

DeSIRA LIFT



*D. Mushumba, R. Guillonnet,
M. Roefs, P. Henriquez, A. Toillier*

**The future of R&I
as driver of
agrifood systems
transformation
and sustainability
transitions**

Perspectives from

East and Southern Africa

This brief presents the outcomes from the regional DeSIRA workshop in East and Southern Africa

The DeSIRA Perspectives Brief Series: a roadmap for research & innovation from stakeholder perspectives in Africa, Asia-Pacific, Latin America and the Caribbean

The DeSIRA Perspective Briefs present lessons learnt by the community of implementers of the European Commission-funded DeSIRA Initiative and their views on the future of research and innovation (R&I) as drivers of agrifood system transformation and sustainability transitions in their respective regions.

By distilling key lessons from DeSIRA's successes and challenges, these perspectives offer actionable insights into agricultural innovation systems (AIS) for innovation stakeholders, decision makers, policy actors and investors.

Each Perspective Brief focuses on a specific region where the DeSIRA Initiative was deployed (Africa, Asia-Pacific, Latin America and the Caribbean).

In order to capture the joint learning and pending challenges among the DeSIRA community, DeSIRA-LIFT organised a series of four regional conferences entitled the "DeSIRA Connect Days". These gatherings were designed to assess the progress of innovations within DeSIRA projects, foster collaboration among stakeholders, amplify the cross-project impacts within countries, and cultivate peer learning on open and responsible R&I for AIS transformation. Moreover, they serve to strategise the subsequent steps post-DeSIRA.

In a nutshell, they were designed to strengthen the Community of Action and Reflection among DeSIRA projects and their stakeholders. These events aimed to facilitate collaboration through regional field and in-person meetings with the following objectives:

- Facilitate discussions among projects aligned with the joint learning agenda, focusing on progress, challenges and developing recommendations to sustain momentum;
- Carry out meetings and roundtables with policy makers, stakeholders, private-sector representatives and regional organisations to promote innovation adoption and strengthen AIS;
- Promote discussions to develop exit strategies, handover processes and pathways for ensuring continuity.

These conferences served as a platform for sharing innovations, research contributions, experiences, good practices and lessons learnt from implementing DeSIRA projects, while fostering stronger engagement with policy makers, regional organisations and private-sector actors. Key themes included scaling agricultural innovation, farmer-led research and fostering enabling environments for innovation scaling. Regional agricultural innovation stakeholders were invited to attend and to identify priority actions and key messages for the region, to connect the DeSIRA community to broader initiatives or opportunities for putting at scale the outcomes of the DeSIRA projects.

The workshops facilitated discussions among research, extension and

education actors, farmer organisations, advisory service providers, civil society, international organisations, funders and policy actors to evaluate efforts and identify challenges.

The regional workshops took place in Bogotá, Colombia (25-27 June 2024); Kigali, Rwanda (29-31 July 2024); Accra, Ghana (24-26 September 2024); and Hanoi, Vietnam (14-16 January 2025). The three-day events included keynote presentations, two workshops and six thematic panel discussions focusing on three main themes:

- New paradigms in research for innovation – Enhancing the impact of research through participatory and system-based approaches.
- Farmer-led innovations and research – Strengthening farmer organisations as key actors in scaling agroecology and sustainable agriculture.
- Creating a conducive environment for scaling – Addressing food system governance, policies, education and financing to foster sustainability.

These themes structured the workshop discussions and informed the synthesis of insights and recommendations in the Perspective Briefs series.

By engaging in these workshops, DeSIRA-LIFT contributed to building a collective understanding of what it takes to co-develop innovations for sustainability transitions through international R&I partnerships and public investments.

Table of contents

Key messages	3
DeSIRA in East and Southern Africa	4
1. Challenges of agrifood systems transformation in East and Southern Africa	4
2. Objectives and challenges of the DeSIRA projects	5
3. DeSIRA stakeholders at the regional workshop	8
Main lessons learned in the DeSIRA community	9
1. New paradigms in research and innovation	9
1.1 Participatory approaches in agricultural research	9
1.2 The changing role of researchers as facilitators	11
1.3 Influencing policies	11
2. Capacity building in agricultural innovation systems	12
3. Shifting from value chains to value webs thinking and approaches	13
4. Measuring impact and ensuring sustainability	14
5. Strengthening grassroots innovation communities	14
5.1 Implementating a variety of multistakeholder partnerships	14
5.2 Integrating several knowledge types	15
6. Supporting sustainable intensification through agroecology	16
7. Women as key innovation actors in agribusiness	6
Recommendations on the way forward	18
1. Making international research work for responsible innovation and agroecology transitions	18
2. Better integration of farmer-led and community-led research & innovation	18
3. Better mobilization of regional organizations and alliances	18
Conclusion	19

Key messages

The Connect Days workshop emphasised the key contributions of DeSIRA projects to inclusive, sustainable and climate-resilient agricultural transformations through participatory action-research, capacity development for agricultural innovation systems (AIS) and improved data systems for decision making. Several key insights emerged as lessons for future action and broader impacts.

New Paradigms in Research for Innovation with an evolving role of researchers

A significant trend is the increasing involvement of farmers in research design and implementation, fostering co-creation of knowledge and valuing both scientific and local/indigenous knowledge. Researchers are increasingly taking on facilitation roles, guiding participatory processes and bridging research-policy-practice linkages.

Capacity building across levels of agricultural innovation systems

Strengthening capacities across various stakeholders, including farmers, researchers, policy makers, extension workers and private-sector actors, is crucial for scaling and sustaining innovations.

A shift towards understanding agricultural systems as complex “value webs” with interconnectedness, multiple value streams and diverse actors is emerging.

Measuring impact and ensuring sustainability for evidence-based decision making in agrifood systems

A comprehensive framework for measuring impact is needed, encompassing both quantitative and qualitative assessments, while ensuring sustainability through institutional embedding, policy influence, market-based approaches, community ownership and knowledge management.

Examples of DeSIRA project achievements

- Participatory research: projects like FO-RI and RAIZ actively involve farmers in research design and co-creation of knowledge.
- Capacity building: initiatives like TAP-AIS in Malawi and the African Forum for Agricultural Advisory Services (AFAAS) focus on building capacities of various stakeholders within the AIS.
- Multistakeholder partnerships (MSPs): projects like FO-RI, Climate-Smart Innovation Malawi, ESSA and ProSilience leverage MSPs to address complex agricultural challenges.

Regional organisations can play a key role in supporting the development of partnerships and facilitating connections within the AIS that will help reconfigure networks by strengthening participation of non-traditional actors.

DeSIRA in Eastern and Southern Africa

1. Challenges of agrifood systems transformation in East and Southern Africa

Challenges persist in addressing malnutrition and ensuring equitable access to healthy diets. According to the State of Food Security and Nutrition in the World 2024 report¹, despite hosting 16% of the global population, Africa accounts for approximately 20.4% of the world's population suffering from hunger compared with 8.1% in Asia, 6.2% in Latin America and the Caribbean, and 7.3% in Oceania. The prevalence of moderate or severe food insecurity in Africa (58.0%) is nearly double the global average. Millions of Africans suffer from widespread micronutrient deficiencies in addition to hunger, with overweight and obesity posing significant public health concerns in many countries. In 2021, approximately 78%, or about a billion individuals of Africa's population, could not afford a healthy diet, against a global rate of 42%. The average cost of a healthy diet in Africa has risen to USD 3.57 in purchasing power parity USD per person per day, significantly surpassing the extreme poverty threshold of USD 2.15 per person per day in 2021.

This situation has prompted many high-level discussions, such as the Science and Partnerships for Agriculture Conference², in which the following conclusions were highlighted.

Navigating the complexities of accessing climate financing poses a significant hurdle in transforming food systems. African nations encounter obstacles in accessing adequate climate finance. These challenges include the dominance of loans in public climate finance, complex processes for accessing funding from financial institutions and eligibility criteria limitations, especially for least-developed countries.

Resource mobilisation and low investment in transformative technologies continue to pose major challenges in the region. These challenges include low commodity investment and limited attention to promoting traditional crops. Many African countries experience significant post-harvest losses, particularly in perishable agricultural commodities. This is primarily attributed to inadequate infrastructure and limited access to affordable finance.

