



Advisory Services for Resilient Agri-Food Systems

The DeSIRA Global Monitoring and Evaluation Framework

ASRAFS MISSION 67

**Annual Global Report 2025 of the EU-funded initiative
“Development Smart Innovation
through Research in Agriculture” (DeSIRA)**

FINAL REPORT

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In cooperation with



Advisory Service for Resilient Agri-Food Systems

MISSION 67

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“Development Smart Innovation through Research
in Agriculture” (DeSIRA)**

FINAL REPORT

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TABLE OF CONTENTS

1	EXECUTIVE SUMMARY	1
2	BACKGROUND	6
2.1	THE THREE PILLARS OF THE DeSIRA INITIATIVE	6
2.2	THE THEORY OF CHANGE OF THE DeSIRA INITIATIVE	7
3	OVERVIEW OF THE METHODOLOGY UNDERLYING THE GLOBAL MONITORING AND EVALUATION FRAMEWORK	8
4	IMPLEMENTATION (INPUT-RELATED DATA): RESEARCHERS AND ORGANISATIONS INVOLVED IN THE IMPLEMENTATION OF THE DeSIRA INITIATIVE	12
5	PROGRESS TOWARDS OUTPUTS	16
5.1	OUTPUT 1 - THE MECHANISMS FOR INTER-INSTITUTIONAL COOPERATION AND THE JOINT DESIGN OF CLIMATE-SMART AND AGROECOLOGICAL INNOVATIONS ARE DEVELOPED	16
5.2	OUTPUT 2 - INNOVATIONS LINKED TO AGRI-FOOD SYSTEMS ARE DEVELOPED AND MADE AVAILABLE AT FARM AND INSTITUTIONAL LEVELS	21
5.3	OUTPUT 3 - FARMERS ARE REACHED BY RESEARCH AND INNOVATION INITIATIVES AND INDIVIDUAL CAPACITIES ARE DEVELOPED BEYOND FARM LEVEL, INCLUDING AT INSTITUTIONAL LEVEL	28
5.4	OUTPUT 4 - EDUCATION AND TRAINING PROGRAMMES RESPONSIVE TO CAPACITY DEVELOPMENT NEEDS FOR AGRICULTURAL INNOVATION AT NATIONAL LEVEL ARE STRENGTHENED	34
5.5	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	37
5.6	OUTPUT 6 - SCIENCE-BASED POLICY BRIEFS ARE PRODUCED AND DIALOGUES ON AGRICULTURE AND FOOD POLICY DEVELOPMENT AND REFORM ARE ORGANIZED	41
6	PROGRESS TOWARDS OUTCOMES	46
6.1	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	46
6.2	OUTCOME 2 – INNOVATION CAPACITIES OF RESEARCH, TECHNICAL AND DEVELOPMENT INSTITUTIONS AS WELL AS CAPACITIES OF FARMERS' ORGANISATIONS TO SUPPORT AGRICULTURE INNOVATION PROCESSES ARE STRENGTHENED	52
6.3	OUTCOME 3 – “PRIVATE SECTOR CAPACITIES AND VALUE CHAINS OF AGRI-FOOD SYSTEMS ARE STRENGTHENED”	59
6.4	OUTCOME 4 – THE AGRICULTURE AND FOOD SYSTEMS POLICY ENVIRONMENT IS IMPROVED AT NATIONAL OR INTERNATIONAL LEVEL	63
7	IMPACT PROSPECTS	68
8	CONCLUSIONS	75
9	ANNEXES	78

LIST OF ANNEXES

ANNEX 1	List of DeSIRA projects included in the Annual Global Report 2025	78
ANNEX 2	Overview of projects' status and implementation periods covered by the Annual Global Report (AGR) 2025, for each DeSIRA project	78

LIST OF TABLES

Table 1: Researchers and Organisations involved in the implementation of the DeSIRA Initiative over the reporting period 2019-2024	15
Table 2: List of global DeSIRA Indicators attached to Output 1	16
Table 3: Summary of cumulative values 2019-2024 for GDIs attached to Output 1	20
Table 4: List of global DeSIRA Indicators attached to Output 2	21
Table 5: Summary of cumulative values 2019-2024 for GDIs attached to Output 2	27
Table 6: List of global DeSIRA Indicators attached to Output 3	28
Table 7: Summary of cumulative values 2019-2024 for GDIs attached to Output 3	33
Table 8: List of global DeSIRA Indicators attached to Output 4	34
Table 9: Summary of cumulative values 2019-2024 for GDIs attached to Output 4	36
Table 10: List of global DeSIRA Indicators attached to Output 5	37
Table 11: Summary of cumulative values 2019-2024 for GDIs attached to Output 5	40
Table 12: List of Global DeSIRA Indicators attached to Output 6	41
Table 13: Summary of cumulative values 2019-2024 for GDIs attached to Output 6	45
Table 14: List of global DeSIRA Indicators attached to Outcome 1	46
Table 15: Summary of cumulative values 2019-2024 for GDIs to Outcome 1	51
Table 16: List of global DeSIRA Indicators attached to Outcome 2	52
Table 17: Summary of cumulative values 2019-2024 for GDIs attached to Outcome 2	58
Table 18: List of global DeSIRA Indicators attached to Outcome 3	59
Table 19: Summary of cumulative values 2019-2024 for GDIs attached to Outcome 3	62
Table 20: List of global DeSIRA Indicators attached to Outcome 4	63
Table 21: Summary of cumulative values 2019-2024 for GDIs attached to Outcome 4	67
Table 22: List of global DeSIRA Indicators attached to impact prospects	68
Table 23: Pillar I – Conversion ratios along the result chain	69
Table 24: Summary of cumulative values 2019-2024 for GDIs attached to impact prospects	74

LIST OF FIGURES

Figure 1: The Result Chain of the DeSIRA Initiative	10
Figure 2: Location of DeSIRA projects	11
Figure 3: Researchers involved in implementation	12
Figure 4: Categories of organisations involved in the implementation of the DeSIRA initiative	14
Figure 5: Categories of innovations developed across Pillar I	22
Figure 6: Distribution of DeSIRA Projects by the Number of Farmers Reached	29
Figure 7: Post graduate students in DeSIRA projects	31
Figure 8: Number of knowledge and communication products	38

Figure 9: Categories of DeSIRA projects based on the level of policy engagement.....41

Figure 10: Categories of organisations strengthened by DeSIRA projects53

LIST OF ABBREVIATIONS

AE	AgroEcology
AEAS	Agricultural Extension and Advisory Services
AFAAS	African Forum for Agricultural Advisory Services
AFD	Agence Française de Développement
AGR	Annual Global Report
AIS	Agricultural Innovation Systems
AICS	Agenzia Italiana per la Cooperazione allo Sviluppo
AKIS	Agricultural Knowledge Innovation System
AR&EO	Agricultural Research and Extension Organisations
ASARECA	Association for Strengthening Agricultural Research in Eastern and Central Africa
CAADP	Comprehensive Africa Agriculture Development Programme
CAADP AR&EO	Agricultural Research and Extension Organisations
CATIE	Centro Agronómico Tropical de Investigación y Enseñanza
CCARDESA	Centre for Coordination of Agricultural Research and Development for Southern Africa
CD	Capacity Development
CDAIS	Capacity Development for Agricultural Innovation Systems
CGIAR	(formerly) Consultative Group on International Agricultural Research
CIAT	International Centre for Tropical Agriculture
CID	(EU) Commission Implementing Decision
CIHEAM-IAM	Centre International de Hautes Etudes Agronomiques Méditerranéennes - Mediterranean Agronomic Institute of Bari
CIP	International Potato Centre
CIRAD	Centre de Coopération Internationale en Recherche Agronomique pour le Développement
CORAF	Conférence des Responsables de Recherche Agronomique Africains (or WECARD)
CC	Climate Change
CSA	Climate Smart Agriculture
DARS	Department of Agricultural Research Services (Malawi)
DeSIRA	Development Smart Innovation through Research in Agriculture
DeSIRA LIFT	Leveraging the DeSIRA Initiative for Agri-Food Systems Transformation
DG INTPA	Directorate-General for International Partnerships of the European Commission
ECOWAS (CEDEAO)	Economic Community of West African States
ENABEL	Belgian Development Agency

FAO	Food and Agriculture Organisation
FARA	Forum for Agricultural Research in Africa
FO	Farmers' Organisation
FoN	Friends of the Nation
GDI	Global DeSIRA Indicator
GFAR	Global Forum on Agricultural Research and Innovation
GIZ	Gesellschaft für Internationale Zusammenarbeit
GM&EF	Global Monitoring and Evaluation Framework (of the DeSIRA initiative)
GRET	Groupe de Recherche et d'Echange Technologique
ICRISAT	International Crops Research Institute for the Semi-Arid Tropics
IFAD	International Fund for Agricultural Development
IICA	Inter-American Institute for Cooperation in Agriculture
ILRI	International Livestock Research Institute
IICA	Instituto Interamericano de Cooperación para la Agricultura
IUCN	International Union for Conservation of Nature
KM	Knowledge Management
LFM	Logical Framework Matrix (or Logframe Matrix)
M&E	Monitoring & Evaluation
MEL	Monitoring, Evaluation and Learning
MSME	Micro, Small & Medium Enterprise
MSIP	Multi-Stakeholder Innovation Platform
NARI	National Agricultural Research Institute
NARS	National Agricultural Research System
NUS	Neglected and Underutilized Species
P-I / P-II	Pillar I / Pillar II (DeSIRA initiative)
R&I	Research and Innovation
SEBRAE/PA	Serviço de Apoio às Micro e Pequenas Empresas do Estado do Pará
SNV	Netherlands Development Organisation)
STI	Science, Technology and Innovation
TAP	Tropical Agricultural Platform
TEAGASC	Agriculture and Food Development Authority (Ireland)
UOM	University of Mauritius
WECARD	West & Central African Council for Agricultural Research & Development
WUR	Wageningen University & Research

1 Executive summary

The DeSIRA initiative contributes to the climate-relevant, productive and sustainable transformation of agriculture and food systems in low and middle-income countries in Africa, Asia and Latin America. It supports Research and Innovation (R&I) projects and strengthens research capacities and governance, involving key actors at the national, regional, and international levels. It comprises 82 projects, with an estimated EC contribution of € 340 million, and € 60 million from EU Member States.

The Directorate-General for International Partnerships of the European Commission (DG INTPA) has developed a Global Monitoring and Evaluation Framework (GM&EF) for the DeSIRA initiative. The GM&EF is a methodological tool to identify and inform initiative-level Global DeSIRA Indicators (GDIs). Its purpose is to steer and monitor the DeSIRA initiative, in order to determine the extent to which its overarching objectives are being achieved, and to report and communicate effectively on new approaches to agricultural R&I. The GM&EF comprises 6 outputs, 4 outcomes and one overall objective (impact), and 28 GDIs. It is not intended for use at project level, and it is not designed to reflect the diversity of projects or the complexity of innovation processes at project level. Given the diversity of DeSIRA projects, each project contributes to certain global (initiative-level) results, but not to all, and the contribution of some projects weighs more heavily on quantitative values than others.

Building on the GM&EF, progress reports and interviews with implementing partners, an Annual Global Report (AGR) has been produced annually since 2022. AGR 2025 is based on the results of 79 DeSIRA projects that had reached at least two years of implementation as of December 2024. This includes 72 R&I projects (Pillar I) and 7 institutional projects focused on strengthening the institutional capacities of regional and international organisations engaged in agricultural research and innovation (Pillar II). R&I projects are categorized into Group 1 (22 projects from the 2018 Commission Implementing Decision), Group 2 (17 projects mostly from the 2019 Decision) and Group 3 (33 projects from the 2020 Decision). AGR 2025 covers the implementation period 2019-2024 and GDIs provide cumulative values. The implementation of 32 projects had been completed at the time of data collection for AGR 2025, including 30 R&I projects and 2 Pillar II projects.

Reflecting the mature stage of the DeSIRA initiative, the cumulative number of researchers involved in implementation since the start (3,009 researchers including at least 777 women) has remained broadly stable, with a modest increase of 5.7% since AGR 2024. Among them, 2,096 (70%) are from target countries. In comparison, the number of organisations (2,005) that have played an active role in the DeSIRA initiative has continued to increase (+26%), mostly owing to the involvement of more Farmers' Organisations (FOs) and private sector entities (respectively +59% and +43%). This suggests an expansion of partnerships aimed at facilitating the dissemination of innovations. The categories of organisations are broken down as follows: 400 research institutes, 563 FOs, 398 technical or territorial organisations (e.g., ministries, local authorities), 6 UN agencies, 343 NGOs (23% of which are international NGOs), 231 private sector entities, and 64 networks, fora or platforms.

Output 1 focuses on Multi-Stakeholder mechanisms such as Innovation Platforms (MSIPs). Embedded in the DeSIRA initiative, this approach enables research bodies to engage with a broad range of actors (e.g. FOs, NGOs, extension services). The scope and level of intervention of MSIPs vary widely across projects. At national level, they mainly support coordination, information sharing and strategy validation, while at local level they foster stakeholder involvement and interaction and the co-creation of innovations. Project partners increasingly see these mechanisms not merely as project processes, but as a strategic dimension of implementation. Under Pillar I, 64 R&I projects have supported a cumulative total of 767 MSIPs (33 regional/international, 108 national and 626 local/subnational). While the number of projects reporting such mechanisms remains stable, the overall number of MSIPs has increased significantly (+33%), mostly at local level. Pre-existing mechanisms generally show stronger continuity prospects than those established from scratch. Given their crucial

role in scaling innovations, projects have continued reinforcing them. The institutional projects (Pillar II) have reported 354 MSIPs (36 regional/international, 315 national, and 3 subnational), with 5 projects targeting Agricultural Research and Extension Organisations (AR&EOs) predominantly accounting for these numbers. The sharp increase in the number of MSIPs at national level (315, up from 73 in AGR 2024) is largely driven by one of these projects, which contributes to a continental programme supporting innovation platforms across value chains in Africa. Pillar II mechanisms mainly emphasise policy dialogue, institutional coordination and capacity development with a focus on Climate Smart Agriculture (CSA) and Knowledge Management (KM).

