POST-EVENT REPORT

# The role of agroecology and regenerative agriculture in farming and food systems in Africa

DeSIRA LIFT

*Africa Fertilizer and Soil Health Summit (AFSH) in Nairobi, Kenya, and online, 7 May 2024*

The Africa Fertilizer and Soil Health Summit (AFSHS) was organised by the African Union and held from the 7th to the 9th of May 2024 in Nairobi, Kenya, and online. It brought together all relevant stakeholders to highlight the crucial role of fertiliser and soil health in stimulating sustainable pro-poor productivity growth in African agriculture. Building on the discussions held during the summit, African Heads of State and Government endorsed the African Fertilizer and Soil Health (AFSH) Action Plan and the Soils Initiative for Africa (SIA) that had been developed by the Africa Union Commission and consolidated in the Nairobi Declaration. The declaration endorsed the Fertilizer and Soil Health Action Plan and the Soil Initiative for Africa Framework as key guiding documents to harness multi-stakeholder partnerships and investments to drive policies, finance, research and development, markets, and capacity building for fertilizer and sustainable soil health management in Africa.

The overall objective of the session is to bolster agricultural sustainability and enhance smallholder farmer livelihoods by improving access and affordability of certified quality organic and inorganic fertilisers across the continent.

CAADP XP4 PROGRAMME

FARA Forum for Agricultural Research in Africa

Funded by the European Union

A side event was convened by DeSIRA LIFT and the International Fund for Agricultural Development (IFAD) –with the CAADP XP4 organisations to discuss the role of agroecology and regenerative agriculture in farming and food systems in Africa. Stakeholders with different backgrounds including experts from research and policy, farmers, micro, small and medium sized enterprises (MSMEs) and civil society organisations (CSOs) shared their views and experiences on the relationship between soil health, productivity and inclusive, sustainable farming and food systems in Africa. They discussed how research and innovation (R&I) can support soil health in Africa with a holistic approach and a better management of the nutrients cycle and actions needed to achieve productive, inclusive, and sustainable agri-food systems at scale. They further formulated recommendations for R&I involving a range of actors to support the AFSH Action Plan and the Soil Initiative for Africa (SIA).

## Main messages and recommendations

- Ecological sustainable intensification (defined as "the enhancement of ecosystem services to complement or substitute for the role of anthropogenic inputs in maintaining or increasing yields" by MacLaren, C et al. (2022)) can contribute to a whole farming and food system transformation and requires shifts in the farming practices and to use more sustainable technologies.
- There is growing evidence from literature that ecological intensification is a pathway to sustainable agriculture. The evidence generated demonstrated the importance of different options for different contexts.
- Ecological intensification is a knowledge-intensive approach that requires extensive data and analysis to determine successful practices for specific conditions taking into account the heterogeneity of farms and farming contexts in Africa. Focus should not be on the differences from the diverse experiments but rather on inviting stakeholders to identify conditions under which the different options work well.
- Ecological intensification requires different extension approaches to accommodate the knowledge-intensive nature of this pathway and to support local innovations.
- Participatory approaches involving farmers foster knowledge co-creation and sharing, and can help identifying jointly with farmers successful practices that work for their contexts.

## Background

The Africa Fertilizer and Soil Health Summit (AFSHS) was organised by the African Union and resulted in African Heads of State and Government endorsing the African Fertilizer and Soil Health (AFSH) Action Plan and the Soils Initiative for Africa (SIA) that have been consolidated in the Nairobi Declaration. DeSIRA-LIFT co-organised a side event and a parallel session with IFAD and respectively the CAADP XP4 organisations and the European Commission to highlight how agroecology and regenerative agricultural practices, including organic and biofertilisers, contribute to productive, inclusive, sustainable farming systems in Africa:

- Side event on Integrated soil health management for productive, inclusive, sustainable farming and food systems in Africa: Exploring the role of agroecology and regenerative agriculture (7 May 2024)
- Parallel session on Emerging opportunities with organic and bio-organic fertilizers for soil health in Africa (8 May 2024)

The next pages provide a summary of the keynote presentation and of the discussion on Integrated soil health management for productive, inclusive, sustainable farming and food systems in Africa.