Challenges persist in the action-oriented implementation of food systems transformation across different government ministries, hindering the effective realisation of the Sustainable Development Goals. Countries have identified the need for skills building in negotiation, consensus building, integrated planning and coordination, and dialogue facilitation, including those involving public- and business-sector interests. The default situation is that ministries and departments tend to function in silos even when opportunities for communication and collaboration exist. The lack of communication can be observed at two levels: horizontally, across government entities, disciplines and sectors; as well as vertically, between central government and local/decentralised structures. This siloing leads to incoherency in national planning in areas of food security, water, energy, mining strategies and initiatives.

Geopolitical dynamics and governance structures heavily influence Africa's food systems. Such dynamics may include trade agreements, international aid and investment flows. Moreover, tensions and conflicts can hinder regional cooperation on food security initiatives, such as cross-border trade agreements and infrastructure development. Geopolitical factors can raise questions of national sovereignty, particularly regarding control over agricultural resources and food production.

Countries, local cooperatives and agricultural associations in Africa indicate challenges in resource mobilisation from both the public and private sectors, as well as in identifying and engaging with key players. Public finances for agriculture have been far below the Malabo target of allocating 10% of national budgets to agriculture.

There are several challenges concerning data and scientific capacity. There is a lack of reliable data and essential tools, such as early warning systems, which are crucial for informed decision making. Moreover, structural deficiencies and limitations exist in the connections between implementation efforts and research-science capabilities and systems.

1) FAO (2025), <https://openknowledge.fao.org/server/api/core/bitstreams/39dbc6d1-58eb-4aac-bd8a-47a8a2c07c67/content/cd1254en.html#gsc.tab=0>.

2) Science and Partnerships for Agriculture Conference (SPAC 2024), Kigali, Rwanda, <https://events.faraafrica.org/>.

2. Objectives and challenges of the DeSIRA projects

The East and Southern Africa cluster of DeSIRA consists of 28 projects and is highly diverse in terms of its themes, operational frameworks, landscapes, and social and organisational environments.

The projects' themes focus on strengthening agricultural systems, innovation support services for agricultural and rural transformation, supporting agroecology transitions, sustainable livestock and pastoralism, innovation at the water/energy/food/forest nexus and information systems. Additionally, they aim to improve nutrition and food security through innovative cropping systems, such as vegetables, legumes, roots and tubers, improving post-harvest technologies, and novel nutrition products are targeted by several projects. A transversal theme is capacity strengthening, with a focus on research organisations, but

also extending to the whole value chain depending on each project's focus.

There are 10 multi-country projects with some overlap with those of other clusters. Ethiopia has the highest number of projects in execution (12), followed by Kenya (7), Rwanda (5), Tanzania (5), Malawi (4), Uganda (3), Eritrea (2), Zambia (2), Egypt (1), Somalia (1) and Sudan (1). A wide range of organisations is implementing the 18 national country projects, some examples are: 3 in Ethiopia (UNICEF, AECID and Hanns R. Neumann Stiftung), 2 in Zimbabwe (CIRAD and ILRI), 2 in Eritrea (FAO and TEAGASC), 2 in Malawi (CIP and FAO), 2 in Uganda (ACTED and CIRAD), 2 in Rwanda (FAO), 1 in Kenya (Netherlands Ministry of Foreign Affairs/SNV), 1 in Tanzania (AgriCord) and 1 in Zambia (several Finnish institutes).

Table 1. DeSIRA projects in East and Southern Africa
National projects

Project acronym	Country/ies of implementation	Leader organization	Themes
Agroforestry - Rwanda	Rwanda	UICN	Agroforestry systems
CDI	Rwanda	FAO	Innovation, climate-smart agriculture, partnerships
Climate Smart Innovation	Malawi	CIP	Climate change adaptation, technological innovations, policy
CSARIDE	Eritrea	TEAGASC	Climate-smart agriculture, climate change, dairy sector
DARE	Ethiopia	UNICEF	Affordable and innovative food, nutrition, private-sector engagement
FO-RI 8	Tanzania	AgriCord	Sunflower, leguminous crops, gender
FO-RI 9	Tanzania	AgriCord	Agroforestry, agroecological transition
ICSI-APL	Kenya	Netherlands Ministry of Foreign Affairs/SNV	Integrated/climate-smart innovations, agro-pastoralist, landscapes
LIPS-Zim	Zimbabwe	ILRI	Climate-smart innovations, livestock, surveillance/control diseases
RAIZ	Zimbabwe	CIRAD	Agroecological intensification, climate change resilience
Robust Coffee	Uganda	CIRAD	Agroforestry, climate change adaptation/mitigation
SIRGE	Uganda	ACTED	Innovation, greenhouse gas emission reduction, pastoralist, livestock
TAP-AIS	Rwanda	FAO	Functional capacities for innovation
TAP-AIS	Eritrea	FAO	Functional capacities for innovation
TAP-AIS	Malawi	FAO	Functional capacities for innovation
Women Coffee Climate	Ethiopia	Spanish Cooperation Agency (AECID)	Women's empowerment, value chain development
Yayu Coffee Climate	Ethiopia	Hanns R. Neumann Stiftung (HRNS)	Forest conservation, agroecology, climate-smart agriculture, integrated landscape management
Z4ABC	Zambia	CIFOR	Agroforestry

Regional projects

Project acronym	Country/ies of implementation	Leader organization	Themes
ECOFODDSYSTEMS	Ethiopia, Tanzania	Ryan Institute, University of Galway, Ireland	Agroecological transition
ESSA	Ethiopia, Kenya	University of Helsinki	Observation/environmental sensing, agropastoral, climate-smart
GE4F	Malawi, Rwanda, Tanzania, Uganda, Zambia	GIZ	Climate-friendly, energy-efficient/water- efficient innovations
LEG4DEV	Ethiopia, Malawi, Tanzania	Ryan Institute, University of Galway, Ireland	Agroecological intensification, water/food/ energy nexus
LSC-IS	Ethiopia, Kenya, Rwanda	WUR	Soil and crop information services
ProSilience	Ethiopia, Kenya	GIZ	Enhancing soils, agroecology
Transitions P1	Ethiopia, Kenya	CGIAR	Holistic metrics, food and agricultural systems
Transitions P3	Ethiopia	CGIAR	Traceable private-public sector incentives, investments
WATDEV	Ethiopia, Kenya	AICS-Italy	Climate-smart water management
WE4F	Ethiopia, Kenya, Somalia, Sudan	GIZ	Water/energy, food systems