Output 2 focuses on the development and availability of innovations at farm level and beyond farm level. Support to innovation, including participatory co-design and deployment, remains a core feature of Pillar I projects. Almost all R&I projects have reported innovations at both levels, with 1,992 innovations intended for farm-level use (+27% compared to AGR 2024). This figure includes innovations that are fully developed and validated, still under development, or that did not pass the testing stage. The diversity of farm level innovations remains large (products, technologies, agricultural practices, farming systems, services and decision-making tools, etc.), with crop varieties accounting for about half of the total value (at least 1,000 varieties tested). Many projects introduce known innovations to new contexts, often supported by global research institutions, while others build on previous innovation efforts to bring them to maturity. A gradual shift is observed across project groups: while older projects (Group 1 and Group 2) remain largely structured around individual technologies or practices, more recent ones (Group 3) increasingly rely on integrated innovation models and co-develop broader agroecology strategies at system level. Climate relevance is explicit in most projects, and 44 projects promote agroecological innovations, though their level of alignment with agroecological principles varies widely. Most R&I projects (68 out of 72) also contribute to innovations beyond farm level (459, +25%), including institutional and private-sector-oriented innovations. This trend, particularly visible in Group 2 and Group 3, suggests increasing engagement of actors supporting farmers and value chains, and points to a progressive strengthening of innovation support functions at local and national levels. Institutional Pillar II projects are not innovation-driven but reported the development of conceptual tools and coordination mechanisms aimed at improving the governance of agricultural innovation systems.

Output 3 examines how R&I initiatives reach smallholder farmers and develop capacities beyond farm level. DeSIRA expands access of smallholder farmers to technical and scientific knowledge through trainings, demonstrations and trials. A cumulative total of nearly 695,000 smallholder farmers (including at least 116,000 female farmers) has been directly reached by 64 Pillar I projects, representing a 69% increase since the last reporting period. Five projects account for 58% of this total. Reported figures remain highly conservative due to monitoring limitations, risks of double counting and incomplete sex-disaggregated data. Growth is largely driven by the most recent projects (Group 3), while older projects continue to expand outreach at a slower pace. Pillar II remains marginal at farm level. Most projects reach relatively small to medium numbers of farmers (32 projects reached fewer than 2,000), reflecting their primary focus on co-design of innovations and knowledge generation rather than large-scale deployment. Many projects train lead farmers and strengthen FOs, NGOs and advisory services to support peer learning and downstream dissemination. A limited number of projects with explicit development objectives reach substantially larger farmer populations. Beyond farmers, DeSIRA has strengthened the capacities of 3,869 researchers (+24%), with women representing no less than 25% of this value. Over 40,000 technical or development staff have also been supported. Not all projects have dedicated plans for researchers, and capacity changes are rarely measured. Nevertheless, partners report positive individual progress through project involvement. Under Pillar II, researcher capacity development focuses on knowledge creation and policy influence, while technical staff training prioritises operational delivery and large-scale dissemination. Supported by over 200 research and education institutions, Pillar I projects have backed 873 Master's and 344 PhD students, about one third of whom are women. Growth in student support is mainly driven by newer projects, and most students, who play a crucial role in project implementation, originate from beneficiary countries, particularly in Africa.

Output 4 highlights DeSIRA's contribution to education through the development or upgrading of curricula and training packages. Although education is not an explicit objective of the initiative, its role in strengthening long-term capacities is increasingly visible. A total of 41 projects (including 37 Pillar I and 4 Pillar II, with half from Group 3 projects) contribute to this output, representing a 46% increase since the last reporting period. For Pillar I, the cumulative number of finalized and reusable educational products has grown from 55 to 117. Pillar II contributes 18 products. Education-related outputs, including curriculum updates, often emerge as by-products of research activities and target diverse audiences, integrating themes such as climate change adaptation and mitigation, agroecology and knowledge management.

Output 5 highlights the continued expansion of the DeSIRA initiative through the increasing production of science-based knowledge and evidence for diverse audiences. Knowledge and communication products are reported only once finalized and accessible for external use, and uneven reporting practices across projects mean consolidated figures remain conservative. Over the reporting period, all categories have recorded strong growth, reflecting both project maturity and expanded coverage across reporting years. This includes communication products (3474, +70%), technical documents (1903, +86%), guidance manuals (578, +96%), databases (95, +46%) as well as peer-reviewed scientific publications (404, +113%), which recorded the strongest growth, category-wise. The surge in scientific publications reflects the contribution of 344 PhD students associated with DeSIRA projects. As several projects have now ended, additional scientific outputs will continue to emerge beyond their final reporting period and may not be fully captured in the Global M&E Framework. Key challenges remain in translating research into accessible knowledge products for diverse audiences and ensuring sustainable knowledge management systems for present and future dissemination.

Output 6 focuses on policy engagement. Most DeSIRA projects (70 out of 79) have planned policy activities and/or objectives. Over the reporting period, R&I projects have organized 135 policy dialogues and produced 170 policy products, mostly briefs, representing a substantial increase compared to AGR 2024 (+55% and +93% respectively). Policy activities under Pillar I remain largely process-oriented, relying on continuous interactions and dialogue, and have taken place at multiple levels (local, national, regional). Projects benefitting from a no-cost extension have been able to further consolidate their policy engagement. Among the older projects, all but 2 have delivered policy outputs. This reflects both growing knowledge production, which underpins policy engagement, and the need to scale solutions through an enabling environment. However, policy results are often implicit and under-reported. Although capacity gaps in policy engagement persist, there is evidence of both internal and external support to strengthen policy-related skills, underscoring the importance of a strong science-policy interface to support policy innovation and inform policy processes. Under Pillar II, 6 projects have reported policy results, increasing outputs to 60 policy briefs and 69 dialogues (+15% and +28%). Engagement is both at regional and national levels, with the former supporting the latter, and continues to focus on CSA and KM, while agroecology is becoming more visible as a policy theme.

Outcome 1 captures the transformation of outputs into changes at farm level, focusing on the capacity and resilience of smallholder farmers as they take up new products, technologies, models or services. Since the start of the DeSIRA initiative, farmers have taken up an estimated 856 climate-smart or agroecological innovations (734 production-oriented and 122 enabling innovations), representing 43% of all innovations intended for farm-level use (1,992). This ratio has steadily increased from 21% in AGR 2023 and 34% in AGR 2024, reflecting progress across all project groups and particularly strong advances in the recent projects (Group 3). Overall, 367,977 smallholder farmers are reported as using at least one co-developed innovation (+39% since AGR 2024), although uptake does not yet imply confirmed long-term adoption. While four large-scale projects account for 59% of this figure, the upward trend is observed across most Pillar I projects. Among projects reporting sex-disaggregated data, women represent approximately 25% of farmers implementing innovations, although reporting remains incomplete. Dissemination and scaling have gained momentum, with 64 projects reporting a scaling strategy, up from 51 in AGR 2024. However, strategies are not always formally

documented. No-cost extensions granted to 50 projects have provided critical time to consolidate innovation processes, evaluate uptake and strengthen dissemination and scaling efforts.

Outcome 2 focuses on strengthening institutional and innovation capacity at the organisation level.

While this is the core objective of Pillar II, most R&I projects also contribute to institutional changes within partner organisations, beyond strengthening individual capacities. Overall, the DeSIRA initiative has contributed to enhancing the capacities of 1,748 organisations (+21% compared to AGR 2024). This includes 699 FOs (40%), 384 national technical bodies (22%), 268 national research entities (15%), as well as NGOs and regional or international organisations. Implementing partners report improvements in methodological approaches, stakeholder engagement and operational research capacities within national research entities. They also report strategic changes within agricultural extension and advisory services. However, for Pillar I projects, institutional capacity development is largely implicit and rarely measured, making attribution challenging. Pillar II has continued to build capacity in AR&EOs. Annual assessments confirm structural and operational progress, including strengthened interoperability, coordinated MEL systems and enhanced capacity to mobilise resources and support regional and national members, although downstream effects remain only partially captured.

Outcome 3 addresses support to the private sector and food value chains. While most R&I projects focus primarily on farm-level innovation, an increasing number support upstream and downstream actors to facilitate the deployment and scaling of innovations. Over the reporting period, 49 Pillar I projects have supported 219 value chains in 45 countries (+31%). They have strengthened or created 2,258 agriculture and food-related MSMEs, including 1,378 from a single Latin American project. Among these, 565 MSMEs have adopted at least one innovation, and a growing share of reported innovations are implemented and in use rather than remaining at prototype stage. Beyond environmentally-friendly technical solutions or value-added products, projects increasingly promote business-oriented innovations, including new marketing models, contractual arrangements and financing mechanisms aiming to improve the equity and efficiency of transactions between value chain actors. Approaches to value chain support remain diverse, ranging from holistic system-wide strategies to targeted interventions focused on specific segments. Under Pillar II, private sector engagement occurs mainly through their participation in national networks, training activities and policy dialogue.

Outcome 4 examines the extent to which projects are able to transform policy-related knowledge products into tangible contributions to policies, strategies or plans. Over the reporting period, among the projects with explicit policy objectives, 47 projects have reported tangible policy results. Partner organisations have participated in and contributed inputs to 232 policy processes (including 19 reported by Pillar II projects) mainly at national and subnational levels, with a view to enabling the environment for scaling the innovations and strengthening agricultural and food systems in 41 countries. The policy engagement has been sustained across all projects, with older Pillar I projects reporting a 23 % increase and the most recent ones a 40 % increase in the number of policy outcomes since AGR 2024. The contribution of DeSIRA is broad, spanning national strategies, legal frameworks and sectoral plans for agroecology, extension systems, food systems transformation. However, policy outcomes achieved by partner organisations remain unevenly documented, and systematic reporting on policy influence is limited, making it difficult for the GM&EF to fully capture DeSIRA's contribution. A learning review commissioned by DeSIRA LIFT has sought to deepen understanding of policy-level impacts, and efforts continue to strengthen the science-policy interface among project partners.

Impact prospects remain difficult to frame at the scale of the initiative due to project diversity and the time required for the effects of innovation processes to materialise. Moreover, participatory R&I initiatives facilitate co-creation but depend on development and policy actors to scale and disseminate those innovations. Among the 47 projects intending to measure farm-level impact, 29 have reported positive results, including several projects which have come to completion and have assessed their impact on target groups. A total of 96,796 smallholder farmers have reported socio-economic gains and improved resilience, more than double the value reported in AGR 2024, with 60% of this figure concentrated in three projects combining

strong development components or broad territorial/value chain coverage. While outreach has expanded substantially since AGR 2024, the improvement in the overall reach-to-benefit ratio (number of farmers claiming benefits / number of farmers reached) is modest (14%, up from 11%). A total of 32 R&I projects reported improved agroecosystems, promising future economic and resilience gains at farm level. Wider impact beyond direct target groups appears potentially significant but is mostly based on projected and often hypothetical dissemination pathways (partnerships, communication campaigns, extension services, peer-to-peer learning) rather than documented spill-over effects. Gender-related impact shows progress, with a growing number of projects documenting concrete changes, yet many initiatives remain focused on participation rather than measurable shifts in women's status or decision-making power. In line with the overall objective of the DeSIRA initiative, several projects have demonstrated their capacity to trigger changes in agriculture and food systems. Among the organisations they have supported, 98 have started translating institutional strengthening into systemic impact. This includes 76 organisations supported under Pillar I, up from 15 in AGR 2024. Policy-level impact remains less tangible, as structural shifts, particularly toward agroecological models, require longer timeframes and dedicated methodologies to assess sustained effects at programme level.

2 Background

The objective of the DeSIRA initiative (Development Smart Innovation through Research in Agriculture) is to contribute to the climate-relevant, productive and sustainable transformation of agriculture and food systems in low and middle-income countries in Africa, Asia and Latin America. The initiative aims at supporting research and innovation projects and strengthening research capacities and governance, involving key actors at the national and international levels. It was launched in 2017 at the One Planet Summit and has been operationalised through three Commission Implementing Decisions (CID 2018, 2019 and 2020). The first contracts were signed in 2019. The total number of projects to date is 82 (including 2 support projects), with an estimated EC contribution of 340 million Euros, and 60 million Euros of EU Member State funds. Information on the DeSIRA initiative and projects already under implementation can be found at <https://europa.eu/capacity4dev/desira>.

2.1 The three pillars of the DeSIRA Initiative

There are three categories of DeSIRA projects clustered under “Pillars”.

Pillar I - Research and innovation in agricultural and food systems (Source INTPA/F3)

Pillar I encompasses projects focused on research and innovation in agricultural and food systems. These projects target a variety of production systems (crop and animal production, agroforestry) and natural resources (forest, pasture, water, soil), and associated services (innovation support services, advisory services), many of them with a value chain perspective and/or agroecological approach, in the context of climate change. In line with the underlying principles of the DeSIRA initiative, these projects have common characteristics: they strive to address major economic, social and environment-related challenges with a view to promoting Food and Nutrition Security and Sustainable Agriculture (FNSSA); they design and promote innovation processes via a multi-stakeholder approach that builds on science and brings together communities of farmers, the private sector, research institutions, technical and development bodies and grassroots organisations; they aim at increasing knowledge, changing behaviours, skills, and technical and management practices, and contributing to policy making.