Download the event's concept note and programme:
43

## Summary of the keynote presentation

**Perspectives on the role and contribution of research, capacity strengthening, policy and investments to the sustainable soil management and soil health debate and interventions**

**Mr. Fergus Sinclair**

Director of Agroecology at the Center for International Forestry Research and World Agroforestry (CIFOR-ICRAF) and Co-Convenor of the Transformative Partnership Platform on Agroecology

**Download Presentation**

Fergus Sinclair set the scene by discussing how research, capacity strengthening, policy and investments can contribute to the sustainable soil management and soil health debate and interventions.
Sinclair called for a sustainable ecological intensification of agriculture that requires a food systems transformation and changing farming practices. By shifting from an input-oriented (current state of play) to a holistic process-oriented soil management, ecological intensification reduces the dependency on external inputs. Scientific literature recently reported a positive correlation between crop diversity and productivity and the potential to substitute industrial nitrogen through production of legumes (by **MacLaren, C et al. (2022)**). Reducing the dependency on production and distribution of conventional fertilizers will empower farmers through increased input autonomy and reduced risk to global price shocks of agricultural inputs. Input reduction is one of the 13 HLPE (HLPE, 2019) principles of agroecology to favourise the ecological over industrial processes that are environmentally disruptive. Sinclair recalled, for example, that industrial nitrogen is a large emitter of greenhouse gases.
Sinclair highlighted the need to contextualize the transition towards ecological intensification to ensure that the farming practices suit the context of their applications. Extension approaches have to accommodate to the knowledge-intensive nature of ecological intensification and have to support local innovations, working jointly with farmers to assess what options work for their contexts.

## II Summary of the panel discussion

Agroecology includes principles of policy and governance to ensure that farmers' agroecological and regenerative agricultural practices are supported by an enabling environment. The panel discussion was comprised of a wide range of actors who reflected on how agroecology can contribute to improved soil health, productivity and inclusive, sustainable farming in Africa.

**Fergus Sinclair**
Director of Agroecology at the Center for International Forestry Research and World Agroforestry (CIFOR-ICRAF) and Co-Convenor of the Transformative Partnership Platform on Agroecology

Sinclair recalled the urgency to implement agroecological and regenerative agriculture practices in Africa to address the increasing demand for food and the pressing global challenges linked to climate change.
Sinclair also stressed the importance of policy and governance supporting the change towards a sustainable agriculture and soil health regenerative practices such as agroecology.

Sinclair acknowledged the need for an enabling environment for SMEs involved in production of organic and biofertilisers. Policies are instrumental and can support, or even drive, the transition towards using non-chemical fertilisers and other agricultural inputs. Subsidies, tax incentives, as well as standardisation and quality assurance are some examples of the supporting policies options. Sinclair also emphasized the need to repurpose fertiliser subsidy programmes and to integrate organic and biofertilisers and as a means of supporting farmers to use them.

**James Wangu**
Food Systems Transformation Associate at the World Resources Institute (WRI)

Drawing from the experience of the Restore Local initiative which provides local restoration champions across the continent, Wangu highlighted the need for increased support to farmers and small and medium-sized enterprises (SMEs) that produce organic biological inputs. The Restore Local Initiative supports local population to restore Africa's landscapes by (i) building their capacity in community mobilisation, agriculture, forestry and business; (ii) directly providing funds; and (iii) creating national restoration plans.

**Rosinah Mbenya**
Country coordinator, PELUM Kenya

Mbenya stressed the need to recognise the role of smallholder farmers, including in research, and to create an enabling environment that supports their capacity building. Implementing agroecological and regenerative agriculture practices increases the farmers' self-sustenance and independence on input sourcing. Improving soil health has the potential to transform communities by improving their yields, incomes and ultimately transforming livelihoods. Adopting agroecological and regenerative agriculture practices is also an opportunity to empower women and transform societies.

Mbenya further explained that financial inclusion has been recognised as a driver for uptake of agroecological and regenerative agricultural practices among smallholder farmers. Efforts should be made to bridge this financial gap for (smallholder) farmers to adopt and implement agroecological and regenerative agricultural practices.

**Talash Huijbers**
CEO of Insecti Pro, Kenya

Insecti Pro is an insect farm based in Kenya that uses Black Soldier Fly which feeds on waste and transforms it into high-value protein for animal feed while the waste is used as organic fertilizer. As a private sector operator, Huijbers highlighted the critical role that SMEs play in transitioning towards sustainable farming and food systems as they are close to smallholder farmers. She also called for more improved means of collaboration between the private sector, research and policy makers to ensure an enabling environment for SMEs involved in sustainable agriculture.