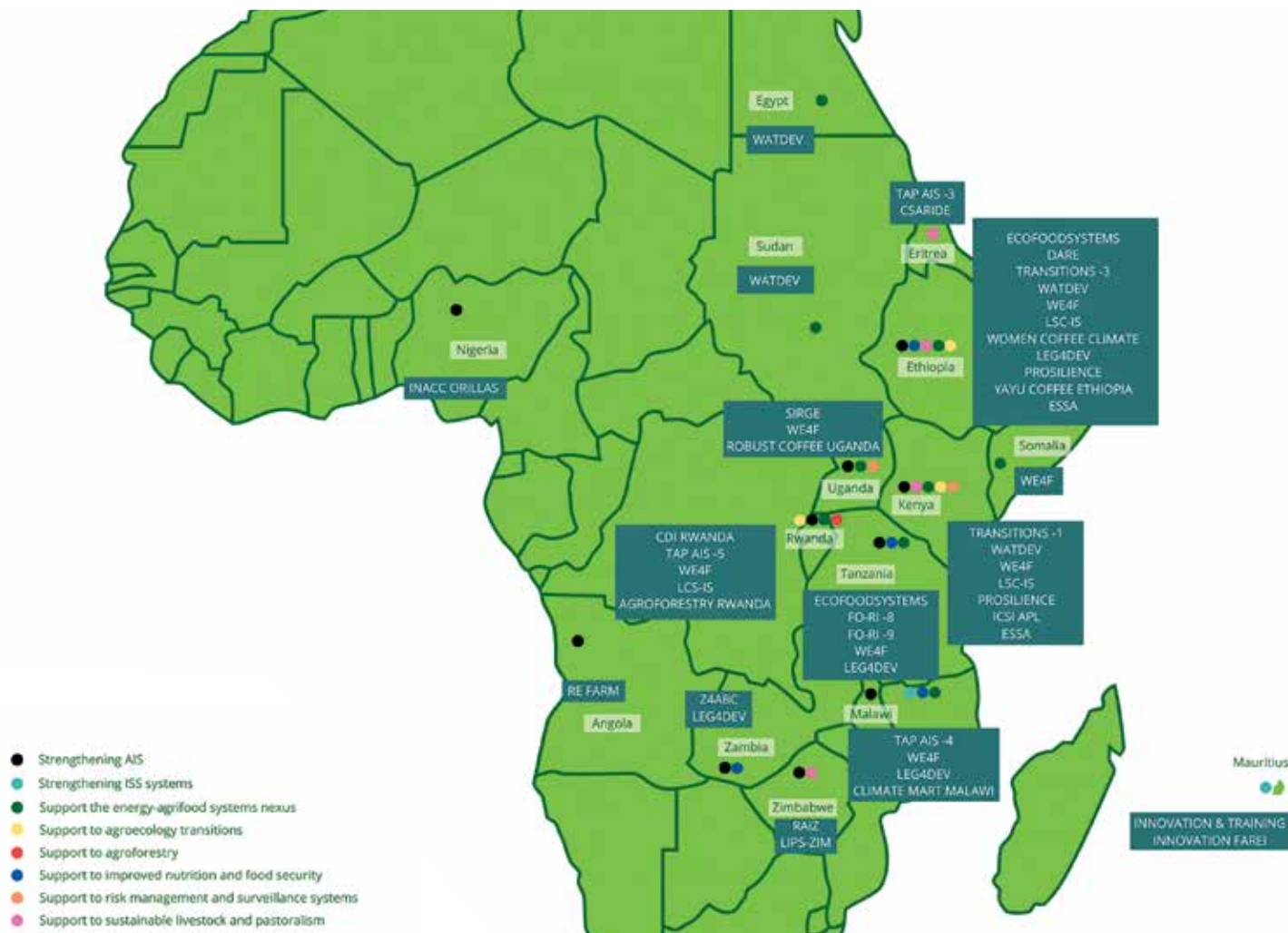
The projects' strategies include action-research and implementation of MSPs at the country and multi-country levels. Most projects aim to implement farmer field schools, training facilities, carry out experimental research in field trials to test, communicate and enable scale-up with a better appropriation of the innovation process and products. Some projects tackle the multifunctionality of agro-pastoralist landscapes, while others support carbon sequestration in forest or livestock sources of greenhouse gas emissions for climate change mitigation. Several projects support MSc and PhD programmes as a strategy for data collection and knowledge acquisition. Most projects had developed participatory approaches to create their theories of change. Some projects apply stepwise approaches to build their monitoring and evaluation. Many projects implement multi-actor platforms.

There have been considerable challenges to project implementation throughout the years. Participants at the DeSIRA Connect Days from several projects indicated difficulties in carrying out participative research due to several constraints, including Covid-19, social and political

insecurity, complicated access to farmer plots and the occurrence of droughts in several regions. There were also policy and regulatory constraints. Projects find it challenging to engage meso- and macro-level actors in learning processes. Many project implementers expressed their needs for sharing knowledge on multistakeholder engagement, action-research for contextualised learning, and robust monitoring, evaluation and learning, an approach promoted by DeSIRA-LIFT, for knowledge management, project management and innovation strategy development. Project managers and team members were eager to learn from their peers how other projects have tackled challenging situations.

Furthermore, projects expressed a need to build capacity in navigating complex environments, managing resource constraints and securing sustainable funding. Potential synergies among projects were identified during Connect Days and other DeSIRA-LIFT activities before this event, in areas such as agroecological transitions, greenhouse gas emission, livestock management, climate-smart agriculture, including water management, platform development and policy actions.

Map of DESIRA projects in East and Southern Africa



3. DeSIRA stakeholders at the regional workshop

The DeSIRA Connect Days workshop for East and Southern Africa took place in Kigali, Rwanda, from 29 to 31 July 2024 at the Lemigo hotel. It was held as a side event during the Science and Partnerships for Agriculture Conference and it was an opportunity to leverage the participation of high-level individuals in African and European agriculture to jointly address pertinent emerging issues affecting the continent³.

The DeSIRA Connect Days brought together a diverse group of 41 participants, including 33 in-person attendees and 8 virtual participants, representing a broad spectrum of organisations. Key attendees included representatives

from the European Union, DeSIRA-LIFT, FARA⁴, FAO, IUCN⁵, AFAAS⁶, PELUM Kenya⁷, SNV⁸, TTGAU⁹, OSSREA¹⁰, ILRI¹¹, AFSA¹², Ethiopian Women in Coffee (EWiC)¹³, AECID¹⁴, ACTED Uganda¹⁵, We Effect¹⁶, CapSha Fertiliser DST Project, Ethiopian Institute of Agricultural Research (EIAR)¹⁷, Rwandan Ministry of Agriculture (MoA), Eritrean Women Agribusiness Association (EWAA), KARLO¹⁸, GAIN¹⁹, TEAGASC²⁰, WICE, ECTA/HRNS²¹, DARS, AGRICORD²², ENABEL²³, CARDESA²⁴, ICRAF²⁵, International Potato Center (CIP)²⁶ and Chitedze Agricultural Research Station (CARS) in Malawi.

DeSIRA Connect Days Kigali 2024



3] <https://events.faraafrica.org/>.

4] <https://faraafrica.org/>.

5] <https://iucn.org/>.

6] www.afaas-africa.org/.

7] www.pelumkenya.net/.

8] www.snv.org/.

9] www.ttgau.or.tz/.

10] www.ossrea.net/.

11] www.ilri.org/.

12] <https://afsafrica.org/>.

13] <https://wicethiopia.org/>.

14] www.exteriores.gob.es/en/Ministerio/Sedes/Paginas/AECID.aspx.

15] www.acted.org/en/countries/uganda/.

16] <http://weeffect.org/>.

17] www.eiar.gov.et/about-eiar/.

18] www.karlo.org/.

19] www.gainhealth.org/.

20] www.teagasc.ie/.

21] www.hrnstiftung.org/.

22] www.agricord.org/en.

23] www.enabel.be/.

24] www.ccardesa.org/comprehensive-africa-agriculture-development-programme-ex-pillar-4-caadp-xp4...

25] www.cjfor-icraf.org/.

26] <https://cipotato.org/>.

Main lessons learned in the DeSIRA community

The main lessons that were shared and created convergence among the DeSIRA community cover seven areas:

1. New paradigms in research and innovation

- **Participatory approaches in agricultural research:** a significant trend is the increasing involvement of farmers in research design and implementation, fostering co-creation of knowledge and valuing both scientific and local/indigenous knowledge.
- **The changing role of researchers as facilitators:** researchers are increasingly taking on facilitation roles, guiding participatory processes and bridging research-policy-practice linkages.
- **Influencing policies:** most projects have included a component to influence policy through research results and information, either by involving policy makers in many project activities or by holding events towards the end to highlight the results.

2. Capacity building in agricultural innovation systems

strengthening capacities across various stakeholders, including farmers, researchers, policy makers, extension workers and private-sector actors, is crucial for scaling and sustaining innovations.

3. Shifting from value chains to value webs thinking and approaches a shift towards understanding agricultural chains as complex “value webs” or “systems” with interconnectedness, multiple value streams and diverse actors is emerging.

4. Measuring impact and ensuring sustainability

A comprehensive framework for measuring impact is needed, encompassing both quantitative and qualitative assessments, while ensuring sustainability through institutional embedding, policy influence, market-based approaches, community ownership and knowledge management.

5. Strengthening grassroots innovation communities

- **Implementation of a variety of multistakeholder partnerships**
MSPs are becoming the norm, detailing the milieu of collaborations between organisations from different sectors to achieve the shared project's goals. These partnerships frequently have involved farmer organisations, women's groups, national and international research organisations, extension services and advisory groups, marketers, traders, government officials (local and national), agribusiness representatives, non-governmental organisations and more.
- **Integration of several knowledge types**
Many DeSIRA projects have tried to promote dialogue between scientific and local knowledge, recognising

the importance of local and indigenous communities in finding and implementing solutions to agricultural challenges. However, it is still important to boost the participation of local representatives and facilitating organisations need to engage strategically with these groups to foster “counter power” – and in doing so ensure that the process is worth their time and effort, and accountable to their needs and interests.

6. Supporting sustainable intensification through agroecology

This includes not only the strategies for co-creation and action-research implemented to find solutions to challenges throughout several value chains, but also, albeit to a lesser extent, addressing issues of consumption (including diets) and food waste.

7. Women as key innovation actors in agribusiness

Most DeSIRA projects have demonstrated that women play a crucial role as innovation actors in agribusiness, often driving advancements in sustainable farming practices, food processing, market access and community resilience. Their deep knowledge of local agricultural systems and unique perspectives on challenges and opportunities within the food value chain were demonstrated through the execution of many co-creation activities. However, the DeSIRA projects acknowledge that systemic barriers like limited access to land, finance and training still hinder their full potential in agriculture and food systems.