Pillar II - Research infrastructure conducive to innovation (Source INTPA/F3)

Pillar II interventions focus on strengthening the capacities of regional and international organisations that play a key role in research and advisory services, especially in Africa: Conférence des Responsables de Recherche Agronomique Africains (CORAF), Association for Strengthening Agricultural Research in Eastern and Central Africa (ASARECA), Centre for Coordination of Agricultural Research and Development for Southern Africa (CCARDESA), Forum for Agricultural Research in Africa (FARA), African Forum for Agricultural Advisory Services (AFAAS). They contribute to the capitalization of experiences related to innovation systems (the Global Forum on Agricultural Research & Innovation-or GFAiR-) or to building research capacities through the training and mentoring of young African researchers (One Planet Fellowships). Each project is designed and monitored with an impact pathway approach for research institutions based on a plausible theory of change with a climate change perspective.

Pillar III - Knowledge and evidence to feed policy design (Source DeSIRA LIFT)

Pillar III is comprised of two interventions, the DeSIRA Global Monitoring and Evaluation Framework (GM&EF) and DeSIRA LIFT “Leveraging the DeSIRA Initiative for Agri-Food Systems Transformation”. DeSIRA LIFT (ended in June 2025) provided services to DeSIRA Initiative’s implementers under three service areas:

Service Area 1 - Support to the country-based DeSIRA projects to enhance their impact by promoting Agricultural Innovation Systems (AIS) thinking and the use of developmental evaluation approaches.

Service Area 2 - Support to African apex organisations for research on agricultural development, extension and higher education, and add value to the global initiatives TAP (Tropical Agriculture Platform) and GFAR.

Service Area 3 - Support to co-create knowledge and evidence to feed policy dialogues and programming on agri-food systems in the Global South.

2.2 The theory of change of the DeSIRA Initiative

Responsible innovations for the productive, sustainable and inclusive transformation of food systems in low and middle-income countries must build on both science and local knowledge. The theory of change of the DeSIRA initiative postulates that by mobilising academic research and participatory action research, and by valuing local knowledge, evidence is generated to inform future interventions and policies, and to co-design and disseminate new climate-smart and agroecological solutions that will be taken up by farmers and organisations. Strong partnerships between multiple stakeholders, the openness of farmers to new ways of working, engagement by the private sector, and interactions with policy makers are the core assumptions required to translate this knowledge into action and to support innovation. Multi-stakeholder approaches developed by DeSIRA projects bring together communities and farmer organisations, grassroots organisations, NGOs, private sector actors, research institutions, and technical and development bodies in pursuit of the common goal of Sustainable Aquatic and Agri-food Systems (SAAFS). The initiative draws on mechanisms for inter-institutional cooperation supported by European, international, and national expertise, that underpin the joint design and development of climate-smart and agroecological innovations, at farm, territorial and value chain levels, targeting a diversity of production (crops and animal production) and farming systems (mixed farming, agroforestry, pastoralism, etc.). Specific attention is paid to landscapes and territories to improve natural resource management, to value chains to facilitate access to markets, and to policies to foster a more enabling environment. Capacity development is the essence of the DeSIRA initiative. Interventions to support innovation are complemented by the strengthening of technical and functional capacities, at the individual and organisational levels, and the strengthening of relevant education and training programmes. This strategy is expected to contribute to reinforcing the links between research and innovation, and to stimulate and develop the capacity to innovate of a large range of actors.

Positive changes are expected at multiple levels. At farm level, the capacity and resilience of smallholder farmers will improve as they make better informed, evidence-based decisions, and take up new climate-smart or agroecological products, technologies, models or services. At institutional level, the innovation capacities of research, technical and development institutions, of farmers' organisations, and of private sector actors to support agricultural innovation processes will be strengthened. As a key actor in the functioning of value chains, a strengthened private sector is expected to facilitate the uptake of innovations by farmers and scale up their use among farming communities. These organisations are expected to continue working together and innovating once projects are over, thus ensuring sustainability. Institutional partnerships on agriculture and food systems are also expected to multiply, triggered by DeSIRA projects. The institutional capacity development of regional agricultural research and extension organisations, more specifically in Africa, will enhance the governance of research and extension services. Support to regional and international research and innovation networks, fora or platforms will boost the capitalization and sharing of experiences and the elaboration of policies, with an Agricultural Innovation Systems perspective. In parallel to research and innovation processes, policy-related activities involve subnational and national stakeholders with a view to increasing their ability to design or improve relevant integrated policies, strategies and plans to address the transformation of food systems, including mitigation and adaptation to climate change and the agroecological transition.

At multiple levels, the DeSIRA initiative is expected to contribute to impact regarding the climate-relevant, productive, and sustainable transformation of food systems in low and middle-income countries. At farm level, target groups will benefit from socio-economic gains and a positive impact on agroecosystems. They will be

better equipped to cope with climate change-related shocks and make use of agroecological or nature-based solutions. The status and role of smallholder female farmers or female food entrepreneurs will improve. Through dissemination and a diversity of scale up strategies, smallholder farmers who are not part of target groups will benefit from innovations developed by DeSIRA projects. At territorial level, agroecosystems will benefit from the introduction of sustainable innovative practices, including institutional arrangements, on agricultural and pastoral land and related to soil and water management. At institutional level, a growing number of organisations involved in the implementation of DeSIRA projects will be able to demonstrate a positive impact on the transformation of agriculture and food systems at national or international level. The policy environment will improve as a result of the endorsement and implementation of relevant policies, strategies or plans supported by DeSIRA projects.

3 Overview of the methodology underlying the global Monitoring and Evaluation Framework

From October 2021 to November 2022, with the technical assistance of ASRAFS (Advisory Services for Resilient Agri-Food Systems, GFA Consulting Group), the Directorate-General for International Partnerships of the European Commission (DG INTPA), developed a Global Monitoring and Evaluation Framework (GM&EF) for the DeSIRA initiative. The GM&EF is a methodological tool to identify and inform initiative-level indicators, also called Global DeSIRA Indicators (GDIs). Its purpose is to steer and monitor the DeSIRA initiative, in order to determine the extent to which its overarching objectives are being achieved, and to report and communicate effectively on new approaches to agricultural innovation and research. The main beneficiary and user of the GM&EF is DG INTPA (F3). Projects and EU Delegations are also potential users.

The GM&EF operates at initiative level, i.e., it is not relevant to individual projects but rather aims to capture what the EU is achieving at global level through the combined contributions of all DeSIRA projects. It consists of a global Logframe Matrix (LFM), which comprises a results chain (see Figure 1 below), as well as 28 GDIs at output, outcome, and impact levels, designed through a bottom-up approach. The GM&EF provides a definition for each GDI.

A brief summary of the methodology for the data collection is as follows: every year, project progress reports are examined to determine whether, and to what extent, a given project contributes to the GDIs. This exercise is carried out without the need for any additional data collection by Implementing Partners (IPs). Subsequently, for each DeSIRA project, an interview is conducted with the main IP. If the project contributes to a GDI, a link is created between the project and this GDI. A link can be explicit (a project indicator, similar to the GDI, exists), or implicit (the project contributes to a GDI, but this is not captured by an indicator at project level). Each project is thus linked to the GM&EF through a specified number of links aimed at capturing the project results -explicit or implicit- that contribute to expected results at global (initiative) level. Each project contributes to X number of GDIs, not to all GDIs. For instance, a project that does not have a policy dimension is not linked to any of the GDIs on policy and is not expected to contribute to these policy related GDIs. For each link, a quantitative value is attributed on an annual basis. This is the quantitative annual contribution of a given project to a given GDI. Qualitative information is also collected, mainly through interviews, to put the quantitative data into context and clarify the link between the result (project level) and the GDI (initiative level). At GM&EF level, for a given year, the GDI value is the sum of all project-level annual contributions to this GDI. Project-level data and GDI values are recorded in the GM&EF. The Annual Global Report of the DeSIRA initiative is then prepared, based on these values and qualitative information gathered during interviews. It is a progress report at Initiative level. It is not an evaluation of the projects. The complete methodology that underpins the development of the GM&EF and its implementation (i.e. the collection of data to inform the GDIs) is available at: ["https://capacity4dev.europa.eu/library/methodology-global-monitoring-and-evaluation-framework-de-sira_en"](https://capacity4dev.europa.eu/library/methodology-global-monitoring-and-evaluation-framework-de-sira_en).

It is important to note that the Global Monitoring and Evaluation Framework is not a tool to monitor projects on an individual basis, and it is not meant to support project-level monitoring processes. In addition, it is not designed to reflect the diversity of projects or the complexity of innovation processes at the project level, let alone the complexity of innovation processes related to agriculture and food systems at country or regional levels. Global DeSIRA Indicators are not a substitute for project-level indicators and are not mandatory at project level.

The collection of data for the GM&EF has its challenges. The quality of the quantitative data at initiative level is tied to the quality of the data at project level, since it sourced from the project's progress reports and monitoring systems. Furthermore, the data needed for informing the GDIs is not always available in projects' progress reports. For instance, results may exist -from an initiative perspective- but may not be properly documented in progress reports. This is why an annual meeting with the IP is needed during the data collection phase to confirm the relevance of a GDI vis-à-vis project results, to identify the relevant data, to capture implicit results and to complement the data with qualitative elements. Besides, certain projects weigh more (quantitatively) than others on the GDI value and may overshadow the results of other projects.

The figure below shows the results chain (outputs, outcomes, impact) at DeSIRA initiative level as well as the articulation between these different results levels.

Figure 1: The Result Chain of the DeSIRA Initiative

IMPACT

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

**All Outcomes together contribute to Impact.
Outcomes mutually reinforce each other.**

OUTCOME 1 —	OUTCOME 2 ▲	OUTCOME 3 ★	OUTCOME 4 ●
The capacity and resilience of smallholder farmers improve as they take up new climate-smart or agroecological products, technologies, models or services	Innovation capacities of research, technical and development institutions as well as capacities of farmers' organisations to support agriculture innovation processes are strengthened	Private sector capacities and value chains of agri-food systems are strengthened	The agriculture and food systems policy environment is improved at national or international level

**Each Output contributes to one or more Outcomes (shape symbol).
Outputs mutually reinforce each other.**

OUTPUT 1	OUTPUT 2	OUTPUT 3	OUTPUT 4	OUTPUT 5	OUTPUT 6
— ▲ ★	— ▲ ★	— ▲ ★	▲	— ★ ▲ ●	▲ ●
The mechanisms for inter-institutional cooperation and the joint design of climate-smart and agroecological innovations are developed	Innovations linked to agri-food systems are developed and made available at farm and institutional levels	Farmers are reached by research and innovation initiatives, and individual capacities are developed beyond farm level, including at institutional level	Education and training programmes responsive to capacity development needs for agricultural innovation at national level are strengthened	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	Science-based policy briefs are produced and dialogues on agriculture and food policy development and reform are organized

Based on data collected via the GM&EF, a first Annual Global Report (AGR 2021/22), covering the implementation period 2019-2021, was produced in 2022. It included 29 DeSIRA projects (22 Pillar I and 7 Pillar II) that had reached at least two years of implementation as of December 2021. The second report (AGR 2023) covered the implementation period 2019-2022 and included 46 DeSIRA projects (39 Pillar I, and 7 Pillar II), all of which had reached at least two years of implementation as of December 2022. This number therefore included the projects already covered in AGR 2021/22.

AGR 2024 further expanded the coverage to all 79 DeSIRA projects under the 2018, 2019 and 2020 Commission Implementing Decisions (72 Pillar I and 7 Pillar II). At the time of data collection, all but one had reached at least two years of implementation. AGR 2025 covers the implementation period 2019-2024. The exact cut-off date varies across projects (see Annex 2), ranging from June 2024 to October 2025, with 33 projects reporting data up to November 2024, December 2024 or January 2025. During the reporting period, 32 projects reached completion. For these projects, the data included in AGR 2025 represents the final project data.

Pillar I projects are divided into:

Group 1 (G1): 22 projects (from CID 2018) included in all AGRs;

Group 2 (G2): 17 projects (mostly from CID 2019) included since AGR 2023;

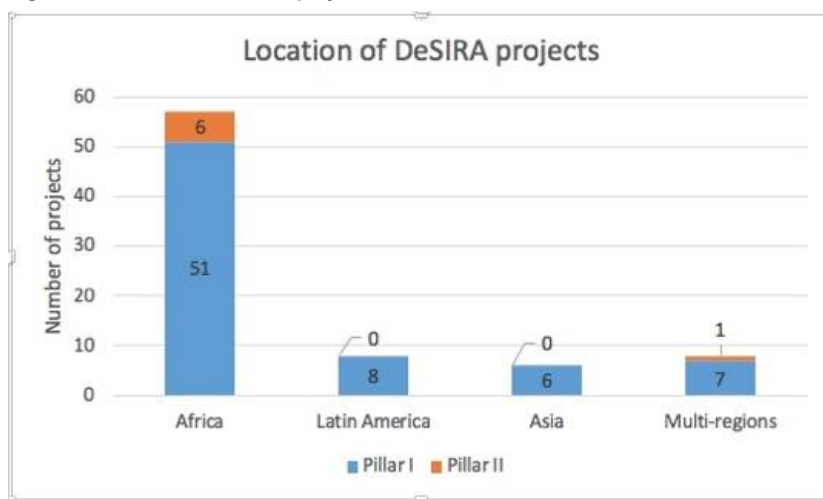
Group 3 (G3): 33 projects (from CID 2020) included since AGR 2024.

Pillar II comprises 3 main projects from CID 2018. One of them is a large project further divided into 5 sub-projects, for analytical and reporting purposes. Thus, for reporting purposes, it is considered that Pillar II includes 7 projects. In terms of reporting Pillar II projects were included in all AGRs.

