OUTCOME 4

"The agriculture and food systems policy environment is improved at national or international level"

Most DeSIRA projects (59 of them; 75%) aim to improve the enabling environment for scaling the innovations they develop. A growing number of them have demonstrated an ability to transform policy-related knowledge products (dialogues, briefs) into tangible outcomes such as new or revised policies, strategies or plans, at national or subnational levels. DeSIRA LIFT has conducted a learning review to assess the impacts of the DeSIRA initiative at policy level. Besides, efforts are underway to equip project partners with the skills needed to strengthen the science-policy interface.

- **184 policies, strategies or plans influenced by a DeSIRA project, under development or endorsed by the relevant authorities;**
- **43 countries or international organisations developing or having endorsed a policy, strategy or plan, which increases their ability to sustainably transform agriculture and food systems and/or adapt to climate change.**

STREAM ("SusTainable Resilient Ecosystem and Agriculture Management in Mongolia"), implemented by FAO and GIZ, strengthens territorial capacities for sustainable long-term landscape management. The project has supported the development and approval of 19 territorial plans, all approved by local assemblies. They serve as mid-term policy documents, spanning 5-7 years, for effective land administration and land resource management. At the national level, the project contributed to amending the Land Law by providing inputs on responsible rangeland management. International and national Geographical Indication (GI) consultants assisted the national authorities in drafting GI regulations aligned with Mongolia's international obligations under the WTO's Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS).

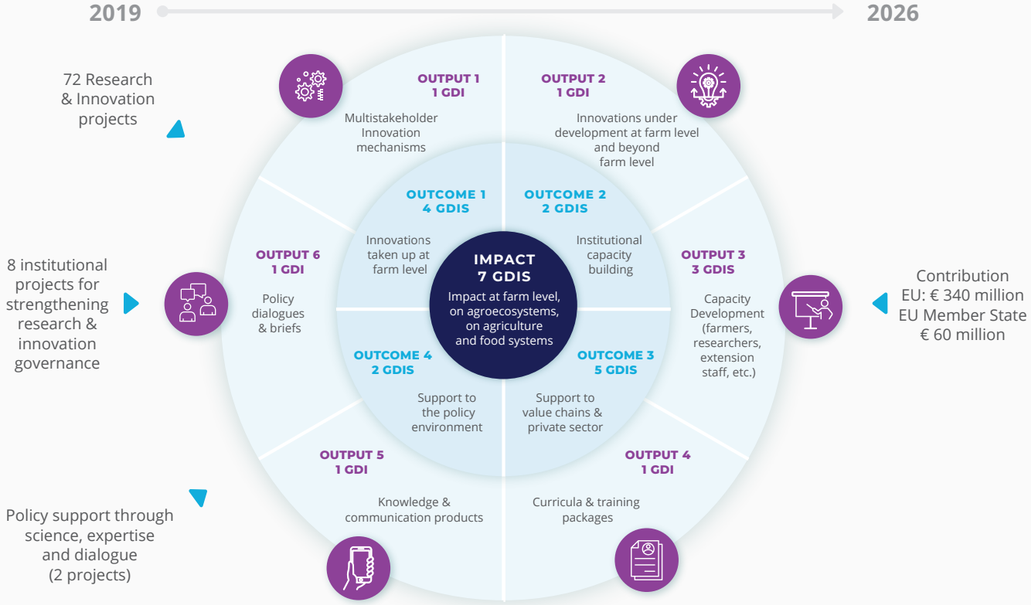
IMPACT PROSPECTS

"The DeSIRA initiative contributes to the climate-relevant, productive, and sustainable transformation of agriculture and food systems in low and middle-income countries"

The impact prospects of the DeSIRA initiative are difficult to frame because research and innovation processes in the agricultural sector take time. Besides, participatory R&I projects facilitate the co-creation of innovations but depend upon development and policy actors to scale and disseminate those innovations. Significant policy shifts also require time. The few projects (9) already claiming a significant contribution to impact usually include a strong training and technical assistance component or have the capacity to easily reach a large audience. The objective of gender equality has not been sufficiently mainstreamed in the design of many R&I projects, in spite of a few well-designed gender-focused initiatives. A few national organizations, empowered by DeSIRA projects, are now working to transform agricultural innovation systems. However, the most significant institutional impact is expected to emerge after the projects are completed. In conclusion, assessing impact at the level of the DeSIRA initiative requires a long-term perspective and specific methodologies to better measure programmatic impact, given the multiple small project-based interventions. That said, data collected for this annual global report indicate:

- **About 45,000 smallholder farmers claim socio-economic gains, a positive impact on agroecosystems and/or feel better equipped to cope with climate change-related shocks;**
- **31 organisations strengthened by DeSIRA claim to be taking steps to better contribute to the sustainable transformation of agri-food systems.**

DeSIRA : Development Smart Innovation through Research in Agriculture



DeSIRA Global Monitoring and Evaluation Framework

GDI= Global DeSIRA Indicator

Since 2019, the **DeSIRA** (Development Smart Innovation through Research in Agriculture) initiative has been fostering a productive, green, and inclusive transformation of agriculture and food systems in low and middle-income countries in Africa, Asia and Latin America. To this end, it mobilises participatory action-research, that values local knowledge, creating evidence to inform interventions and policymaking. DeSIRA encourages the adoption of climate-smart and agroecological innovations through multi-stakeholder collaboration, targeting and involving communities of farmers, NGOs, private sector actors, research institutions, extension services (etc.). It emphasizes inter-institutional South-South and South-North cooperation and capacity development at individual and organizational levels to promote innovation.

DeSIRA supports the development of policies and strategies for transforming food systems, with a focus on climate change adaptation, agroecological transition, and socio-economic gains. Improved smallholder farmer resilience, stronger institutional innovation capacities, and private sector engagement to enhance the uptake and scaling of agricultural innovations are part of its expected outcomes.

The **DeSIRA Global Monitoring and Evaluation Framework** aims to steer the DeSIRA initiative as well as to report and communicate on overall achievements, and on new approaches to agricultural R&I. It consists of a logical framework with the overall objective (impact), 4 outcomes, 6 outputs and 28 initiative-level indicators (Global DeSIRA Indicators).

The **Annual Global Report 2024** is the third annual report that builds on the Global Monitoring and Evaluation Framework. It covers the 2019-2023 period. It highlights how DeSIRA projects contribute to expected results at the initiative level. Data comes from projects annual progress reports and interviews with all implementing partners. Given the diversity of DeSIRA projects, each one contributes to some of the specific results, but not all.

Over the period of reference, 2,855 researchers -of which at least 743 were women- were involved in the implementation of DeSIRA, including 70% (1,992) from target countries. A total of 1,663 organisations played an active role in activities, including 368 research institutes, 404 Farmers' Organisations, 358 technical or territorial bodies (e.g. ministries, local authorities), 298 NGOs (25% of them international), 166 private sector entities, 63 formal and informal networks and 6 UN agencies.

82 projects including 72 Research and Innovation (R&I) projects, 8 institutional projects aimed at strengthening the capacities of regional, continental, and international organisations engaged in agricultural R&I and 2 projects in support of the DeSIRA initiative.

Funding: EU funding of € 340 million and € 60 million from EU Member States.

DeSIRA PARTNERSHIPS FOR INNOVATION

OUTPUT 1

"The mechanisms for inter-institutional cooperation and the joint design of climate-smart and agroecological innovations are developed"

Most projects have invested substantial efforts in creating or reinforcing multi-stakeholder innovation mechanisms and building the capacity of the stakeholders to participate effectively. These mechanisms facilitate interactions between actors and the joint design of climate-smart and agroecological innovations. They demonstrate the ability of research bodies to work with diverse actors at different levels. They also create the conditions for disseminating or scaling innovations, contributing to the successful impact of DeSIRA projects.