These lessons are detailed and packaged below.

1. New paradigms in research and innovation

1.1 Participatory approaches in agricultural research

A significant trend highlighted by DeSIRA projects is the increasing involvement of farmers in research implementation and design, yet this process is not heterogeneous across projects. While some projects, like RAIZ or FO-RI, have purposely included farmer participation in the project design and their participation started from the outset, other projects involved farmers at a later stage. This later use of participatory approaches mostly reflects two different scenarios.

In the first scenario, the project's researchers would first intend to start innovation by bringing new or improved technologies – with the still widespread assumption that this role falls onto research by definition – and that farmers would adopt the technologies and practices once they had been brought to them by the research team. In a second

scenario, as the project was being implemented, the team would build participatory approaches to ensure ownership of results and technologies and their further dissemination in the local farming community. In many aspects, this would still fall under the top-down technology transfer paradigm, with its inherent risk of technologies not being adopted depending on multiple factors, which go beyond technology itself, such as cost of implementation, entry barriers for use, whether the technologies are gender sensitive, etc.

The second scenario is the one in which despite researchers' efforts, the farmers seem reluctant or unable to adopt the technology developed and brought by the research team as part of the project and possibly challenge it based on their own knowledge, pushing the project to review its approach and embark into co-creation processes. This failure, which may also exist in the first scenario at different degrees, is the trigger for project teams questioning not only the approach but also the role of researchers. The shift is most often welcomed and embraced by both farmers and researchers as the benefits are acknowledged. Researchers from several DeSIRA projects in the region indicated that once they understood that their role was not only that of a researcher but also a facilitator (in MSPs), they would not revert to previous, more top-down roles and postures, as these do not lead to positive outcomes in terms of adoption.

A key question here would be whether the project approach - pushing for delivery and outcomes as per the commitment of the project team - has played in favour of the increased adoption of these participatory approaches.

Both situations were depicted by DeSIRA projects and it was acknowledged that not only participatory approaches are being applied but that the sooner they are implemented the more projects have chances to generate outcomes. This shift from traditional top-down research approaches to more inclusive, bottom-up methods was evident in various projects.



Panel of discussion on climate-smart innovation technologies (ACTED Uganda)

Questions that arose during this discussion were framed in terms of the limited time and resources that projects have to achieve their results, usually under strained situations that are beyond the project team's control: (1) What are the true drivers of innovation?; (2) How do you (project team and researchers) determine the needs?; (3) At the community level, how do you solve issues not only about technologies, but also mistrust; and (4) How to opportunistically find and use donor funding to carry out research activities?

Fruitful discussions tackled these questions. For instance, the FO-RI project in Tanzania involved farmers in setting the research agenda and identifying research topics from the beginning. *"We use the 'model couples' approach to engage both male and female farmers relying on champions to promote the gender transformation approach,"* said Joe Kataka, FO-RI project coordinator. The REFARM project in Angola exemplifies the second scenario where farmers dedicated their own time to experiments, indicating active participation in the research process after careful strategy reformulation by the research team. *"How can we convince farmers that we know what works? Only with joint research practice and agroecology, and this takes time, sometimes there are no direct results,"* said Aderito da Cunha, researcher DAGRI-UNIFI, REFARM project. *"The Climate-Smart Innovation Malawi project used farmer field school approaches, where farmers are directly involved in testing and evaluating new technologies, we can ensure that their knowledge is valued using this approach,"* stated Akinwale Moses Gbenga, International Potato Center (CIP), project leader.

There was consensus that the early involvement of farmers is crucial for ensuring that research addresses real needs and constraints faced by farmers. It also contributes to the co-creation of knowledge, valuing both scientific and local/indigenous knowledge. It was noted, however, that it is still important to boost the participation of local representatives, and facilitating organisations need to engage strategically with these groups to foster "counter power" – and in doing so ensure that the process is worth their time and effort, and accountable to their needs and interests. This requires careful and ongoing efforts to "level the playing field" and mitigate dominating power relations, which usually bend away from local people and towards state and private-sector interests, as was mentioned by several panellists.

Tesfaw Binyam from Addis Ababa University, participating on behalf of the ESSA project, mentioned "reinforcing local knowledge in co-creation" as part of their approach. The RAIZ project has designed its approach based on "living labs assuming that indigenous knowledge is present and valuable". Living labs bring farmers, scientists and other partners together to co-develop, test and monitor new practices and technologies in a real-life context. AFAAS expresses interest in documenting and sharing indigenous technical knowledge. A few project managers indicated that they struggle to find researchers who want to do action-research because it is less likely to produce publications; they

indicated that there is a need for incentives for researchers to get involved in action-research that might not lead to a publication and peer recognition. An issue discussed was also how to give recognition to the communities that participate in the research.

Despite these challenges, these increasing participatory approaches, shifting away from or altering the traditional technology transfer paradigm, are acknowledged as making research more relevant, effective and empowering for farmers, while also enriching scientific understanding with local insights and experiences.

1.2 The changing role of researchers as facilitators

With the above-depicted change in the research for innovation paradigm, researchers are increasingly driven, and often expected, to take on facilitation roles in addition to their traditional research functions. Embracing this new role requires effort and a particular set of skills from researchers, who do not necessarily see themselves as facilitators. Often, researchers feel this new role pushes them away from their traditional activities to conduct experiments and generate scientific knowledge and particularly to publish their results. The new facilitation role therefore has a cost and requires some form of incentive for researchers.

In this new role, researchers are finding themselves facilitating MSPs by organising and guiding participatory processes. They are tasked with enabling the co-creation of knowledge by involving farmers and other stakeholders in the research process. Researchers are also expected to bridge research and policy by communicating research findings to policy makers and facilitating evidence-based policy dialogues. For them to be effective in these new roles, they first need to change the prevalent “expert” posture to one of just another learner, and then use the right skills and tools. The critical role of capacity building in acquiring these skills was discussed, and many project teams acknowledged that the project did not budget for these activities and that these activities should be undertaken from project inception.

Supporting innovation systems by helping to identify and nurture local innovations is another key aspect of this new role. Additionally, researchers are increasingly involved in capacity building, as they take responsibility to train farmers, extension workers and other stakeholders. This evolution in the researcher’s role requires the development of new skills, including communication across diverse stakeholder groups, participatory research methodologies, conflict resolution and negotiation, systems thinking, and knowledge translation and brokering.

While this new role brings challenges, such as balancing traditional research outputs with facilitation roles and navigating complex stakeholder dynamics, it also offers significant benefits. These include more relevant and applicable research outcomes, increased adoption of



Plenary discussion on the role of researchers as facilitators of innovation processes

innovations, stronger research-policy-practice linkages, enhanced sustainability of interventions and empowerment of local stakeholders.

For the Climate-Smart Innovation Malawi project, executed by the International Potato Center (CIP), co-creation has been a key way to develop technologies that respond to the needs of farmers, and for the farmers to adopt and use them.

It should be noted that an emerging field for research lays into this facilitation role into which R&I projects bridge innovation communities and policy makers. Such research and related publications however require multidisciplinary approaches as mentioned during the Connect Days.

Learning from failures – key lessons from the session

- Receive feedback and continue to refine. Look at it from a social science perspective. Learn and increase the feedback mechanism.
- Experimental agriculture shows a fundamental shift in focus: rather than simply encouraging farmers to try out different options from other contexts and gathering information based on technology performance, the emphasis is now on understanding the critical role of contextual factors. This shift involves recognising that options must be tailored to specific contexts, representing a broader paradigm shift in agricultural practices.
- Hire experts but also always consult

1.3 Influencing policies

The link between research, policy and practice was a significant theme throughout the DeSIRA Connect Days in Kigali. The question of actual policy impact of projects remains high as such impacts are difficult to track if they do not translate into legislation. This is something that only a few projects have managed, for example SIRGE which provided access to new technologies for reducing greenhouse gas emissions and environmental impacts of the beef industry in Uganda, and, at the same time,

provided valuable information to policy makers for their national determined contributions to the UNFCCC²⁷. In the ProSilence project, co-created research findings are transferred to local, regional and national political decision makers.