In AGR 2025, Group 1 and Group 2 projects are frequently referred to as the “older projects” whereas Group 3 projects are called the “newer” or the “most recent projects”. The distinction between older and newer projects can be useful in interpreting year-on-year variations in quantitative GDI values.

The implementation of 32 projects was over at the time of data collection for AGR 2025. This includes 2 Pillar II projects and 30 Pillar I projects, including 14 from G1, 8 from G2, and 8 from G3.

Figure 2: Location of DeSIRA projects



Out of 79 DeSIRA projects, 57 are implemented in Africa, 8 in Latin America, 6 in Asia. Among them, many cover more than one country within the region. In addition, 8 projects cover multiple countries spanning across at least 2 regions.

The GDI values presented in the report are cumulative for the period 2019-2024, with the understanding that the period of implementation covered is not the same for all projects: mostly 5 to

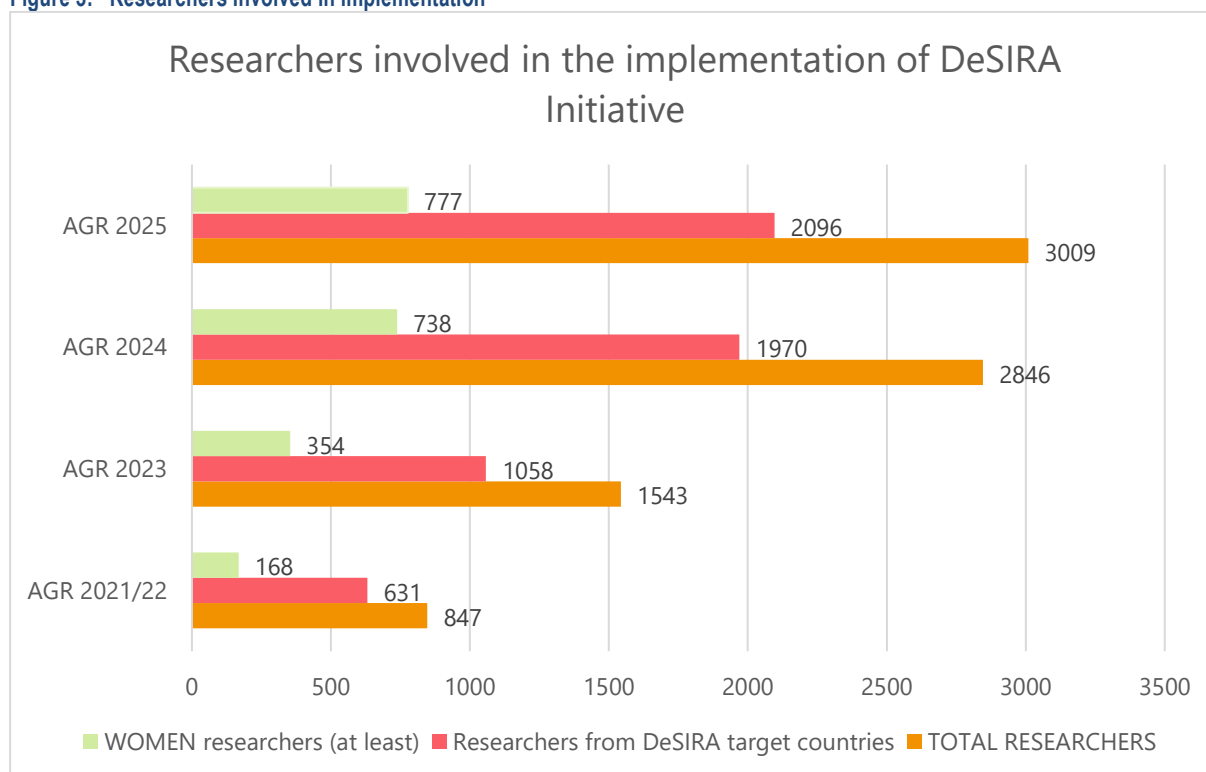
6 years for P-I G1 and P-II, 4 to 5 years for P-I G2 and 3 to 4 years for P-I G3. The data was collected from June to December 2025 based on the latest available annual progress report for each project, and an interview with each project IP. To allow for a year-on-year comparison, the cumulative data is presented for two successive implementation periods (AGR 2024 or 2019-2023; AGR 2025 or 2019-2024) and for two categories of projects: Pillar I and Pillar II. Quantitative data at group level (G1, G2, G3) are referred to where necessary for the analysis of GDIs at pillar level but are not reported in Tables. Projects included in AGR 2025 are listed in Annex 1.

4 Implementation (input-related data): Researchers and Organisations involved in the implementation of the DeSIRA Initiative

The global reporting period 2019–2024 is characterized by challenging implementation conditions across Africa, Asia and Latin America (COVID-19, the war in Ukraine). Under AGR 2025, the operating environment continued to be shaped by the economic and logistical repercussions of the war in Ukraine (rising input costs, disruption of supply chains) and worsening political and security issues, particularly in the Sahel. In this context, one project in Niger closed before completing all planned activities. More broadly, recurrent climate-related shocks, as well as electoral cycles and related institutional changes, also affected implementation conditions in several countries. These add to specific issues, such as complexities related to land-use and environmental constraints in Latin America (e.g. Brazil and Colombia), as well as institutional challenges, for instance in Vietnam where a major restructuring started in November 2024 (merging of ministries, redrawing of administrative boundaries and phasing-out of district-level governance). Despite these constraints, the majority of projects are progressing in line with revised timelines. Most projects have now absorbed delays related to the COVID-19 pandemic, owing to no-cost extensions that were systematically granted upon request.

As in the previous year, 79 projects are covered under AGR 2025. At the time of data collection (June–December 2025), 56 of them had received at least one extension, while a dozen additional extension requests -mainly from projects that had not previously benefited from an extension- were under review. The average extension duration was 10 months, ranging from 3 to 24 months, with some projects benefiting from two extensions. At the time of data collection, 32 projects had completed implementation, therefore AGR 2025 includes final data and information for these projects.

Figure 3: Researchers involved in implementation



A cumulative total of 3,009 researchers contributed to the implementation of project activities over the 2019–2024 reporting period. Compared to the previous reporting period, which saw the integration of 33 Pillar I projects into the DeSIRA Global Monitoring and Evaluation Framework (GM&EF), the increase in the number

of researchers remains limited (+5.7%), mainly because the overall number of projects covered by the GM&EF has remained stable (79). Most, if not all projects have reached a mature stage in terms of team composition, with relatively stable research teams. This includes both researchers from DeSIRA target countries and international, including European, researchers. This value also includes PhD students contributing to DeSIRA projects. Given that around 40% of the projects had already ended by the time of data collection and that most remaining projects had reached an advanced stage of implementation, very few, if any, new PhD students joined project teams in 2024.

Among the 3,009 researchers, almost two-thirds of individuals (2096) are from target countries in Africa, Asia and Latin America. Several projects -particularly those involving the largest research teams-are not always able to accurately disaggregate the number of male and female researchers. As a result, sex-disaggregated data are missing for 388 individuals. Among researchers whose sex is identified, women represent 29.7% (777, see Table 1, below).

Since the start of the DeSIRA initiative, many organisations (2005) have been involved in project implementation. The figure below disaggregates per category of organisations:

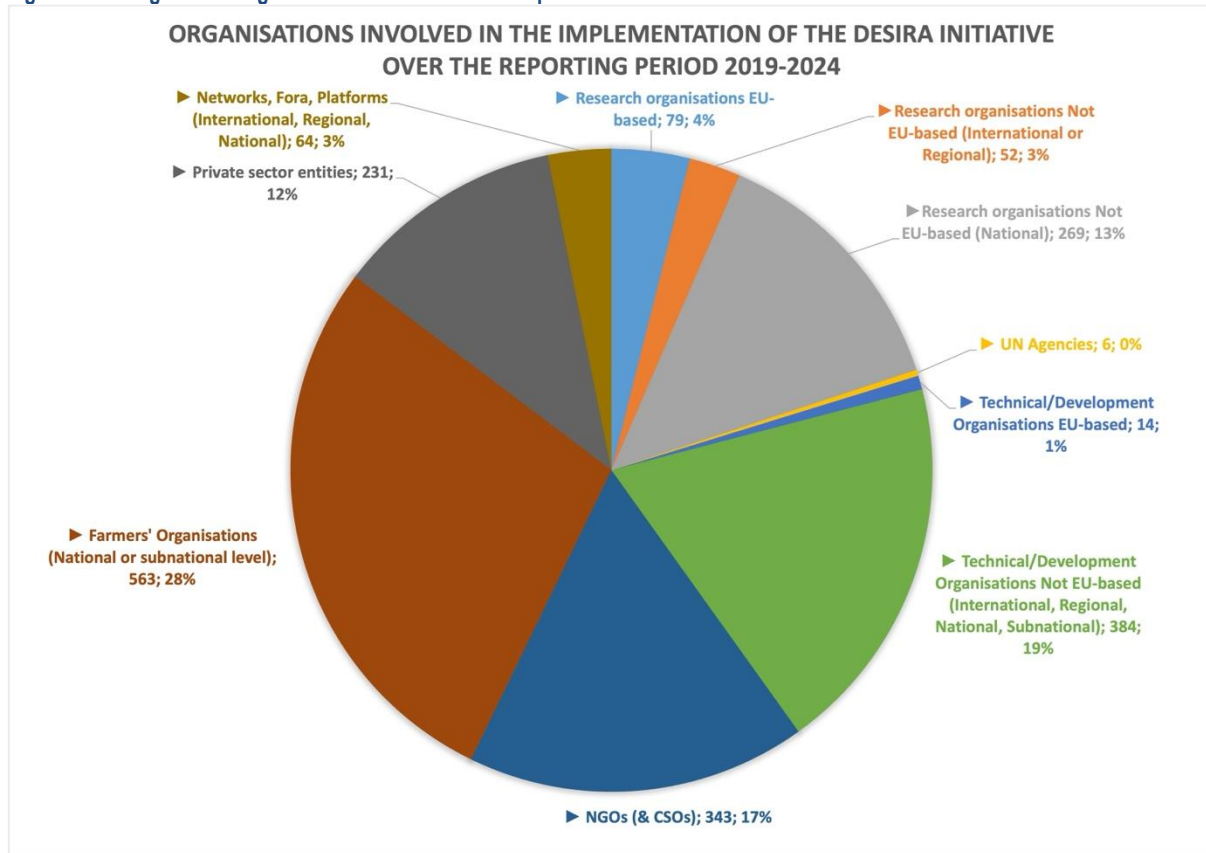
- 400 research institutes (20%), including 79 European research bodies and 52 international or regional (but not EU-based) research bodies,
- 563 farmers' organisations (28%),
- 398 technical organisations (20%), such as ministries, local authorities (etc.),
- 6 United Nations agencies (0,3%),
- 343 NGOs (17%), including 79 international NGOs,
- 231 private sector entities (12%), and
- 64 networks, fora or platforms (3%), including 12 European-based bodies.

Among the 79 European research organisations involved in project implementation, 25 are or have been involved in more than one DeSIRA project. This includes 10 institutions which play or have played a role in more than four projects, either as main implementing partner or associate partner:

- Université de Liège (ULiège, Belgium, 6 projects),
- Universiteit Gent (UGhent, Belgium, 4 projects),
- KU Leuven (KUL, Belgium, 5 projects),
- Natural Resources Institute Finland (LUKE, Finland, 4 projects),
- Centre de coopération internationale en recherche agronomique pour le développement (CIRAD, France, 35 projects),
- Institut de Recherche pour le Développement (IRD, France, 14 projects),
- Leibniz Centre for Agricultural Landscape Research (ZALF, Germany, 4 projects),
- University of Hohenheim (UHOH, Germany, 4 projects),
- Wageningen University & Research (WUR, Netherlands, 11 projects),
- Consejo Superior de Investigaciones Científicas (CSIC, Spain, 4 projects).

Besides European research organisations (e.g., CIRAD, WUR), several categories of organisations have continued to play a key role in structuring synergies between DeSIRA projects, including European implementing agencies (e.g. Gesellschaft für Internationale Zusammenarbeit, Agence Française de Développement, Belgian Development Agency, Agencia Española de Cooperación Internacional para el Desarrollo) and global platforms (e.g. Tropical Agricultural Platform - TAP; Global Forum on Agricultural Research and Innovation - GFAiR). The CGIAR has also played a key role in implementation, with all but one of its international research centres involved in one or more DeSIRA projects. Last but not least, until June 2025, DeSIRA-LIFT, a cross-cutting learning and coordination support action of the DeSIRA initiative, was supporting projects to manage for impact by reinforcing the projects' synergies through a dedicated [Community of Action and Reflection](#).

Figure 4: Categories of organisations involved in the implementation of the DeSIRA initiative



AGR 2024 saw a marked increase (116%) in the overall number of organisations involved in implementation over the previous reporting period (from 738 to 1594), mostly due to the inclusion of 33 Pillar I projects in the global DeSIRA reporting process. The increase for AGR 2025 is more limited (26%) given that the number of DeSIRA projects covered by AGR 2025 has remained identical to last year. The increase mostly stems from the last group of DeSIRA projects (33 projects), and more specifically from the involvement of farmers' organisations and private sector entities (respectively +59% and +43% over the previous year), whereas the increase in the number of national research institutions has been marginal. This is in line with the pattern already observed in AGR 2024 with the older groups of DeSIRA projects (Group 1 and Group 2). As activities progress, partnerships multiply with farmers' organisations and value chain (private sector) actors to encourage and strengthen the processes aiming at facilitating the dissemination of the innovations.

The following section provides a summary of the progress of the 79 projects towards the planned results of the DeSIRA initiative i.e., 6 outputs, 4 outcomes and the stated impact.

