

2nd Biennial Africa Climate-Smart Agriculture Stakeholder Conference

Thematic Paper Presentation on *Compatibility assessment of agroecology and CSA practices,*

14th September 2022 (11h30-13h30 and 14h30-15h30 GMT)

Alisa Hotel, 21 Dr. Issert Rd, North Ridge, Accra (Ghana)

Venue: Botsio Hall and online

Registration: <https://tinyurl.com/2p8j43zc>

The 2022 edition of the Biennial Africa Climate Smart Agriculture Conference will be held from 14th to 16th September 2022 in Accra, Ghana and online. The Conference will provide opportunities to discuss Climate-Smart Agriculture (CSA) accountability, resource use and impact in Africa amongst a wide audience. The main themes of the conference include: (i) the role of digitalisation in advancing CSA in smallholder systems; (ii) the nexus of CSA and the mechanisation of smallholder systems in Africa; (iii) bottom-up and system-wide capacity development approaches to enhance CSA practices; (iv) strengthening the support of extension and advisory services to ensure CSA compliance amongst smallholder farmers in Africa; (v) the contribution of agroecology to CSA.

Context:

- Today's agriculture has succeeded in supplying large volumes of foods to global markets but is generating negative outcomes on multiple fronts: widespread degradation of land, water, and ecosystems; high greenhouse gas (GHG) emissions; biodiversity losses; persistent hunger and micro-nutrient deficiencies alongside the rapid rise of obesity and diet related diseases. The COVID-19 pandemic and current food crisis confirm the importance to foster transition to resilient and diversified sustainable agri-food systems.
- In this context, a growing number of voices are calling for a complete transformation of our agricultural and food systems and are pointing to a transition to agroecology as a key pathway to tackle the challenges we are currently facing.
- As a science, agroecology is multidisciplinary. It brings together agronomy, ecology, environmental science, sociology, economics, history and more, while prioritising participatory and holistic approaches. An agroecological approach¹ to sustainable food production is defined as one that favours the use of natural processes, limits the use of external inputs, and promotes closed cycles with minimal negative externalities.

¹ Agroecological practices involve processes such as: nutrient cycling; biological nitrogen fixation; improvement of soil structure and health; water conservation; biodiversity conservation and habitat management techniques for crop-associated biodiversity; carbon sequestration; biological pest control and natural regulation of diseases; diversification, mixed cultivation, intercropping, cultivar mixtures; and waste management, reuse and recycling as inputs to the production process, for example use of manure and compost.

- FAO has identified ten interlinked and interdependent elements of agroecology² that include diversification; co-creation and sharing of knowledge; building synergies supporting multiple ecosystem services; efficiency; recycling; resilience of communities and ecosystems; protecting human and social values; supporting culture and food traditions; responsible governance and circular and solidarity economy.
- The diversity in agroecological systems reduces vulnerabilities to climate variability. The reduction in the use of pesticides and synthetic fertilisers improve resilience to the climate change effects. Traditional knowledge of smallholders combined with scientific knowledge are effective in managing climate risks. Recycling, reduction of waste and use efficiency limits GHG and supports mitigation.
- Some challenges for the agroecological transition are holding back a wide-scale transition to agroecology (i.e. lack of enabling environment; insufficient incentives for producers; low support for innovative research and knowledge approaches, low promotion of local diversified agroecological markets; lack of coordinated action among sectors and actors).

Objectives of the sessions:

- **To discuss agroecological approaches and practices which contribute to climate resilience and concrete ways in which agroecology can support adaptation and mitigation strategies**
- To make recommendations to mainstream agroecological principles into the Climate Change and Climate-Smart Agriculture debate and call for investments.

DeSIRA-LIFT supports FARA and its members in two main areas:

1. **Organising two complementary sessions: (i) a Thematic Paper Presentation on “Compatibility assessment of agroecology and CSA practices”, and (ii) a Side event on “The contribution of agroecology to climate change adaptation and mitigation” showcasing successes from smallholders, private sector operators and CSOs in the field** to showcase some sustainable innovations and solutions adopted in Africa.
2. **Supporting: (i) a review of ten years of African involvement and action in COPs (between CoP 17 and CoP 27) detailing lessons learned and plausible future actions and efforts to achieve the foreseen actions in relation to African agriculture; (ii) the development of a Decadal Plan to implement the African Climate Change Strategy on agriculture.** Both reports will be presented at the Biennial CSA Conference. Main preliminary findings will be presented at the Conference.