**Kishero Oliver**
Coffee farmer and Vice Chairperson, Gumutindo Coffee Cooperative, Uganda

Oliver shared her experience as smallholder farmer and emphasised the importance of participatory research projects to ensure the relevance of research to the end users. She also raised the need to strengthen the smallholder farmers' capacity by translating scientific knowledge into user-friendly language that can be understood and acted upon. Oliver grows coffee with bananas and livestock, and has worked with ASARECA and the National Agricultural Research Organisation (NARO) to improve her intercropping practices. She also uses her garden as a farming school, focusing on engaging women and the youth.

## III Main takeaways and conclusion

**Christophe Larose**
Head of Sector Sustainable agriculture, Directorate-General for International Partnerships (DG INTPA) at the European Commission

Larose recalled the importance of context-specific approaches to holistically address the soil health challenges faced by the different stakeholders on the continent. Young people are key players of the transformative agenda, bringing new ideas and questioning the conventional research approaches. Including (smallholder) farmers in research – as promoted by various programmes funded by the European Union – is also needed to ensure that research addresses the needs of all stakeholders. Embracing a holistic transformation towards sustainable agriculture and food systems requires a combination of different approaches to increase their benefits. This includes research on how to use differently agricultural inputs, such as the combination of organic and biofertilisers with conventional ones.

**The DeSIRA Initiative** (Development Smart Innovation through Research in Agriculture), funded by the European Commission, Directorate General for International Partnerships (DG INTPA), seeks to enhance an inclusive, sustainable and climate-relevant transformation of rural areas and of agri-food systems, by linking better agricultural innovation with research for more developmental impact. It supports actions in low- and middle-income countries (LMICs) to strengthen the resilience of their agri-food systems, the relevance of the national and regional research and innovation systems, and the coherence and efficiency of their agricultural public research and extension services related to climate change challenges.

**DeSIRA-LIFT** (Leveraging the DeSIRA Initiative for Agri-Food Systems Transformation) is a service project (June 2021 – May 2024) to the European Commission, DG INTPA, with the main objective to enhance the impact of the DeSIRA Initiative by providing (on-demand) services to DeSIRA project holders and partners. DeSIRA-LIFT includes three service areas aligned to the three DeSIRA Pillars: Service Area 1 supports country-led DeSIRA projects to enhance their impacts on climate-oriented innovation systems in line with more sustainable food system transitions. Service Area 2 supports the Comprehensive Africa Agriculture Development Programme (CAADP) ex-pillar IV organizations in their Agricultural Knowledge and Innovation Systems (AKIS) related roles. Service Area 3 provides support to policymakers on themes related to agricultural research for development (AR4D) and innovation policies and programming.

DeSIRA-LIFT is implemented by members of the Agrinatura and EFARD, in particular the members: Wageningen UR, CIRAD ISA (University of Lisbon), NRI (University of Greenwich), SLU and COLEAD.
Agrinatura (http://agrinatura-eu.eu) is the European Alliance on agricultural knowledge for development. The European Forum on Agricultural Research for Development (EFARD) (http://www.efard.org) is an umbrella network of European research and non-research stakeholders from public and private European organisations and the European Commission.

**Disclaimer** This publication has been realized within the DeSIRA-LIFT project financed by the European Commission/DG INTPA (FOOD/2021/424-11), and implemented by member organisations of the Agrinatura EFARD networks. The content of this publication is the sole responsibility of the author(s) and does not necessarily represent the views of Agrinatura, EFARD or the European Commission.

**Citation** DeSIRA-LIFT. 2024. Thematic Paper Presentation on the role of agroecology and regenerative agriculture in farming and food systems in Africa. Summary report of the Africa Fertilizer and Soil Health Summit (AFSH) in Nairobi, Kenya, and online, 7th of May 2024

**Cover photo: ©: Alliance of Bioversity International and CIAT /Neil Palmer**

Funded by the European Union

**Website:**
https://www.desiralift.org/

**LinkedIn**:
https://www.linkedin.com/company/desira-lift

**Email**:
info@desiralift.org

**Address**:
Wageningen Centre for Development Innovation
P.O. Box 88
6700 AB Wageningen
The Netherlands