Table 1: Researchers and Organisations involved in the implementation of the DeSIRA Initiative over the reporting period 2019-2024

Input-related indicators – CUMULATIVE VALUES – No duplicates	TOTAL	TOTAL	TOTAL	TOTAL	Variation from AGR 2024 to AGR 2025	
Annual Global Report (AGR) ►	AGR 2021/22	AGR 2023	AGR 2024	AGR 2025	Absolute value	Percentage
Number of DeSIRA projects contributing to the value	29	46	79	79	+0	0%
► Researchers from DeSIRA target countries	631	1058	1970	2096	+126	6,4%
► Other Researchers	216	485	876	913	+37	4,2%
TOTAL RESEARCHERS (*)	847	1543	2846	3009	+163	5,7%
<i>Including Women researchers (at least)</i>	168	354	738	777	+39	5,3%
► Research organisations - EU-based	33	45	78	79	+1	1,3%
► Research organisations - Not EU-based (International or Regional)	21	34	37	52	+15	40,5%
► Research organisations - Not EU-based (National)	89	142	243	269	+26	10,7%
► UN Agencies	2	3	6	6	+0	0%
► Technical/Development Organisations - EU-based	4	9	13	14	+1	7,7%
► Technical/Development Organisations - Not EU-based (International, Regional, National, Subnational)	43	123	346	384	+38	11%
► NGOs (& CSOs)	52	105	295	343	+48	16,3%
► Farmers' Organisations	50	159	353	563	+210	+59,5%
► Private sector entities	25	70	161	231	+70	43,5%
► Networks, Fora, Platforms (International, Regional, National)	27	48	62	64	+2	3,2%
TOTAL ORGANISATIONS (**)	346	738	1594	2005	+411	25,8%

(Source: Global M&E Framework of the DeSIRA initiative, December 2025)

All Annual Global Reports (AGR) values include Pillar II projects.

AGR 2021/22 includes (Pillar I) G1 projects. AGR 2023 includes (Pillar I) G1 and G2 projects. AGR 2024 & AGR 2025 include (Pillar I) G1, G2 and G3 projects.

Group 1 (G1) = 22 Pillar I projects included in the GM&EF since 2021/22 (CID 2018)

Group 2 (G2) = 17 Pillar I projects included in the GM&EF since 2023 (CID 2019)

Group 3 (G3) = 33 Pillar I projects included in the GM&EF since 2024 (CID 2020)

Pillar II = 7 projects = 2 projects, plus 5 'sub-projects' (under SUPPORT TO CAADP AR&EO) mostly from the 2018 CID

(*) Assumption (not verifiable): there are no duplicates among researchers.

(**) No duplicates

5 Progress towards Outputs

5.1 Output 1 - The mechanisms for inter-institutional cooperation and the joint design of climate-smart and agroecological innovations are developed

Table 2: List of global DeSIRA Indicators attached to Output 1

GDI #21	Number of multi-stakeholder innovation platforms/mechanisms developed or strengthened #21A (Regional or international level) #21B (National level) #21C (Subnational level)
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The definition of "innovation platform" (or mechanism) varies across DeSIRA projects. Multi Stakeholder Innovation Platforms (MSIPs) have different scopes, levels of implementation (local, national, regional, international), stakeholder composition (farmers, researchers, extension agents, private sector actors, etc.), interaction modes (degree of participation of non-research actors, degree of formalisation, regularity of meetings, etc.), and focuses (thematic, mandate), highlighting the concept's flexibility. MSIPs at national level focus on stakeholder coordination, information sharing, and strategy validation, often through technical groups that do not always include farmers. MSIPs at local level focus on stakeholders' involvement and co-creation of innovation. The concept of multi-stakeholder innovation mechanism and associated processes is often an innovation of its own for the targeted stakeholders. This is best illustrated by a presidential decree (July 2023, Uzbekistan), which recognizes the benefits of the DeSIRA project's innovative approach to innovation and its validation by farmers (see the case story below). Table 3 (below) provides a summary of cumulative values 2019-2024 for GDIs attached to Output 1 for Pillar I and Pillar II projects.

Pillar I

Out of 72 Pillar I projects, 64 have supported a cumulative total of 767 MSIPs (33, 108, 626 respectively at regional/international, national and local/subnational levels), including 215 local MSIPs from a single regional project (this was illustrated in AGR 2023). Many projects support several MSIPs at different levels. However, among Pillar I projects, 8 do not have a formal multi-stakeholder strategy. This includes projects, the implementation of which had ended at the time of data collection. Some projects were not conducive to the establishment of multi-actor innovation mechanisms. This was, for example, the case for two projects in Mauritius, which were primarily intended to strengthen one institution, namely the same institution that was responsible for implementing the project. For others, these were often projects that held a limited number of consultations to develop and implement innovations. However, project managers explained that these consultations could not be considered multi-actor innovation mechanisms.

Innovation processes are typically built or strengthened via thorough consultation with a diversity of stakeholders and demonstrate the capacity of researchers to work and interact with different types of actors at different levels (local, national, regional, global), which is key to addressing complex issues. As mentioned in AGR 2024, projects that began during the peak of the global pandemic (January 2020 to February 2022) faced delays in formalizing and implementing multi-stakeholder strategies. The no-cost extensions granted to most of these projects were instrumental in their efforts to recover from initial delays and further strengthen multi-stakeholder mechanisms, while the sustainability of those expected to continue beyond the project period remains to be demonstrated.

Even though the number of projects reporting innovation mechanisms has hardly changed since the last reporting period, the increase in the overall number of MSIPs is substantial (+192, or 33%). The increase is mostly

at local level (+160). Three projects alone have developed and supported an additional 132 MSIPs at local level, including a regional horticulture project, which accounts for 215 MSIPs, i.e. a third of the innovation mechanisms reported at local level for the DeSIRA initiative.

There is growing evidence that multi-stakeholder innovation mechanisms are considered and treated as both innovative processes and specific expected results, rather than simply as project-related processes. Discussions with project leaders clearly show that these multi-actor mechanisms, which are a defining feature of the DeSIRA initiative, are no longer seen merely as a criterion to be met, but rather as a genuine strategic dimension of activity implementation and as added value that enables the establishment of fruitful dialogue with all stakeholders. This perception does not always translate into the reporting: the projects' logical frameworks do not systematically include an indicator to report on such mechanisms. Surprisingly, compared to projects started in 2019 and 2020, it is the most recent projects (Group 3, a group of 33 projects that mainly started in 2021) that provide the least visibility on these multi-actor processes, given that 17 of the 32 projects claiming to support multi-actor innovation platforms do not include any indicator in their logical framework to highlight this specific feature of their project and to capture its value.

The pathway towards the sustainability of multi-stakeholder mechanisms is unique to each project. AGR 2025 confirms that mechanisms that pre-date DeSIRA projects have advantages over new ones. Not all new mechanisms developed in the context of project implementation are meant to be sustainable. However, while a few projects indicate that multi-stakeholder mechanisms were established solely for implementation, most strive to create conditions for the long-term sustainability of those they initiated from scratch. For those which are expected to remain active after the project ends, key factors of sustainability emerge: the quality and the balance of the stakeholder composition, the use of facilitators to define interaction modes and promote the participation of every category of actors, the degree of formalisation of the mechanism (official, informal), the regularity of meetings, the thematic focus and the mandate. In turn, functional and active multi-stakeholder mechanisms are more likely to play a role in creating the conditions for the dissemination and/or scaling of innovations, a key factor in the sustainability of the projects' results. Several projects work at community level, as well as at higher administrative levels, to assess the potential for scaling innovations and to take into account sustainability issues.

Pillar II

Over the reporting period, Pillar II has supported 354 MSIPs, comprising 36 regional or international, 315 national and 3 subnational MSIPs. Five projects targeting Agricultural Research and Extension Organisations (AR&EOs) in Africa account predominantly for these numbers. Among them, one project alone claims support to 280 MSIPs through the Technologies for African Agricultural Transformation (TAAT) programme. Funded by the African Development Bank, TAAT is a large continental programme that supports Innovation Platforms across value chains. DeSIRA resources have been used to facilitate the incubation of these platforms focused on commodities, but their capacity, sustainability and outcomes are not highlighted in the reporting. This project accounts for the strong increase in the number of national-level MSIPs under Pillar II since the last reporting period (from 73 to 315). This confirms the continuous efforts of the 5 African AR&EOs to promote a multi-stakeholder approach at national level, as well as at regional level (36 mechanisms compared to 24 last year). Under Pillar II, most AR&EOs support several regional multi-stakeholder mechanisms, structured around dialogues on policy issues, the scaling of climate-smart technologies, and the strengthening of regional institutional ecosystems (e.g. linking research, innovation and education). They underline the growing importance of communities of practice and the inclusion of gender and youth dimensions. Capacity development activities focus on topics like Climate Smart Agriculture (CSA) and Knowledge Management (KM) to strengthen skills, tools, and coordination for innovation and scaling. Not highlighted until recently, the theme of agroecology has emerged as a topic of interest at regional level. At national level, besides support to innovation platforms on commodities, AR&EOs have supported platforms, communities of practice or working groups on CSA, agroecology, nutrition, gender, knowledge management and foresight in relation to climate change. Until June

2025, DeSIRA LIFT was providing support to projects to help them to navigate the diverse and complex mechanisms aimed at supporting innovation. It has produced [a learning review focusing on multi-stakeholder platforms and collaboration mechanisms](#).

EU-AGRIN (UAKIS) “Supporting an inclusive transition to “green” economy in the Agrifood sector and a “climate-smart” Uzbek Agriculture Knowledge and Innovation System - fostering investments for climate change adaptation and mitigation”

Implemented by UNDP (United Nations Development Programme)

Uzbekistan

Pillar I / Group 3

EU-AGRIN has supported the implementation of innovative projects at farm level, targeting primarily smallholder farmers, farmer cooperatives, and micro-agri-business, with a view to piloting and demonstrating ways of achieving mitigation, adaptation and transformation pathways, in the context of climate change.

The project, which ended in September 2025, established 18 Innovation Groups (innovation-based projects) in three regions of Uzbekistan (Tashkent, Fergana, Kashkadarya). The groups tested innovations, mostly at farm level, and shared the findings and recommendations with farmers. This approach is considered a key achievement of the project. Bringing together a diversity of stakeholders (farmers, researchers, advisors, academics, private sector actors and NGOs), the groups aimed to address agricultural challenges stemming from climate change through innovative solutions, with a view to increase the efficiency and sustainability of agricultural and food production. Established through a transparent mechanism that attracted over 200 applications, 18 pilot projects implemented activities aligned with sustainable agriculture themes such as climate-smart agriculture, water efficiency, sustainable crop production, alternative energy use, and aquaculture. The selected projects varied across the pilot regions: Tashkent focused on seed production and modern irrigation methods, Fergana emphasized new cotton varieties and organic tomato cultivation, and Kashkadarya invested in new wheat varieties and biological pest control, among other topics. Innovation groups remained active for the duration of the selected project (approximately two years). According to the project team, groups linked to value chains (e.g. dairy, merino sheep) might remain active whereas groups having achieved their objective (i.e. testing of new wheat varieties) and shared the results had already ended when the project closed. Recognizing Innovation Groups as key instruments of agricultural transformation, a Presidential Decree was issued in 2023, formally endorsing the model promoted by the project. The decree acknowledges the importance of integrating science, education, and production in agriculture and establishes a legal framework that mandates the formation of innovation groups throughout the country. This legislative act paves the way for long-term institutionalization and integration of the project’s approaches into national policy frameworks.

MARIGO “Maraichage agroecologique périurbain” (Peri-urban agroecological market gardening)

Implemented by CIRAD (Centre de coopération Internationale en Recherche Agronomique pour le Développement)

Côte d’Ivoire

Pillar I / Group 2

The objective of the project was to establish a diagnosis of the peri-urban market gardening sector, produce multidisciplinary knowledge on value chains, and support actors toward an agroecological transition.

As with EU-AGRIN in Uzbekistan, MARIGO (which ended in June 2025) is among the projects for which the establishment of multi-stakeholder platforms was an explicit and expected result. Several indicators attached

to this result demonstrate the importance the project placed on the design of these platforms: the number and diversity of stakeholder categories involved in each platform, the representativeness of platform members, the number of workshops held, stakeholder satisfaction. The project established four platforms (one in each of the regions where it operated), to enable quality dialogue and the sustainability of outcomes. Each platform brings together farmers, trainers, researchers, actors from the horticultural value chain, public policy decision-makers, and civil society representatives. Together, these stakeholders co-develop sustainable solutions to the challenges facing the Ivorian horticultural sector in a context of climate change. The project provided training and advisory support. The platforms were further strengthened by the project's outputs, both in terms of diagnostic work and the development of adapted and sustainable agroecological solutions, thereby responding to institutional demand. Their status and operating modalities were validated through general assemblies, and their official recognition by departmental and national institutions (prefectures, Ministère d'État, Ministère de l'Agriculture et du Développement Rural et des Productions Vivrières) improves their effectiveness and sustainability perspectives. According to the project team, the platforms are therefore able to continue their activities beyond the end of the project.