- **563 multi-stakeholder innovation mechanisms strengthened or created at international, regional, national, and local levels.**

TRANSITIONS Psii ("Agroecological Transitions for Building Resilient, Inclusive, Agricultural and Food Systems Program: Private Sector Incentives and Investments"), managed by IFAD and implemented by Alliance of Bioversity International and CIAT in Vietnam, Peru, and Ethiopia, *has supported 8 multi-stakeholder innovation mechanisms (3 in Ethiopia, 3 in Peru and 2 in Vietnam). All are focused on strategies, incentive mechanisms, business models and tools to support the transition to agroecology. In Peru, for instance, the project strengthened and expanded an existing collaboration between a private sector company and a cacao cooperative. Researchers from the Alliance Bioversity-CIAT worked with farmers and cooperative representatives, and involved a second private sector company to develop and implement a digital tool for tracing agroecological practices on cacao farms.*

OUTPUT 2

"Innovations linked to agri-food systems are developed and made available at farm and institutional levels"

Supporting innovation, including co-design and deployment, is central to DeSIRA. All projects are strongly committed to innovation processes, testing and putting into use diverse products, technologies, practices, production systems, services, decision-making tools (etc.). The climate-relevant approach is explicit in most processes. Besides, about two-thirds of R&I projects promote agroecological innovations, though their commitment to agroecological principles varies. Innovations for use by institutions or private sector entities play an increasing role in strengthening partner organisations, supporting small enterprises, and fostering inter-institutional arrangements for landscape and natural resource management.

- **1,577 climate-smart or agroecological innovations in progress or developed for use by farmers;**
- **368 innovations in progress or developed for use by institutions or private sector entities.**

OUTPUT 3

"Farmers are reached by research and innovation initiatives and individual capacities are developed beyond farm level, including at institutional level"

DeSIRA continues to make solid progress in reaching smallholder farmers, facilitating access to technical and scientific knowledge and supporting them in sharing knowledge and experience with their peers. Three R&I projects with a strong development focus account for half the farmers reached since DeSIRA's inception. A quarter of R&I projects reached fewer than 500 farmers, as they primarily focus on generating knowledge and co-designing innovations, while supporting other actors in scaling efforts. Implementing partners note improved capacities of researchers in partner countries. Backed by European and African institutions, DeSIRA supports many postgraduate students, most of them from beneficiary countries in Africa. These are professionals seeking higher degrees or younger individuals involved in the implementation of activities while pursuing academic studies.

- **At least 410,000 smallholder farmers reached;**
- **3,600 researchers whose capacity has been strengthened, including at least 705 women; this includes most researchers involved in the implementation of DeSIRA;**
- **34,000 technical/development staff whose capacity has been strengthened;**
- **681 Master's students supported, including 266 women; 560 from beneficiary countries;**
- **314 PhD students supported, including 107 women; 288 from beneficiary countries.**

OUTPUT 4

"Education and training programmes responsive to capacity development needs for agricultural innovation at national level are strengthened"

The instrumental role of education in building individual capacities is reflected in the significant number of projects with plans to develop or improve curricula or education programmes, typically building on R&I results. It underlines the potential value of DeSIRA in an area which is not an explicit objective of the initiative. Updating curricula commonly involves incorporating training topics such as climate adaptation and mitigation, along with agroecology and knowledge management.

- **116 curricula or training packages upgraded or developed.**

OUTPUT 5

"Science-based knowledge and evidence are generated and made available to inform research for innovation in agriculture, institutional cooperation and the dissemination of new climate-smart and agroecological solutions"

The ever-increasing production of science-based knowledge and evidence for a diversity of actors highlights the full deployment of the DeSIRA initiative. More knowledge products (technical reports, databases, guidance manuals, theses, scientific publications) are expected, as many projects have been extended to allow for the completion of R&I processes.

- **At least 2,091 communication products developed for all audiences;**
- **1,661 knowledge products developed, including 193 scientific publications.**

OUTPUT 6

"Science-based policy briefs are produced and dialogues on agriculture and food policy development and reform are organized"

The level of policy engagement varies across DeSIRA projects: 60 have a specific policy objective; 9 are engaged in policy activities with no specific policy objective; 10 have no policy activities or objective. Driven by the production of knowledge and seizing opportunities to participate in policy reform and/or development, most projects are now involved in policy dialogue to improve the enabling environment for the scaling of the nascent innovations (technical or institutional). The diversity of the topics covered by the policy outputs of R&I projects reflects the diversity of innovations in progress. Agroecology is a growing policy topic. The policy topics of institutional projects focus on climate-smart agriculture and knowledge management.