The concept of “policy windows” - opportune and sometimes unpredictable moments when policy makers might be readier to act based on new ideas or evidence - was introduced in a presentation where several DeSIRA cases were discussed, to help projects identify whether they had experienced such moments and whether they could identify opportunities for policy changes. As an example, the global fertiliser price spike was mentioned by some projects as an identified potential window to advocate for more sustainable soil management practices. Others indicated that a change in government is an opportunity to influence strategies and policies.

For this to happen, evidence is necessary. Several other projects emphasised the importance of generating robust science-based evidence to inform such policies. For instance, the FO-RI project in Tanzania demonstrated an effective approach to evidence-based policy advocacy. This involved positioning women at the forefront of agroecological innovation, conducting research to prove the resilience of traditional crop varieties, involving women in MSPs to drive lobbying and advocacy efforts, engaging men as champions for women’s voices and empowering women across the value chain. DARE will offer results of action-research to convince the private sector to invest in more nutritious formulations based on processing local fruits.

Other projects, such as Climate-Smart Innovation Malawi demonstrated how policy influence could happen at multiple levels, from community dialogues to national policy reviews. In addition, in Malawi, the TAP-AIS project supported the review of the national agricultural policy. Both projects used multistakeholder approaches and paved the way to a policy moment by involving policy makers at an early stage. ICSI-APL ensured that all work at the country level was included as part of a decentralised mechanism for agricultural policy, which ensures ownership as well as feedback into national policies. Several initiatives focused on building the capacity of researchers, civil society organisations and farmers to engage in policy processes.

A key challenge identified was the gap between policy makers and researchers, even though policy makers call for scientifically backed evidence to support their decision processes. Means of dialogue, such as platforms for dialogue, can provide permanent avenues for reinforced collaboration. The importance of focusing on “actionable issues” rather than high-level “wish lists” of policy change was acknowledged. Some projects mentioned efforts to align their advocacy with broader continental frameworks like CAADP, potentially increasing their policy influence.

For policy changes, as with other shifts at the level of innovation communities, key elements include transparency

of information, open data from robust monitoring, ongoing dialogue and joint analysis. These processes, coupled with joint capacity building on an equal footing and tangible, actionable outcomes, create an environment conducive to policy adjustments and make AIS more innovation-friendly. Various strategies can be employed by projects according to the moment in their implementation to combine these different elements.

2. Capacity building in agricultural innovation systems

Alongside the previous points, reinforcing capacity building across multiple levels emerged as a central theme during the Connect Days, seen as essential for ensuring the scaling and long-term sustainability of agricultural innovations. This multilevel approach to enhance capacities targets various stakeholders including farmers, researchers, policy makers, extension workers and private-sector actors.

For farmers, capacity building focuses on skills development in new agricultural practices and technology use, but also on functional capacities to allow them to better set the innovation process into a broader picture into which they are capable and allowed to interface with a broader array of partners. The development of business skills is a strong vector as it allows measuring how production is inserted into value chains into which farmers may have a wider say.

Researchers require support in adjusting their research methodologies, through the development of interdisciplinary collaboration skills and the adoption of participatory approaches. A clearer definition of the role of facilitator would help researchers adopt the role more easily. However, it was found that only a few DeSIRA projects train their researchers for the role of facilitator.

One of the shared examples is AFAAS, which brings the national extension and advisory services of the African continent under one umbrella. The organisation enhances the utilisation of knowledge and technology by working with value chain actors. They promote learning and add value to research and extension to ensure that the technology being developed meets the needs of the users.

Communication support is also needed to help researchers move beyond the boundaries of scientific communications (publications) into potentially change-making communication, particularly directed towards policy makers. Policy makers in turn require strengthening their capacities to take into account evidence-based and scientifically backed knowledge and communication in policy-making processes. They would also benefit from support on how to articulate and connect with research and farming communities and innovation processes. Extension workers require updated knowledge on innovative practices and skills in farmer engagement.

Like researchers, extension workers have a role as facilitator as well as knowledge providers, and reinforcing their ability

²⁷ United Nations Framework Convention on Climate Change.

to relate with science and farmers at the same time is crucial for innovation processes. Finally, the private sector needs to understand innovation processes and how they provide value to agricultural productions that will, in turn, add to the value chain or network. Greater appreciation, by all players, of innovation systems would allow to develop skills in public-private partnerships.

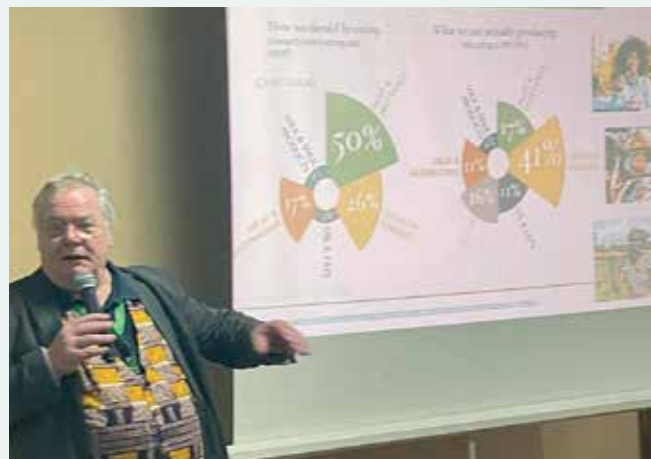
Key approaches to capacity building include participatory learning, hands-on training with practical, field-based learning experiences and peer-to-peer learning to facilitate knowledge exchange among stakeholders. Institutional capacity building to strengthen organisations and systems, and a greater emphasis on continuous learning rather than one-off trainings would also allow for deeper changes and longer-term effects. These activities need to be planned from project formulation and budget allocation to ensure higher outcomes. Examples of capacity building initiatives are numerous and varied; most projects and partner organisations like CCARDESA or AFAAS have been engaged in them. Systematising and sometimes formalising the process with curricula that can be developed with education specialists and the farmers themselves would help institutionalise and disseminate the practice.

As examples, the TAP-AIS project in Malawi worked on improving capacities to conduct effective multistakeholder policy processes. The Transitions project in Ethiopia worked on integrating agroecology into university curricula. CSARIDE in Eritrea targets institutional capacity building for the national research institute, the college of agriculture and extension departments. The Women Coffee Climate project created a community of practice, called EthioLatin, held by its partner OSSREA, a social sciences research organisation, that harnesses knowledge from women coffee producers not only in Ethiopia but also in Colombia and Honduras, thus supporting cross-dissemination of knowledge in a South-South context. This community of practice has proven valuable to share knowledge, not only about important issues relating to coffee systems, which are very different between some regions, but also relating to challenges faced and opportunities to work together in the future. Alemu Tesfaye, a frequent contributor to the EthioLatin community of practice, mentioned the “... opportunity to establish a space like a town hall platform for listening to the coffee producing community, given a voice to women, to understand their challenges, needs and aspirations”. Through the EthioLatin community of practice, topics like these encourage discussion with all involved²⁸.

3. Shifting from value chains to value webs thinking and approaches

Multistakeholder, multidisciplinary facilitated dual-way processes combining research, capacity building and knowledge creation between farmers, researchers, extensionists and policy makers are by nature nonlinear, multifactorial and evolve over time. Acknowledging and

embracing these processes brings about a significant evolution in understanding agricultural and food systems no longer as linear value chains – that could combine – but rather as more complex “value webs”.



Value webs reflections (presentation by CIFOR-ICRAF)

This shift in the role of R&I in food systems brought forward in the keynote speech was rapidly understood by participants of the Connect Days in Kigali, as it resounded with observed situations that they had not necessarily analysed or depicted as such. Value webs or networks, also referred to during the DeSIRA Connect Days in Bogotá for the Latin America and Caribbean region, represent a more holistic, systems-based and plural approach to value creation, with value being more than economic value. Traditional linear value chains focus on a single product, with sequential steps from extraction to production to consumption. In contrast, value webs are more complex and interconnected, recognising multiple products, actors and relationships with non-linear interactions between various components of the system. Value webs also introduce or recognise the notion of circularity, which is essential for the conservation of resources and the reduction of negative externalities.

Key characteristics of value webs include interconnectedness, where changes in one part of the system can affect multiple other parts; multiple value streams that consider various products and by-products derived from a single agricultural activity; and the inclusion of diverse actors beyond just producers, processors and consumers. Value webs also acknowledge feedback loops where information and resources can flow in multiple directions, incorporate ecosystem services and the role of natural resources, and consider the broader societal context in which agricultural activities occur.