Table 3: Summary of cumulative values 2019-2024 for GDIs attached to Output 1

N° of projects contributing to the GDI # Values > 0 (*)		OUTPUT 1: "The mechanisms for inter-institutional cooperation and the joint design of climate-smart and agroecological innovations are developed"		Pillar I	Pillar I	Pillar II	Pillar II
AGR 2024	AGR 2025	GDI #	OUTPUT 1 - Global DeSIRA Indicators	AGR 2024	AGR 2025	AGR 2024	AGR 2025
20	24	21A	Number of multi-stakeholder innovation platforms/mechanisms developed or strengthened (Regional or international level)	24	33	29	36
32	35	21B	Number of multi-stakeholder innovation platforms/mechanisms developed or strengthened (National level)	89	108	73	315
49	50	21C	Number of multi-stakeholder innovation platforms/mechanisms developed or strengthened (Subnational level)	466	626	3	3
TOTAL				575	767	105	354

(Source: Global M&E Framework of the DeSIRA initiative, December 2025)

Colour code	GDI Title	AGR 2024	AGR 2025	(X): no expected contribution
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Each figure is the sum of the values contributed by each DeSIRA project to the GDI.

Values > 0 AGR 2025 = number of projects (all categories) having contributed a positive value to the GDI during the reporting period 2019-2024.

(*) Many projects support innovation mechanisms at more than one level.

Group 1 (G1) = 22 Pillar I projects included in the GM&EF since 2021/22 (CID 2018)

Group 2 (G2) = 17 Pillar I projects included in the GM&EF since 2023 (CID 2019)

Group 3 (G3) = 33 Pillar I projects included in the GM&EF since 2024 (CID 2020)

Pillar II = 7 projects = 2 projects, plus 5 'sub-projects' (under SUPPORT TO CAADP AR&EO) included in the GM&EF since 2021/22

5.2 Output 2 - Innovations linked to agri-food systems are developed and made available at farm and institutional levels

Table 4: List of global DeSIRA Indicators attached to Output 2

GDI #22	Number of climate-smart or agroecological innovations under development #22A (At farm level: products, technologies, agricultural practices, farming systems) #22B (At farm level: services, decision making tools, governance mechanisms) #22C (Beyond farm level, including at institutional level)
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Innovation is an idea put into action that can be technical or social, incremental or radical. Over the reporting period, all but three projects developed innovations at farm level (i.e. for use by farmers) and/or beyond farm level (i.e. for use by institutions or private sector entities). Most Pillar I projects reported innovations for both levels. AGR 2024 placed a strong emphasis on identifying project-level innovations within the DeSIRA initiative. For details on innovations developed by each project, see AGR 2024 - Annex II https://capacity4dev.europa.eu/library/2024-annex-annual-desira-global-report_en; the document has not been updated for AGR 2025, but remains fully relevant.

Global DeSIRA Indicator #22 measures the number of innovations under development or developed but not yet taken up by potential end-users (e.g. farmers, groups of farmers, institutions). It does not measure the level of implementation of these innovations, which is covered by several indicators attached to Outcome 1.

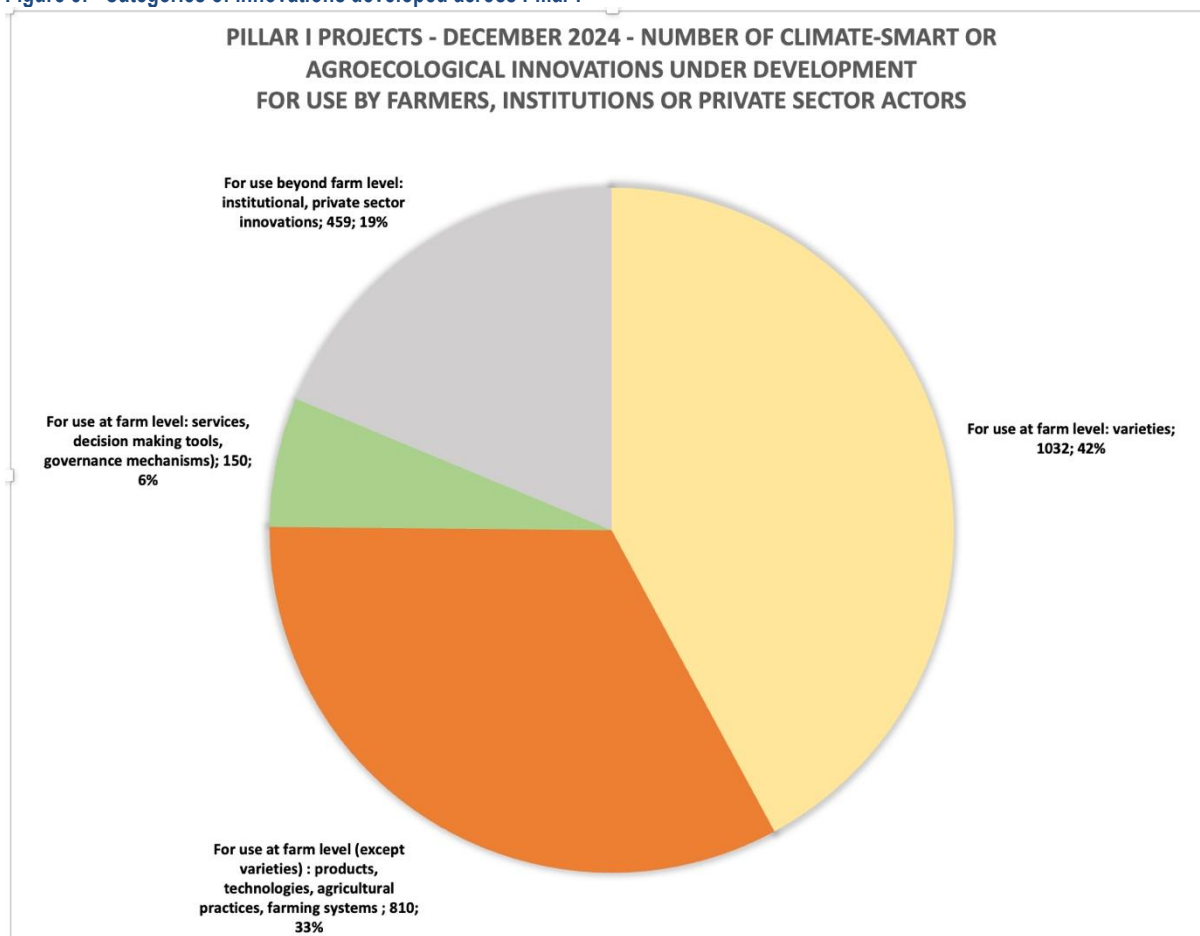
Caution is required when aggregating quantitative data on innovations, given their diversity (e.g., crop varieties, financing mechanisms) and inconsistencies in how their nature is reported across projects. Innovation is a complex process that follows a trajectory, with projects contributing at one or several stages of this process (from initial concept and prototyping to development and dissemination).

Pillar I – Innovations for use at farm level

Over the reporting period, Pillar I projects reported a total of 1992 innovations for use at farm level. The vast majority (1842) fall into the following categories: products (e.g. biopesticides; biofertilizers), crop varieties (e.g. testing and introduction of Neglected and Underutilized Species), technologies (e.g. solar-powered fertigation systems; hydroponic fodder production), agricultural practices (e.g. crop rotation; rational grazing), farming systems (e.g. silvopastoral systems; coffee agroforestry). A smaller, yet non-negligible, share of farm-level innovations (150) consists of services (e.g. digital climate risk crop insurance that enables claims without paperwork or travel; a Participatory Guarantee System certification for transition and organic agroecological products), decision-making tools (e.g. a mobile OneFish app that provides information on inputs, feed formulation, nutrition, and market linkages; a water level app), and governance mechanisms (e.g. community grazing plans to regulate herd mobility and sustainable fodder resource use). Under Pillar I, 52 out of 72 projects are involved in the development of at least one service, decision-making tool, or governance mechanism for use by farmers or farmer groups. Many projects combine financing mechanisms with marketing and/or input supply.

Even though the number of projects monitored has not changed since the last reporting period, the number of innovations for use at farm level has increased by 27% (+ 424, from 1568 to 1992). Interestingly, all DeSIRA projects have significantly contributed to Output 2, i.e. not just the most recent ones. The older projects (Group 1 or G1) account for an additional 101 innovations (+27% over AGR 2024 for G1 alone), Group 2 alone is responsible for about half the overall increase with an additional 224 innovations (+70% over AGR 2024), while the most recent projects (G3) reported an additional 99 innovations (+22% over AGR 2024).

Figure 5: Categories of innovations developed across Pillar I



Since AGR 2024, among the older projects (i.e. the 22 projects that form Group 1), 6 projects have continued implementing and reporting additional innovation processes, owing to an extended duration of implementation. Among them, over the reporting period, one project reported a total of 413 varieties tested, including 85 new varieties since the last reporting period. In this group, a project in Niger eventually closed in July 2025 due to exceptional circumstances and did not develop any innovations.

Within Group 2, all projects involved in innovation processes at farm level have continued to co-design and co-develop new agroecological or climate-smart practices, as well as services intended to facilitate the adoption of these practices (e.g. new business models to facilitate the adoption of cover crops, financing mechanisms to facilitate the application of climate-friendly, energy- and/or water-efficient innovations). However, within Group 2 and in quantitative terms, the additional contribution to GDI #22 mainly comes from 2 projects, which together reported more than 200 new varieties tested in coordination with farmers in Asia and West Africa.

With 33 projects, Group 3 (G3) is the largest and most recent group of DeSIRA projects. All but one of them have contributed to GDI #22 over the reporting period. A project in Vietnam has yet to report any innovation. Even though the contract was signed in December 2021, it received government approval in July 2023, and the contracting process with stakeholders took another year. Therefore, its outputs remained limited for the reporting period. Other projects have strengthened innovation processes, with 13 of them engaging in additional ones. The main drivers behind additional innovations remain an expansion of agroecological practices, participatory evaluation of climate-resilient varieties and the scaling of water and soil management practices.

Under AGR 2025, seed varieties remain the most common innovations claimed by many projects, with at least 1000 crop varieties identified, either new varieties from DeSIRA-supported breeding programmes, or existing

varieties tested in new contexts. This accounts for half the innovations developed for use at farm level and includes grains, legumes, fodder crops, vegetables, fruits and coffee, among other crops. This value is underestimated because several DeSIRA projects report the testing of new varieties for a given crop as “one” innovation, irrespective of the number of varieties tested (which is not always known). Among the other half, the diversity of innovations is large. Group 1 is mostly structured around individual technologies, practices and varieties. Integrated innovation approaches are present but mainly limited to specific production systems (e.g. agroforestry or rice–fish systems). In contrast, Group 2 and Group 3 show a more systematic and explicit reliance on integrated innovation models, beyond standalone practices or technologies.

The climate-relevant approach is explicit in most projects. In addition, 44 Pillar I projects promote agroecological innovations, though their commitment to the concept and principles that underpin agroecology varies widely. While many DeSIRA projects focused on adapting existing practices at farm level, the more recent ones (from Group 2 and Group 3) tend to co-develop comprehensive agroecology strategies to induce changes at system level.

Pillar I – innovations for use beyond farm level

The vast majority of Pillar I projects (68 of 72 projects) also claim a contribution to innovation beyond farm level (459), including innovations for use at institutional level (e.g., conceptual biological models to predict pest risks and dynamics; multi-scale simulation models to assess the potential impact of agricultural policy instruments in support of agroecological intensification) and by private sector actors (e.g. an artisanal production seal to certify compliance with the sanitary and environmental criteria required for food production units; generation of by-products by integrating biodigesters, slurry reuse, and vermicomposting to transform livestock waste into energy and agricultural inputs). The number of innovations for use beyond farm level has increased by 25% since the last reporting period (+92 innovations). This indicates increasing engagement of stakeholders supporting farmers or value chains, which may suggest a step towards a progressive transfer of the innovation support functions to local/national actors. Some innovations targeted at institutional stakeholders (e.g. extension agents) are also suitable for smallholder farmers (e.g. daily climate information service).

Pillar II

Institutional Pillar II projects are not focused on innovations. They nevertheless report 11 institutional innovations in AGR 2025 (against 10 last year). The majority of these innovations are identified through implicit links, i.e., not explicitly emphasized by the projects themselves. The innovations developed by Pillar II projects include conceptual tools (a policy analysis tool assessing formulation, implementation, and impact of agricultural policies), as well as instruments aimed at transforming the institutional framework governing agricultural innovation (e.g. an institutional mechanism coordinating multi-stakeholder action around shared agricultural challenges known as “Collective Action”; formal collaboration mechanisms reducing duplication among regional agricultural research organisations).

DINAAMICC « Démarches INTégrées et Accompagnement pour une Agriculture familiale à Madagascar Innovante et résiliente aux Changements Climatiques » (Integrated approaches and support for an innovative and climate-resilient family farming in Madagascar)

Implemented by CIRAD (Centre de coopération Internationale en Recherche Agronomique pour le Développement)

Madagascar

Pillar I / Group 3

The project aims to reduce the vulnerability of family farms in the highlands of Madagascar to climate and environmental changes by diversifying agricultural activities, promoting agroecological practices, and improving the management of natural resources.

The research focuses on various themes, underpinned by studies, experiments and evaluations in coordination with farmers, producer organisations and researchers. A study does not necessarily predict the outcome of the research, as it may lead to nothing, to the formulation of recommendations or to the development of an innovative practice.

Research on bio-aggressor control focuses on the implementation of prophylactic measures and awareness-raising, the development of agroecological practices for bio-aggressor control, and deepening knowledge about emerging bio-aggressors (i.e. living organisms that negatively impact plants, crops, or ecosystems, such as pests, pathogens, invasive species). At least 12 biocontrol strategies are being explored to reduce the impact of these pests on crops such as maize or legumes. Several (at least 7) research axes are aimed at managing diseases (e.g. rice bacterial blight). Studies aim to understand the aggressiveness of these pathogens and to identify agroecological methods (e.g. the use of essential oils and improved farming practices), to limit their spread. Seven other research axes are aimed at developing methods or practices to control bacterial plant diseases and two aim at managing weeds and unwanted plant species. Other potential innovations include simple tools like hand weeders, as well as management practices to control plant overgrowth in rainfed rice and maize cropping systems.