- **140 policy dialogues organised, and 133 policy documents produced.**

MAS ("Modelos Agroecológicos Sostenibles"), implemented by the FAO in Cuba, *develops and implements an integrated agricultural knowledge management system, with a focus on agroecology. In collaboration with the National Office of Statistics and Information, the project has developed a set of 12 primary indicators to measure, monitor and track food production in local food systems, in the context of the law. These indicators, yet to be officially approved as of November 2023, are considered "reference indicators". They will be used to monitor the implementation of the Cuban Food Sovereignty and Food and Nutritional Security Law (SSAN Law) passed in 2022.*

OUTCOME 1

"The capacity and the resilience of smallholder farmers improve as they take up new climate-smart or agroecological products, technologies, models or services"

The transformation of outputs into changes at farm level is expected to be reflected in the capacity and resilience of smallholder farmers as they take up climate-smart or agroecological innovations. Most R&I projects are not designed to maximize reach, and some do not report on the use or uptake of innovations. Nevertheless, the number of farmers implementing these innovations continues to grow. Dissemination and scaling strategies are highly relevant to DeSIRA. They are key to engaging actors in the innovation journey and to fostering an enabling environment. While R&I projects do not lead in scaling innovation, 50 of them (70%) now have a strategy and play a key role in initiating scaling processes, by contributing to knowledge sharing, advocacy based on evidence and capacity building activities.

- **621 innovations already taken up by smallholder farmers;**
- **At least 265,000 smallholder farmers have taken up at least one innovation.**

SyRIMAO ("Regional Innovative System for the Control of Fruit Flies in West Africa"), managed by Agence Française de Développement (AFD) and implemented by the Economic Community of West African States (ECOWAS) in 15 countries*, has developed eco-friendly mass trapping technologies to protect mangoes from the fruit fly. An innovative model of a contract between producers and exporters guarantees access to pest control products in return for mangoes. As of December 2023, it was in place in Mali, Côte d'Ivoire and Burkina Faso. Besides, an improved surveillance system is operational in 14 countries of the regional community. During the 2023 campaign, it benefitted at least 60,000 mango farmers: 106,132 ha of plantations were monitored, 5.4% of which were deemed infested, of which 67% were subsequently treated.*

OUTCOME 2

"Innovation capacities of research, technical and development institutions as well as capacities of farmers' organisations to support agriculture innovation processes are strengthened"

A majority of R&I projects (86%) strengthen the capacities of farmers' organisations, NGOs or advisory services, which is key for co-innovating and scaling innovation. Almost all projects strengthen researchers' capacities in partner countries. Institutional projects focus on strengthening the organisations they target and report positive changes. Some R&I projects also contribute to the institutional capacity of organisations involved in their implementation, including research organisations in partner countries. However, most implementing partners of R&I projects lack a methodology to measure these changes, making attribution and reporting on results difficult.

- **1,440 organisations in the process of strengthening their capacities, including 607 farmers' organisations, 223 national research entities, 157 local NGOs and community-based organisations, in addition to 278 national or local technical/development organisations (extension services, ministries, local authorities, etc.).**

OUTCOME 3

"Private sector capacities and value chains of agri-food systems are strengthened"

While R&I projects mainly focus on sustainable production or natural resource management, their contribution to value chain development and private sector engagement is increasing. Forty projects (55%) now target downstream (mainly small enterprises in processing and marketing of food and other consumer products) and upstream actors (mainly input providers, energy providers and private advisory services). Support approaches are either holistic, considering the entire value chain, or are more narrowly targeted at specific segments of the value chains.

- **1,357 agriculture and food-related micro, small or medium enterprises strengthened or created;**
- **165 value chains supported in 45 countries.**

ACCESS ("Accelerate innovation dynamics in the agricultural sector through the strengthening of Innovation Support Services") implemented by CIRAD in Burkina Faso *introduces new innovation support approaches jointly implemented by public research organizations and private incubators, targeting Multi-actor Innovation Partnerships (PIMs) and innovative micro and small enterprises. For the latter, the approach focuses on individual support, guided by a coach with upgraded capacities to connect entrepreneurs with PIMs and with innovation scaling ecosystems beyond country boundaries. The project has facilitated innovation processes for consumer products, agricultural inputs, and services. For PIMs, the approach is supported by innovation facilitators, and ensures the continuation or completion of existing innovation projects, particularly in the rice and milk value chains.*