices (based on Brandt et al.)
- Environmental characterization of agricultural area (TAPE Step-0) with the JRC-ASAP system
- Guide for retrieving indicators for TAPE assessment using EO data and tools



From: Brandt et al., 2024. Severe decline in large farmland trees in India over the past decade. Nature sustainability





#### Outlook 2025

- Participation to Desira Lift conference in March and organization of a joint side event with FARA, RUFORUM and RMRNs
- Invitation of RMRN experts to COPERNICUS global networking event in Krakow in May for introducing them to the data and services available under the COPERNICUS programme
- New meta-analysis on the various impacts of Agroecology which includes extraction of quantitative information from literature studies (previous reviews were qualitative only)
- Capacity building Workshops (economy-wide and farm level) on JRC modelling tools in cooperation with FARA, RUFORUM and PANAP network.
- Launch of the project: "Modelling pathways for a sustainable transition of food systems in Africa", with a focus on 3 African countries - 1st phase is the definition of scenarios and stakeholder workshops
- Literature review study on the environmental and economic impacts of agroforestry (with focus on coffee and cocoa)



#### Contact: Kwaku Dei Antwi – kantwi@faraafrica.org

## <u>Visit us: www.faraafrica.org</u> www.ruforum.org

Join the discussions:

https://faraafrica.community/fara-net/agroecology

### **#RMRN\_Agroecology**

Support to Regional Centres of Excellence related to Green Transition - FARA/RUFORUM component on agroecology







Funded by the European Union