Other research themes include forest and agroforestry plantations (e.g. carbonization techniques; agroforestry systems); agriculture–livestock–agroforestry integration (e.g. rice–fish farming); varieties of interest (e.g. evaluation and promotion of upland rice, lowland rice, and bean varieties adapted to Madagascar’s highland conditions, while exploring the use of mycorrhizal fungi and rhizobia to improve soil fertility); water conservation and distribution practices (e.g. improvement of irrigation techniques; facilitation of exchanges for better collective water use).

Agroecological innovations are already used by farmers to intensify and diversify production systems while reducing dependency on conventional inputs. By combining improved varieties, integrated pest management and diversified systems such as rice–fish farming, the project expects to strengthen farm resilience to climatic and ecological stresses. Farmer organisations and multi-stakeholder platforms play a central role in testing, disseminating and scaling innovations across targeted regions. The dissemination and scaling strategy relies on a wide network of local farmer organisations, three regional organisations and one national organisation (FIFATA). A key project partner, FIFATA (Association for the progress of farmers), previously focused mainly on potato and vegetable production, has already incorporated project-supported practices such as upland rice into its strategy, creating the conditions for wider dissemination. FIFATA also plans to integrate agroforestry and new approaches to the collective management of natural resources into its strategy.

The project also works with the General Directorate of Meteorology (GDM) to improve meteorological information services for farmers. Through new weather stations, agro-meteorological platforms and joint training with farmers, the GDM strengthens its capacity to deliver tailored climate services supporting agricultural decision-making. At institutional level, the project develops a multi-criteria evaluation framework for agroecological practices, relying on concepts and methodologies that, locally, are innovative and can be used by institutions such as FOs or NGOs. For instance: participatory diagnostic tools (ComMod or Companion Modelling), which encourage participation and discussion among local stakeholders; modelling tools, such as GAMS (General Algebraic Modelling System), used to model family farms.

ABRIGUE “Strengthening territorial capacities to foster innovations in agroecology, artisanal fishing and circular bioeconomies for climate change adaptation and mitigation in Colombia’s coastal zones and forest frontiers”

Implemented by Instituto SINCHI (Instituto Amazónico de Investigaciones Científicas SINCHI)**Colombia****Pillar I / Group 3**

The objective of the project is to strengthen agriculture, forestry, among other land uses, and artisanal fishing sectors within agroecological systems and bioeconomies to increase their competitiveness, productivity, resilience and efficiency.

To improve local food value chains, the project has introduced many innovative agroecological practices, evaluated through a network of 39 pilot farms that has been established by the project to promote an *agroecological transition of traditional production systems*.

Each practice is linked to a specific value chain, in one of the three targeted areas, characterized by distinct ecological conditions and production systems.

In the Amazon forest frontier of Caqueta, innovations focus on cacao, copoazú, dairy and canangucha systems, implemented with farmers' organisations through territorial innovation platforms and pilot farms. For instance: biofertilization of cacao agroforestry systems through the expansion of composting sheds and vermicomposting; productive ecological restoration via Amazonian fruit trees such as copoazú, Brazil nut, açai; mixed forage banks for dairy cattle; restoration of swampy areas dominated by canangucha (a palm tree native to the Amazon rainforest) through isolation and enrichment).

In the Pacific coastal ecosystems of Choco, the focus is on the vanilla chain (e.g., integrated management of phytosanitary issues using plant extracts with fungicidal action, seed germination, vanilla curing), the coconut chain (e.g. rescue and conservation of regional germplasm material) and on artisanal marine fishing, developed with community councils of Black communities (Consejos Comunitarios) and local fishing organisations.

In the Orinoquia region of Meta, the project focuses on testing and evaluating innovative practices to improve existing silvo-agricultural and agro-silvopastoral systems (e.g. agroforestry systems with coffee as the main crop).

Pilot farms serve as spaces to identify and test other innovations (mainly social, i.e. focusing on inclusivity, women's empowerment, replicability, scalability, and adoption processes). The project is also developing several labels for the certification of AEBE products/services (AgroEcología y BioEconomía), underpinned by a Participatory Guarantee System: for instance, a "transition" label to motivate those who do not yet fully apply 100% organic practices; a label for 100% organic production. In addition, a local multi-stakeholder innovation platform supported by the project is designing a participatory certification for a "ZEPA" label (Exclusive Artisanal Fishing Zone), in response to the demand from families involved in marine artisanal fishing.

At institutional level, the project has introduced TAPE (Tool for Agroecology Performance Evaluation), a tool designed by the FAO. The methodology has been adapted to the local context by the stakeholders and used, as part of the baseline assessment, to estimate the degree of agroecological transition of traditional production systems. The project developed an innovative capacity-building and institutional strengthening programme for grassroots organisations, aimed at empowering them to effectively implement and sustain technical innovations. Although not initially planned, this programme emerged as the project team recognized that social and institutional strengthening was a necessary precondition for successful technical innovation.

In support of private sector actors, the project develops and tests new value chains based on agroecological products with commercial potential. This includes the development of processing, marketing, and business management strategies. The research targets five value chains and focuses on the production of inputs and processing of raw materials. Examples include: new food products derived from cacao leachates (liquid extracts or run-offs from cacao processing); solid biofertilizers from copoazú husks; feedstuffs for fish and pigs from

canangucha pulp residues (canangucha is a Non-Timber Forest Product); innovative curing and drying processes of vanilla to improve sensory quality and volatile profile; dehydrated grated coconut for gourmet culinary use; cold-pressed coconut oil for cosmetics and food; coconut flour as a nutraceutical. These products have all moved beyond development stage and are now being produced by farmers' organisations.

Table 5: Summary of cumulative values 2019-2024 for GDIs attached to Output 2

N° of projects contributing to the GDI # Values > 0		OUTPUT 2: "Innovations linked to agri-food systems are developed and made available at farm and institutional levels"		Pillar I	Pillar I	Pillar II	Pillar II
AGR 2024	AGR 2025	GDI #	OUTPUT 2 - Global DeSIRA Indicators	AGR 2024	AGR 2025	AGR 2024	AGR 2025
58	58	22A	Number of climate-smart or agroecological innovations under development (At farm level: products, technologies, agricultural practices, farming systems)	1462	1842	0	0
45	52	22B	Number of climate-smart or agroecological innovations under development (At farm level: services, decision making tools, governance mechanisms)	106	150	0	3
71	73	22C	Number of innovations under development (Beyond farm level, including at institutional level)	367	459	10	11

(Source: Global M&E Framework of the DeSIRA initiative, December 2025)

Colour code	GDI Title	AGR 2024	AGR 2025	(X): no expected contribution
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Each figure is the sum of the values contributed by each DeSIRA project to the GDI.

Values > 0 AGR 2025 = number of projects (all categories) having contributed a positive value to the GDI during the reporting period 2019-2024.

Group 1 (G1) = 22 Pillar I projects included in the GM&EF since 2021/22 (CID 2018)

Group 2 (G2) = 17 Pillar I projects included in the GM&EF since 2023 (CID 2019)

Group 3 (G3) = 33 Pillar I projects included in the GM&EF since 2024 (CID 2020)

Pillar II = 7 projects = 2 projects, plus 5 'sub-projects' (under SUPPORT TO CAADP AR&EO) included in the GM&EF since 2021/22

5.3 Output 3 - Farmers are reached by research and innovation initiatives and individual capacities are developed beyond farm level, including at institutional level

Table 6: List of global DeSIRA Indicators attached to Output 3

GDI #23	Number of smallholder farmers reached by research & innovation initiatives
GDI #24	Number of individuals whose capacities are developed #24A (Researchers) #24B (Technical or Development Staff)
GDI #25	Number of individuals supported to earn a post-graduate diploma #25A (Master) #25B (PhD/Doctorate)

For GDI #23 (Number of smallholder farmers reached by research & innovation initiatives), one farming household is counted as one smallholder farmer, regardless of the number of family members contributing to farming activities. Large farming units, which a few projects have targeted in addition to smallholders, have been excluded from the count.

Capacity development of smallholder farmers

Overall and since the last reporting period, DeSIRA has continued making significant steps in supporting smallholder farmers and facilitating access to technical and scientific knowledge through trainings, workshops, on-farm demonstrations of practices, research trials, farmer field schools, exposure visits (etc.). It is estimated that a cumulative total of 695,000 smallholder farmers has been directly reached by 64 DeSIRA research and innovation (Pillar I) projects. Five Pillar I projects account for 58% of this value. The number of farmers reached directly is significantly underestimated due to monitoring and reporting limitations at project level. Challenges include difficulties in estimating the reach (especially women farmers), risks of double counting, and unavailability of disaggregated data (e.g. several project-level indicators aggregate farmers and technical staff). Values reported by projects unable to adequately address double counting issues were either excluded or adjusted using conservative assumptions regarding repeated participation in activities. Institutional projects (Pillar II) are only marginally involved in capacity development at farm level.

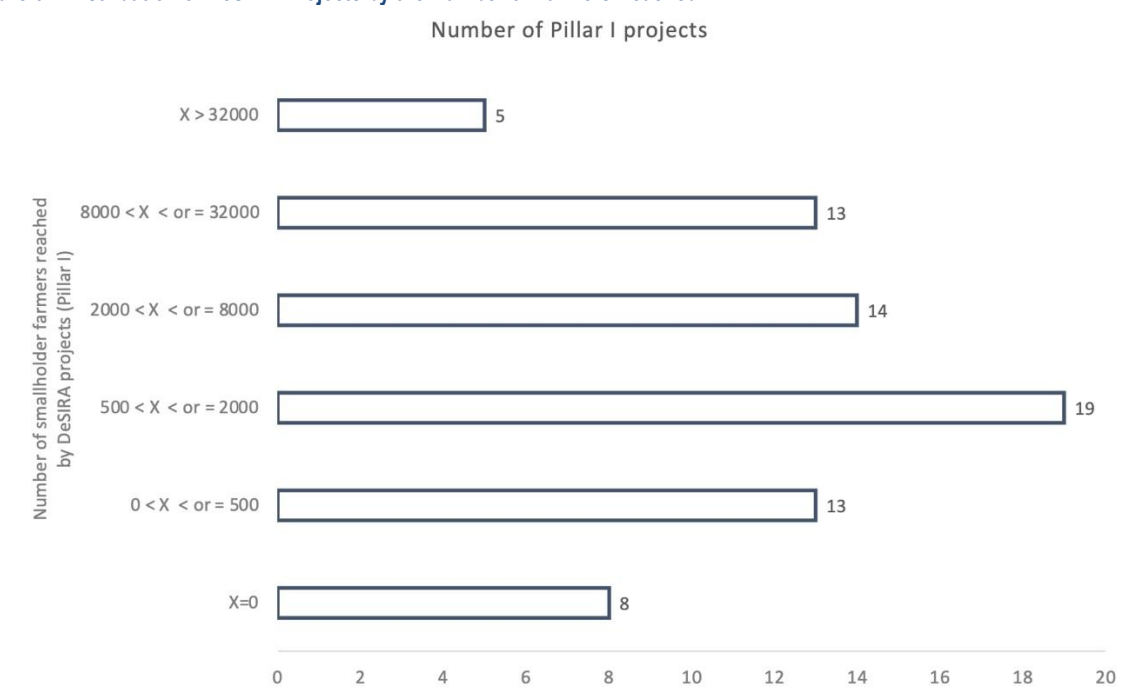
The number of farmers reached by all Pillar I projects has increased by a significant 69% since the last reporting period (from 411,021 to 694,297). This growth can be analysed according to project maturity. The most recent Pillar I projects (Group 3) show the highest increase (+ 291%). Although one of the G3 projects carries significantly more weight than the others in this growth, most G3 projects have substantially expanded their reach. Many of the oldest projects (from Group 1) have continued to reach additional farmers (+42%), while growth has been more limited among Group 2 projects (+6%). Finally, a limited number of Pillar I projects (8) have not reported against GDI #23. Among them, a few focus on enabling services and innovation systems (not farm-level outreach), two projects have faced substantial implementation delays, and some do not monitor the number of farmers reached.

Figure 6 below shows the distribution of Pillar I projects according to the number of smallholder farmers who have directly benefited from project activities. The distribution is clustered around small and medium-scale projects. Projects reaching between 500 and 2,000 farmers form the largest category (19 projects). Projects targeting fewer than 500 farmers remain relatively frequent (13 projects). This reflects the primary objective of research and innovation projects, which is to generate knowledge and co-design innovations, typically through trials involving relatively small farmer groups, rather than to scale these innovations. Many projects focus on training motivated farmers (e.g. farmer leaders, relay farmers) to promote peer-to-peer learning and extension, as well as supporting organisations (farmers' organisations, local NGOs, advisory services) to play an extension

role, rather than maximizing the number of beneficiary smallholder farmers. The effects of this strategy remain unverified until innovations are deployed by farmers.

A limited number of DeSIRA projects have an explicit development objective and reach a substantially larger number of farmers. These include 5 projects which, together, report reaching over 400,000 farmers. This is a result of the participation of development organisations (including farmers' organisations) within the project consortium, the inclusion of digital tools, or the release of seeds on a large scale.

Figure 6: Distribution of DeSIRA Projects by the Number of Farmers Reached



Among the 64 projects contributing to GDI #23, only 35 provided sex-disaggregated data, reporting over 116,000 women farmers (i.e. female-headed farming households). This figure is underestimated, as four of the largest projects (reaching over 32,000 farmers each) do not provide sex-disaggregated estimates.

At the time of data collection for AGR 2025, 30 Pillar I projects (most of them from Group 1 and Group 2) had ended or were about to end. Their final results are included in AGR 2025. The remaining projects continue to build the capacity of farmers and develop dissemination and/or scaling strategies (see Outcome 1).