This shift towards value webs thinking has several implications for project design and implementation, as well as for policy. It needs holistic interventions that consider wider impacts beyond a single value chain and requires the involvement of a more diverse group of actors. Managing this complexity demands more sophisticated tools for analysis

28] https://ossrea.net/images/WCC/PDFs/Empowering_Women_in_the_Coffee_value_Chain.pdf.

and decision making. The value webs approach is better equipped to address long-term sustainability challenges and can identify novel intervention points and synergies within the system.

4. Measuring impact and ensuring sustainability

Measuring impact and ensuring sustainability are common challenges discussed by projects. A comprehensive framework for measuring impact needs to include not only traditional quantitative metrics focusing on outputs such as yield increases and income improvements, but also qualitative assessments of farmer satisfaction and changes in knowledge and attitudes, systems-level indicators that track changes in policy or institutional frameworks, and long-term monitoring through establishing baselines and conducting regular follow-ups.

Challenges in impact measurement include contribution assessment to impacts of specific interventions, capturing indirect or spillover effects, balancing rigorous measurement with practical constraints, and accounting for contextual factors and external influences. Also, resources and the opportunity given by the donor was mentioned as a key factor. In many cases, it also requires qualifying impact as being long term and achievable beyond project change, with a contribution from others and defining shorter-term outcomes that already produce a nature of change that leads towards impact.

Ensuring sustainability involves several key strategies. Institutional embedding is a key – if not the most prominent – factor for sustainability, integrating project approaches into existing structures and building the capacity of local institutions. Policy influence, often associated with institutional embedding, involves advocating for supportive policies and engaging policy makers throughout the project. Market-based approaches aim to develop sustainable business models and engage private-sector actors. Community ownership is fostered through participatory approaches and building local leadership capacity. Knowledge management involves documenting and disseminating learning and creating platforms for ongoing knowledge exchange. The more these approaches are combined, the higher the potential for sustainability.

Examples from the DeSIRA Connect Days illustrate these approaches. The REFARM project reported specific metrics like the amount of land rehabilitated and increases in farmers' income. The TAP-AIS project in Malawi worked on integrating their approach into national agricultural policy for long-term sustainability. Several other projects mentioned the importance of building local capacity, such as FO-RI training local facilitators. DARE is developing local, accessible and affordable food solutions for pregnant women and young children to increase diet diversity with private-sector collaboration. ProSilience enhances agroecological transition by adopting proven and upgraded strategies for

soil protection and rehabilitation of degraded soil at farm system and agroecosystem level. Its partners are supported to leverage lessons learnt, co-evaluate them in terms of policy and loop them into their national and international dialogue. The Women Coffee Climate project has produced recommendations for the private sector that include the need to foster inclusive business practices by promoting gender equality within coffee companies and cooperatives, as well as for policy makers. These recommendations aim to encourage responsible sourcing practices that prioritise gender equality, ensuring fair prices and long-term partnerships with women coffee producers; and support certification programmes that promote gender equity, such as Women in Coffee programmes.

5. Strengthening grassroots innovation communities

5.1 Implementing a variety of multistakeholder partnerships

MSPs are seen as crucial for addressing complex agricultural challenges. These challenges often involve interrelated issues spanning environmental, social and economic domains, inherent to an agroecology approach, which is systemic in nature. MSPs bring together diverse actors with different expertise, resources and perspectives to tackle these multifaceted problems.

Projects like FO-RI, Climate-Smart Innovation Malawi or ProSilience used MSPs to address issues like soil health, climate resilience and sustainable agricultural practices. These partnerships allow for a more holistic approach to problem solving. The institutionalisation of these partnerships is occurring at various levels, from local to national. At the local level, this takes the form of farmer field schools and community-based dialogue processes. At the national level, multi-actor processes such as the agriculture innovation MSPs supported by TAP-AIS in Malawi got integrated into the national agricultural policy review process. The project Climate Change Malawi worked through district innovation platforms to engage stakeholders in testing and validating technologies and assessing farm level profitability. They also promoted engagement of stakeholders. One clear objective was to strengthen national agriculture research systems.

The institutionalisation of MSPs, as is the case in Kenya through the action of ICSI-APL, is seen as a means to ensure sustainability of the collaborative efforts beyond the lifespan of individual projects. It also helps in creating structures that are more permanent for ongoing dialogue and innovation in the agricultural sector. These points underscore the growing recognition that complex agricultural challenges require collaborative, multidisciplinary approaches and that formalising these collaborations can lead to more sustained impact.

A crucial insight emerged from discussions around the importance of working through existing structures rather than creating parallel systems. The experience of projects like LIPS-Zim demonstrates how strengthening existing government extension services, rather than establishing separate teams, creates more sustainable institutional capacity. Whilst this approach might require more patience, it ultimately leads to better long-term outcomes. ESSA's experience particularly demonstrates how dedicated coordination teams and structured governance can maintain momentum while responding effectively to emerging challenges. This delicate balance between structure and flexibility emerges as crucial for sustained collaboration.

In East and Southern Africa, like in Latin America and the Caribbean, multistakeholder and participatory approaches are becoming the new standard of research for innovation. However, these preliminary results from the Connect Days should not hide the risks or reversibility of MSPs where factors such as the continuity of resources and their allocation, the continuity of facilitation processes to support the participation of relevant actors as the partnership evolves, are crucial. It should also be noted that DeSIRA projects operate among a range of other factors that they do not control and influence the performance of MSPs, and in doing so they fill the "missing middle" between national and international development objectives. "The importance of MSPs is in plugging the missing middle between quite good national and international commitments to big objectives such as land restoration and climate adaptation, where there is a big gap between that objective and action on the ground. It is at the local landscape and territorial scale where things tend to fall apart because of weak social capital where the ecosystem service first manifests to implement agroecological transitions," emphasised Fergus Sinclair, Transitions project.

During a discussion, the question of how to measure the effectiveness of this partnership was posed. For representatives of the Women Coffee Climate project, this is done by integrating efforts, obtaining feedback later and after the project finishes, and being flexible and listening to feedback needed during the project.

ICSI-APL emphasised three aspects: the quality of contributions, the level of coordination and efficiency, and the key outputs that indicate that the project is moving along in the right direction.

The panellists from the Yayu Coffee project indicated that each partner has tasks to complete, and that there is a need for constant coordination and regular meetings with the senior management team. There is also a senior technical team for the day-to-day coordination of activities. Finally, at the field level, the farmer facilitators have an important role at coordinating, especially to avoid conflicts and problems.

5.2 Integrating several knowledge types

The integration of local and indigenous knowledge with scientific research – often resulting from participatory processes – is becoming increasingly recognised as vital for sustainable agricultural development. This approach, fundamental in agroecological transitions, combines traditional practices and understanding passed down through generations, often highly adapted to local conditions, with systematic, evidence-based understanding developed through formal research methods.

The benefits of this integration are numerous. It ensures innovations are appropriate for local conditions and cultures, increasing the likelihood of adoption. It combines time-tested practices with modern scientific insights, often contributing to biodiversity conservation. Importantly, it also empowers farmers by validating their knowledge and experiences. However, one of the limitations to incorporate local/indigenous/traditional knowledge into research processes is the limited existence of methods – these being often designed on the go – as was mentioned by a couple of project implementers.



GAIN (Ethiopia) sharing best practices in considering indigenous knowledge

Nonetheless, various approaches are used in the field to facilitate this integration. Participatory research involves farmers in the research process from design to implementation. Farmer field schools combine formal training with farmer-to-farmer learning. Innovation platforms serve as multistakeholder spaces for knowledge exchange and co-creation. Some projects engage in citizen science, involving farmers in data collection and analysis. There are also efforts to systematically document and validate traditional knowledge.

However, this integration is not without challenges. These include managing power dynamics to ensure equal valuation of different knowledge systems, bridging gaps between scientific and traditional ways of understanding, adapting locally-specific knowledge to broader contexts and addressing intellectual property concerns in protecting

indigenous knowledge while promoting sharing. Best practices emerging from this approach include respecting and validating all forms of knowledge, creating safe spaces for knowledge sharing and co-creation, ensuring two-way communication between researchers and farmers, adapting scientific methods to incorporate local perspectives, and documenting and disseminating integrated knowledge products.

6. Supporting sustainable intensification through agroecology

The perception of agroecology as a holistic and participatory approach to sustainable agriculture, addressing multiple challenges simultaneously, is increasing as its benefit are ever more scientifically documented. This holistic nature encompasses food security, nutrition, biodiversity conservation, soil health and climate resilience in an integrated manner.