More information on the content of both sessions: Isolina Boto, DeSIRA-LIFT (isolina.boto@coleacp.org)

² FAO. [The 10 elements of Agroecology guiding the transition to sustainable food and agricultural systems](#). 2018.

Thematic Paper Presentation

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Moderation: Cliff Dlamini, Executive Secretary, CCARDESA, Gaborone, Botswana

Overview

- A literature review on agroecology, Maria Luisa Paracchini, JRC, Italy
- Agroecological transformation in support of climate change adaptation and mitigation in Africa, Pablo Tittone, CONICET/University of Groningen
- The contribution of agroecology to CSA, Suwlanji Sinyangwe, FANRPAN, South Africa
- Ecological Organic Agriculture: A mitigating alternative for climate change, Oluyinka Adewoyin, Department of Crop Science and Horticulture, Federal University, Oye, Nigeria

Q&A session

Panel: Analysis of framework CSA/Agroecology

- Smallholder Farmers and The Need for Climate-Smart Agriculture in Nigeria, Adebola Adedugbe, Farmideas, Nigeria
- Agronomy-driven climate-smart agriculture: Agronomy and climate adaptation and mitigation, Bernard Vanlauwe, R4D Director at the International Institute of Tropical Agriculture (IITA), Kenya
- Climate-Smart Agricultural Practices for the sustainable food system in Nigeria: An Agroecology-specific Analysis, Iredele Ogunbayo, Innovation Lab for Policy Leadership in Agriculture and Food Security (PiLAF), Nigeria
- Examining the strengths, weaknesses, opportunities and treats of agroecology in ensuring food security and environmental sustainability, Never Mujere, Department of Geography Geospatial Sciences and Earth Observation, University of Zimbabwe, Zimbabwe
- Biodiversity Conservation of Neglected and Underutilized Nigerian Horticultural Crops, Funmilayo Mary Oloyede, Department of Crop Production and Protection, Obafemi Awolowo University, Ile-Ife, Nigeria

Q&A session

Panel: Agronomic performances CSA/Agroecology/conventional practices

- Agronomic Evaluation of Soybeans (Glycine Max (L.) Merrill) Under Crop Rotation System in The Forest-Savanna Transitory Location in The Humid Tropics, Victor

Olwe, Institute of Food Security, Environmental Resources and Agricultural Research (IFSERAR), Nigeria

- Agroecological Cropping Systems Management: Impact of Conservation Agriculture in Maize-Based Cropping Systems, Anthony Imodu Oyeogbe, University of Ibadan, Nigeria
- Agroecological Differentials in Crop Production: Evidence from Smallholder Rice Producers in Nigeria, Tenitayo Adeyemo, Nigerian Institute of Social and Economic Research, Nigeria

Q&A session

Panel: Nature based solutions/Agroecology

- Analysis of Agroforestry Practices Among Small-Scale Farmers in Southern Guinea Savannah Zone of Nigeria, Adeola Oloyede, Dept of Agricultural Economics, University of Ilorin, Nigeria
- Mangrove Forest Restoration Nature-Based Solution to Climate Change: An Agroecological Contribution to Climate Sensitive Agriculture in Coastal Communities, Ogunnaike Gbemisola, Dept of Agricultural Economics and Farm Management, Olabisi Onabanjo University, Nigeria
- Assessment of stakeholders' satisfaction for Sustainable ecological agricultural practices that promote climate-smart agriculture in Nigeria, Taofeeq Yekinni, Agricultural Extension and Rural Development, University of Ibadan, Nigeria
- Enhancing agroecology as an effective Climate Smart Agriculture approach to reduce wildfires vulnerability in the savannah ecological zone of Ghana, Aline Mwintome Naawa, WASCAL Doctoral Program, Université de Lomé, Togo

Q&A session

Conclusion and recommendations

For more information, please contact Isolina Boto, DeSIRA-LIFT (isolina.boto@coleacp.org)