The Transitions project in Ethiopia, for instance, is working on various aspects of agroecology, including crop rotation, optimal fertiliser use and manuring, in an approach that goes beyond technologies. Fergus Sinclair explained: *"People are really beginning to grasp what transformation is all about. It's not just incremental change or a little more efficiency in unsustainable monoculture agriculture sustained by environmentally destructive chemicals, but rather beginning to shift toward ways we can be sustainable and equitable. This is often confused with regenerative agriculture. To achieve real system transformation, we have to do a lot more than that: engage more with markets, nutrition, jobs, input manufactures such as fertilisers, to convert higher-quality protein. We also need to address food loss and waste, consumer behaviour, to the government, who is making decisions, how much participation is there in decisions on how landscape policies are formed and implemented and the power dynamics between smallholder farmers and big input suppliers".*

ProSilience is encouraging the use of better practices for soil management and land restoration. Yayu Coffee and Women Coffee Climate are implementing agroforestry arrangements and best crop practices to protect the buffer zone adjacent to the Yayu Biosphere Reserve. Several other DeSIRA projects are working with farmers to avoid slash-and-burn practices for growing food. This illustrates how agroecology integrates different practices to create a more sustainable farming system. The approach is also noted to consider social and economic aspects, not just environmental ones, supporting food sovereignty and empowering farmers in decision-making processes. There is growing interest in measuring and demonstrating the multiple benefits of agroecological practices. A systematic review presented in the keynote address on food systems shows that 87% of studies found positive outcomes from agroecological practices for food and nutrition systems. This indicates a growing body of scientifically grounded evidence supporting agroecology benefits. To further support this

effort, the new phase of DeSIRA intends to work with FAO on "agroecology performance evaluation" and rolling out tools to advocate for agroecology contribution across multiple dimensions. Despite growing evidence, policies are not yet fully taking this evidence on board, indicating a need for a more robust regular and scientifically backed measurement of agroecology benefits to provide evidence to policy makers and other stakeholders. *"We agree to disagree about what agroecology really is, as long as we understand this requires a holistic approach,"* stated Yodit Balcha, PSII Ethiopia lead – Alliance for Bioversity & CIAT, Transitions project.

7. Women as key innovation actors in agribusiness

Gender considerations have emerged as a crucial aspect of AIS. Reinforcing the role of women at all stages and levels in agriculture, including their leadership, is needed. Several, if not most, DeSIRA projects in East and Southern Africa are already implementing gender-sensitive approaches to various degrees. Women Coffee Climate in Ethiopia focuses on harnessing women's capacities in agriculture. The FO-RI project in Tanzania is highlighted for putting women at the forefront of MSPs, driving lobbying and advocacy efforts.



Gender considerations for women's coffee value chain in Ethiopia (EWIC)

"Farmers set the scene for research and implementation of the project, they identify their destiny and expectations for the next 20 years to be more resilient to climate change. They select the crops to engage in research. This is when the women's concerns are heard, such as welfare of the family, provide food for the family, men's support to the family by paying for school fees, medicines and others", as mentioned by Kastory Timbula from the Tanzania Tree Growers Associations Union (TTGAU), FO-RI Tanzania.

A study by DeSIRA-LIFT documented 18 cases of women innovating in agriculture or agribusiness across Africa. There is recognition of the need to ensure that agricultural technologies are gender-friendly and inclusive. This is

particularly important, given that women contribute 60% of the workforce in agriculture but are also primary gatekeepers when it comes to food safety and nutrition. Efforts are being made to expand women's roles beyond primary production across the value chain, including in post-harvest handling, processing and trading.

Innovative approaches to gender equality are being implemented. FO-RI Tanzania has designed the “model couples” concept, where husband-wife pairs work together on farms with clearly defined roles and shared profits, demonstrating the benefits of gender equality in agriculture. The role of men as champions for women's voices is emphasised, particularly in traditionally patriarchal societies, and there is a call for them to embrace it more often in order to be part and parcel of the process.

At the policy and strategic levels, the CAADP annual review report highlighted low gender performance, leading to commitments to improve in this area. There is a push for more gender-focused research and policy influence, as evidenced by the DeSIRA-LIFT gender study.

Despite these efforts, challenges remain. While there is acknowledgment of the importance of increased gender-sensitive technologies, a noticeable gender imbalance in the field remains, suggesting more work needs to be done to further women's inclusion in decision making, especially for projects targeting R&I in agriculture.

Messages received during the Connect Days event indicate that the European Union remains committed to supporting the outcomes of the many DeSIRA projects and research partners with further availability of funding which will now be ensured by the upcoming next phase of the initiative called DeSIRA+.

Recommendations on the way forward

1. Making international research work for responsible innovation and agroecology transitions

Ensuring ownership and translation into action is best supported by multistakeholder mechanisms comprised of both international, national and local actors, and is becoming the new normal for research in agricultural innovation and agroecological transitions.

RECOMMENDATIONS

- Project implementers: allow teams time for full-time coordination in the MSP. Promote regular communication through multiple channels - from formal meetings to informal WhatsApp groups – to sustain engagement while ensuring rapid response to emerging challenges. Systematically record decisions and lessons learnt. Ensure adequate resources for coordination, maintaining clear communication channels and building flexibility into governance arrangements while maintaining strategic focus.
- Donors: allow funding future initiatives that carefully balance structure with flexibility, ensuring MSPs can maintain strategic direction while adapting to changing circumstances, even between projects.
- Policy makers: acknowledge that innovation is a long process, it would be important to facilitate implementation/ adoption of the innovations and knowledge generated in the DeSIRA projects by allowing extensions and second phases for scaling.

2. Better integration of farmer-led and community-led research and innovation

The DeSIRA Connect Days workshop provided a rich set of actionable ideas and suggestions for key stakeholders that will contribute to enhancing the impact of R&I. Projects should invest adequately in building collaborative foundations before expecting technical results, whilst building on existing structures and relationships rather than creating parallel systems. Adequate resources must be secured for both technical activities and collaboration processes, maintaining flexibility while keeping a strategic focus. Creating clear pathways between policy and practice through appropriate governance structures emerges as particularly important.

Researchers: understand that research is essential to help farming communities tackle the multiple challenges they face. To do so, they need to support communities and co-create new knowledge and solutions. The “expert” does not always know everything.

RECOMMENDATIONS

- Project implementers: strengthen managerial/functional

capacities for researchers to function as effective facilitators. Allocate budget for training activities from project inception.

- Policy makers: allocate funding for public research institutions, extension services and advisory service providers to be able to participate in planning exercises, network strengthening and MSP participation during project execution and beyond. New knowledge is essential, but it needs to be owned by farming communities and it also needs to translate into actionable policies that enable innovation. This means that farming communities design further meaningful solutions in partnership with research, civil society and the private sector. It also means that governments and public authorities understand and support this.
- Project implementers: implement action-research and co-creation through MSPs from project design. Work with structures already established in the territories, especially those that represent farmers.
- Donors and funders: allow for the establishment of partnerships even before the project starts – this will increase participation and trust. Encourage participation of organised farmers from project conception. Allocate funding for networking and MSP strengthening.

3. Better integration of farmer-led and community-led research and innovation

Scaling, out, up and deep, the multiple outcomes of DeSIRA projects requires that these multistakeholder mechanisms are further supported and facilitated. This is likely to be better achieved if research and its partners draw from transdisciplinary approaches. Between these, gender and youth should have a key role. Regional organisations can play an important role in facilitating participation of the right actors and dissemination of knowledge, also promoting the generation and implementation of policies based on sound science and field results.

RECOMMENDATIONS

- Project implementers: take on board regional organisations in the MSP set up by R&I projects should be systematic. Another option implies embedding the projects into existing and well-functioning regional MSPs, as well as aligning the projects' expected outcomes with their needs.
- Donors: need to support long-term investments in developing capacities of regional organisations and partnerships that support innovation processes, agroecology transitions and agrifood system transformation because these are long-term processes that require facilitation capacities. Among the capacities needed are supporting coherent programming of R&I investments and co-designing project proposals with donors and national and regional stakeholders, specifically making sure that farmers and local communities are partnering with the projects from the inception of the project idea and project formulation.
- Policy makers: mobilise regional organisations in national reforms and promote and support cross-country collaboration around shared innovation agendas.

Conclusion

The insights from the DeSIRA Connect Days for East and Southern Africa reveal the significant shift occurring in agricultural research and development approaches.

The move towards value web thinking, participatory research methods and MSPs reflects a more holistic and inclusive approach to addressing complex agricultural challenges.

The changing role of researchers as facilitators and the emphasis on integrating different knowledge types underscore the importance of co-creation and knowledge sharing in innovation processes.

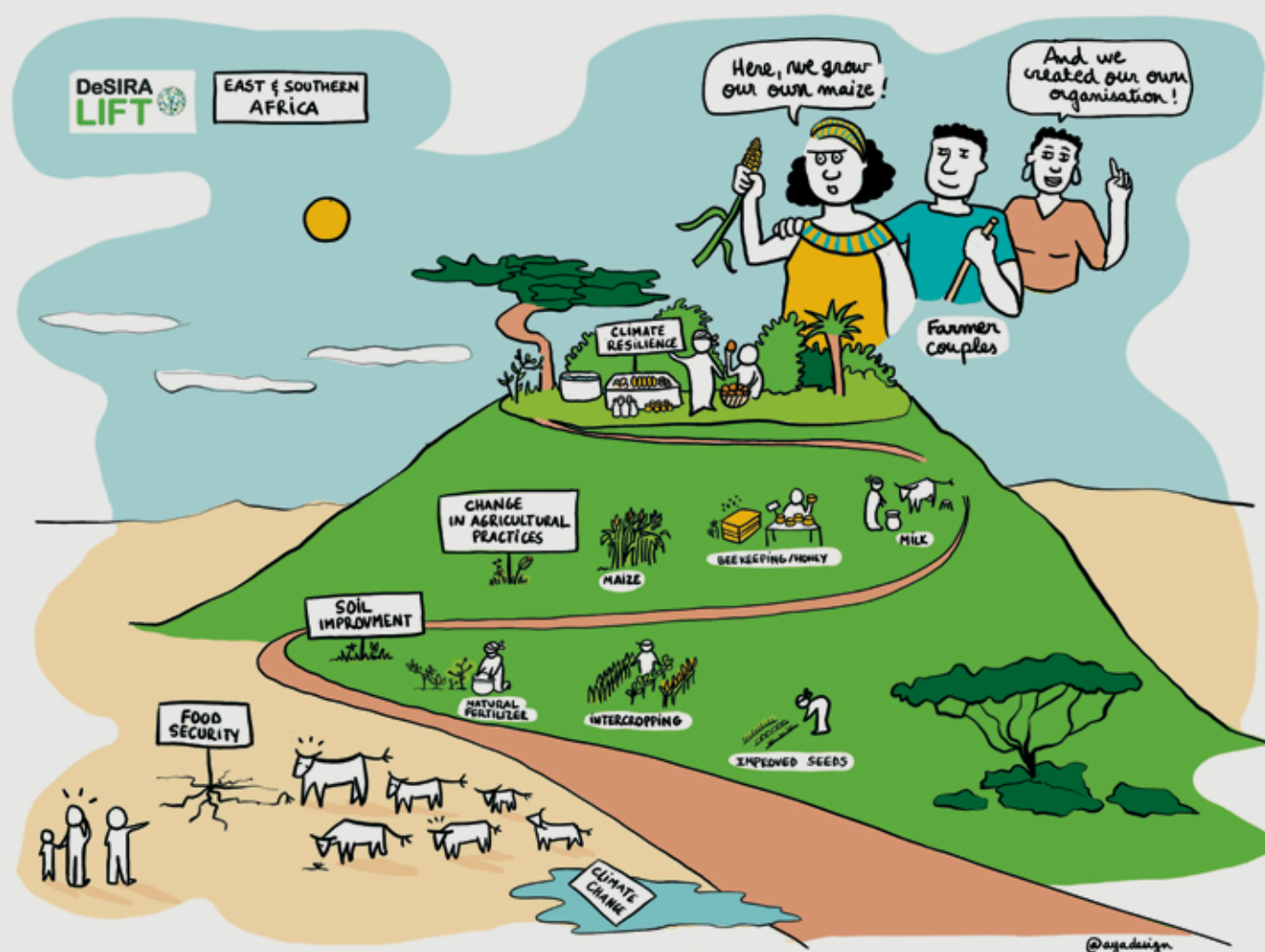
The focus on agroecology as a holistic approach to sustainable agriculture, coupled with increased attention to gender considerations, demonstrates a growing recognition of the interconnectedness of environmental, social and economic factors in agricultural systems.

The emphasis on policy engagement and evidence-based advocacy highlights the crucial link between research, policy and practice.

These evolving approaches offer promising pathways for more effective and sustainable agricultural innovation. However, they also present new challenges, particularly in measuring impact, ensuring long-term sustainability and navigating complex stakeholder dynamics.

As the field of agricultural research and development continues to evolve, ongoing learning, adaptation and collaboration will be crucial to address the pressing challenges facing global food systems.

Key takeaways in a picture



Acknowledgement

DeSIRA-LIFT (Leveraging the DeSIRA Initiative for agri-food systems transformation) is a service facility supporting the DeSIRA Initiative (Development Smart Innovation through Research in Agriculture, in short DeSIRA) funded by the European Commission (FOOD/2021/424-11). DeSIRA (2019-2026) aims to bridge the gap between research and policy-making towards resilient, sustainable and equitable agri-food systems in low- and middle-income countries. DeSIRA-LIFT (2021-2025) includes three service areas aligned to the three DeSIRA pillars: *Service Area 1* supports country-based DeSIRA projects to prove and improve 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 Innovation Systems (AIS) related roles. *Service area 3* provides support to policymakers on themes related to agricultural research for development (AR4D) and innovation policies and programming.

This Perspective Brief has been prepared as part of the DeSIRA-LIFT Community of Action and Reflection put in place by *Service Area 1*, under the leadership of Aurelie Toillier (Agrinatura/CIRAD) and Margarida Lima de

Faria (Agrinatura/ISA, University of Lisbon), and managed by Renaud Guillonnet (Agrinatura). The purpose of the Community of Action and Reflection was to share and learn about challenges and practices in managing for impacts in R&I projects.

This Perspective Brief forms part of a collection of knowledge products, building on combined activities of the DeSIRA-LIFT Service Area 1 team that has been providing support to the 70 DeSIRA projects of DeSIRA pillar 1 in their various contexts. These knowledge products were developed in close interaction and with the inputs of the DeSIRA project teams. This brief has been made possible thanks to the support of Ms Isolina Boto and her team at COLEAD; and the organization committee members for the DeSIRA Connect days: Ms Isolina Boto, COLEAD; Dr Aggrey Agumya and all the team at FARA, the Forum for Agricultural Research in Africa, the Delegation of the European Union in Rwanda and CIRAD Regional Office for East and Southern Africa, as well as the valuable input of all participants to the DeSIRA Connect Days. Besides the names of authors and contributors, thanks are due to the many people from DeSIRA who openly shared their lessons learned and reflections.

Publisher

CIRAD, The French agricultural research and international cooperation organization working for the sustainable development of tropical and Mediterranean regions.

42, rue Scheffer, 75116 Paris, France

www.cirad.fr

DOI: pending

Citation

Mushumba D., Guillonnet R., M. Roefs., Henriquez P., Toillier A., 2025 The future of R&I as driver of agrifood system transformation and sustainability transitions. In: DeSIRA Perspective Brief Series Perspectives from East and Southern Africa. CIRAD, Montpellier, 22p

Proofreading: Bianca Becks, Agrinatura/WUR

Maps: Manon Koningstein/DeSIRA-LIFT

Design: RCO.design/Aur lie Buridans

Photos:   DeSIRA-LIFT

Disclaimer

This publication is technically supported and financed by DeSIRA-LIFT, which is funded by the European Commission / DG INTPA (FOOD/2021/424-11) and implemented by member organisations of the Agrinatura (CIRAD, ISA, NRI, SLU, WUR) and EFARD networks (COLEAD). 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.   European Union, 2025

The Commission's reuse policy is implemented by Commission Decision 2011/833/EU of 12 December 2011 on the reuse of Commission documents (OJ L 330, 14.12.2011, p. 39 – <https://eur-lex.europa.eu/eli/dec/2011/833/oj>).

Unless otherwise noted, the reuse of this document is authorised under the Creative Commons Attribution 4.0 International (CC BY NC 4.0) licence. This means that reuse is allowed for NonCommercial purposes only, provided that appropriate credit is given and any changes are indicated.



Address:

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

Website:

<https://www.desiralift.org/>

LinkedIn:

<https://www.linkedin.com/company/desira-lift>

Email:

info@desiralift.org