Capacity development of researchers and technical staff

Besides farmers, DeSIRA projects contribute to the development of individual capacities for a wide range of actors including researchers, extension specialists (from the government, private sector, farmers' organisation), NGO staff, local authorities etc. Overall, across all DeSIRA projects (Pillar I and Pillar II), the DeSIRA initiative is estimated to have strengthened the capacity of at least 3,800 researchers and 40,000 technical or development staff.

For the reporting period, the total number of researchers whose capacities have been developed under the DeSIRA initiative amounts to 3,869 researchers, with 72% under Pillar I and 28% under Pillar II. Under Pillar I, there has been a substantial increase of 29% since the last reporting period (+633 researchers). Training on data collection, management and analysis is central to many Capacity Development (CD) plans, including for researchers. However, not all projects have specific CD plans for researchers. For a majority of Pillar I projects,

researchers who are actively involved in project implementation develop their capacities through practice rather than through formal training. Capacity development is embedded in day-to-day research activities and learning-by-doing processes. This is rarely captured through measurement tools and/or in the reporting. Instead, project teams reflect positively on individual-level changes such as ways of working. According to project teams, the interaction with a diversity of actors (farmers, technicians, extension agents, private sector stakeholders, policymakers etc.) is the key factor contributing to strengthening researchers' capacities and broadening their perspective beyond academic or disciplinary skills. Project teams also indicate that the supervision of PhD and MSc students is often a means through which researchers expand their own methodological and analytical capacities. Besides, North–South collaboration is highlighted as a valuable mechanism for mutual learning, with both partner institutions benefiting from exposure to different research cultures, constraints, and approaches.

As for technical staff, across all Pillar I projects, the number of individuals having strengthened their capacities amounts to cumulative 37,214 (including one G2 project accounting for 50% of this value). This is a 24% increase over the last reporting period. This growth is partly driven by the most recent projects (G3), which recorded a strong increase (142%). Capacity development for technical and development staff is primarily delivered through trainings, workshops and Training of Trainers (ToT), often coupled with hands-on practice of tools (e.g. data systems, GIS/platform use, M&E tools). There is evidence that CD is widespread, but measurement is uneven. Projects frequently struggle to disaggregate technical staff from farmers and researchers, and to identify unique individuals from repeated participants across multiple events. As a result, reporting for AGR 2025 adopts conservative rules that results in the exclusion of values and the underestimation of outputs. Extension officers, facilitators, and technical personnel (and sometimes private-sector technical staff) are capacitated so they can deliver downstream support to targeted producers and to scale technologies, practices and knowledge beyond the target groups. Training for technical staff (public and private) encompasses a diversity of topics, including technical and non-technical topics such as: effective extension service delivery, innovation facilitation, conservation agriculture, agroforestry, organic agriculture, climate-resilient agriculture and agroecology-based approaches, forest and land management, food safety risk assessment, marketing and e-commerce, public policy cycle, social and behaviour change communication, gender and youth inclusion (etc.). Gender disaggregation exists but varies widely across projects and the data is not always reliable.

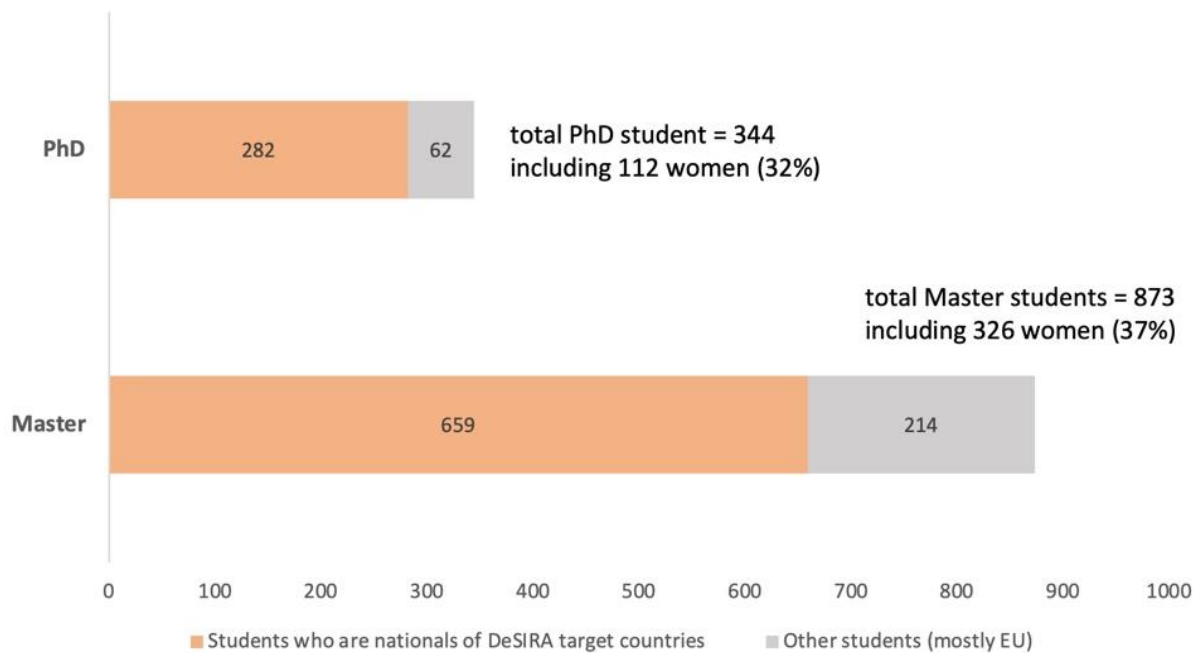
With 7 institutional projects, Pillar II contributes 1080 researchers and 2807 technical staff, reporting respectively an increase of 13% (+127 researchers) and 22% (+ 501 technicians) over the last reporting period. Overall, CD for researchers focuses on knowledge production, advanced scientific skills, science–policy interface, international exposure, research governance and careers. Technical staff training is designed to support large-scale dissemination through a diversity of strategies including extension systems, communities of practice, and cascaded training models.

Sex-disaggregated data is often available but not systematically reported, making it difficult to accurately assess women's representation among researchers. While women appear to account for around 25% of the total number of researchers supported, this figure includes a significant share of researchers for whom sex is not reported. When considering only researchers with identified sex, women represent close to 30%. Given that most researchers benefiting from capacity development are the same individuals involved in project implementation, it is assumed that women's share among all supported researchers does not exceed this level. Overall, women's representation in technical staff roles remains generally low, with some exceptions.

Support to post-graduate students

Post-graduate students have continued to play a crucial role in project activities, contributing to research, innovation-related tasks, fieldwork, and knowledge production. They enhance their scientific skills while pursuing academic degrees. Students are exclusively supported under Pillar I and most Pillar I projects support or have supported Master's (ranging from 1 to 71) and/or PhD students (1 to 24). Since the start of the initiative, Pillar I projects have supported a cumulative total of 873 Master's (+28% over the last reporting period) and 344 PhD students (+9%). Expectedly, the increase in the number of Master students was strongest in the most recent projects of Group 3 (+46%), in line with a growth in research activities, which created a higher demand for Master's-level recruitment. However, many of the older projects continued to recruit Master students to support their research (+ 17% for Group 1 and + 28% for Group 2). By contrast, the growth in the number of PhD students was nearly stagnant in G1 and G2, as these projects were either ending or approaching completion. Consequently, the increase in PhD student numbers is driven almost entirely by Group 3.

Figure 7: Post graduate students in DeSIRA projects



Students are either professionals from partner institutions, pursuing advanced degrees, or young individuals continuing their studies. Most students originate from DeSIRA target countries, with a majority from Africa, which is consistent with the fact that 51 out of 72 Pillar I projects are implemented in Africa. About one third of PhD and Master students are women (32% and 37%, respectively).

More than 200 Research and Education institutions (excluding research-only institutions) contribute to capacity development for students and researchers, with several institutions involved in more than one DeSIRA project. This includes 55 European institutions, 7 non-EU universities (from Switzerland, the United Kingdom and the United States), and 147 universities from DeSIRA target countries. While the number of European academic bodies has remained stable since the previous reporting period, the number of national universities has increased (+19 institutions), reflecting the establishment of additional partnerships to support research and individual capacity development.

FO-RI « Research and innovation and farmers organisations»**Implemented by Agricord****Africa: Burkina Faso, Mali, Senegal, Cameroon, Burundi, RDC, Madagascar, Tanzania;****Asia: Philippines;****Pacific Island Countries: Cook Islands, Fiji, Papua New Guinea, Solomon Islands, Tonga;****Caribbean: Haiti;****Latin America: Brazil, Uruguay****Pillar I – Group 3**

The project supports 13 action-research partnerships in Africa, Asia, Pacific Island Countries, the Caribbean and Latin America. They are carried out by farmers' organisations, with technical support from agricultural agencies and research bodies, which design, test and disseminate innovations based on agroecological principles.

Started in January 2022, the project has trained more than 23,548 farmers until December 2024 (farmers were counted once only and duplicate participations were removed). Farmer capacity development focuses on participation in action research activities and peer-to-peer learning processes on agroecology. As per the Agricord approach, peer-to-peer learning events play a central role in supporting innovation by encouraging collaboration, knowledge exchange, and joint problem-solving among farmers, researchers, and other stakeholders. By drawing on shared experience within communities, it facilitates the uptake and adaptation of new practices. In 2024, all 13 action research projects contributed to GDI #23. Aiming to empower farmers to jointly conduct inclusive action research and dissemination on agroecology, trainings focused on vegetable seeds, action research protocols, joint experiment design and implementation, and good agricultural practices. They were delivered through on-site sessions, indoor meetings, and online formats.

The project does not systematically track the number of researchers or technical staff whose capacity has been strengthened by the project. It confirms that 26 researchers involved in implementation are increasing their capacity as they are learning from farmers during the on-farm experiments they support. In addition, the capacity of at least 76 technicians has been supported through participation in practical workshops and learning events related to action research projects. At global level, in 2024, practical workshops on capitalizing experiences in action research brought together field facilitators, senior staff, and board members from farmers' organisations and research centres. At project level, for instance in Tanzania, field officers from two farmers organisations -the Tanzanian Tree Growers Association and the Union Njombe Agricultural Development Organisation- participated in learning events organized by the Tanzanian chapter of PELUM (Participatory Ecological Land Use Management), a Kenya-based network of civil society organisations promoting agroecology and sustainable land use in Eastern, Central and Southern Africa.

As of December 2024, across the 13 research projects, 4,653 farmers reported increased capacity to carry out agroecological action-research. This reflects both the development of farmers' skills in farmer-led research methodologies and their active involvement in implementing experiments. Preliminary results from a survey of FO-RI implementing partners indicate that all respondents (including producers, researchers, agri-agencies and FO staff) reported improved skills in farmer-led research, including problem identification, protocol design, validation of results and innovations, and dissemination of findings.

Table 7: Summary of cumulative values 2019-2024 for GDIs attached to Output 3

N° of projects contributing to the GDI # Values > 0		OUTPUT 3: "Farmers are reached by research and innovation initiatives, and individual capacities are developed beyond farm level, including at institutional level"		Pillar I	Pillar I	Pillar II	Pillar II
AGR 2024	AGR 2025	GDI #	OUTPUT 3 - Global DeSIRA Indicators	AGR 2024	AGR 2025	AGR 2024	AGR 2025
62	66	23	Number of smallholder farmers reached by research & innovation initiatives	411021	694297	358	811
66	72	24A	Number of individuals whose capacities are developed (Researchers)	2156	2789	953	1080
63	72	24B	Number of individuals whose capacities are developed (Technical or Development Staff)	29940	37214	2306	2807
49	55	25A	Number of individuals supported to earn a post-graduate diploma (Master's)	680	873	0	0
48	48	25B	Number of individuals supported to earn a post-graduate diploma (PhD/Doctorate)	315	344	0	0

(Source: Global M&E Framework of the DeSIRA initiative, December 2025)

Colour code	GDI Title	AGR 2024	AGR 2025	(X): no expected contribution
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Each figure is the sum of the values contributed by each DeSIRA project to the GDI.

Values > 0 AGR 2025 = number of projects (all categories) having contributed a positive value to the GDI during the reporting period 2019-2024.

Group 1 (G1) = 22 Pillar I projects included in the GM&EF since 2021/22 (CID 2018)

Group 2 (G2) = 17 Pillar I projects included in the GM&EF since 2023 (CID 2019)

Group 3 (G3) = 33 Pillar I projects included in the GM&EF since 2024 (CID 2020)

Pillar II = 7 projects = 2 projects, plus 5 'sub-projects' (under SUPPORT TO CAADP AR&EO) included in the GM&EF since 2021/22

5.4 Output 4 - Education and training programmes responsive to capacity development needs for agricultural innovation at national level are strengthened

Table 8: List of global DeSIRA Indicators attached to Output 4

GDI #26	Number of curricula or training packages developed or upgraded
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Education is not a DeSIRA objective in and of itself. Nevertheless, its instrumental long-term role in building individual capacities, as reflected in and supported by the involvement of 209 research and education institutions in project implementation, has led many projects to develop or improve training or education programmes. In total, 41 projects contribute positively to Output 4, including 37 Pillar I projects and 4 Pillar II projects, representing a 46% increase over the reporting period (from 28 to 41). Half of the contributing projects belong to the most recent group of projects (Group 3 under Pillar I). In AGR 2025, curricula and training packages are reported only once they are finalized and available for use beyond the project context. Training packages developed solely for capacity building during project implementation, with no use after project completion, are therefore not reported under AGR 2025.

For Pillar I, the cumulative number of education-related outputs has grown substantially (from 55 to 117, + 113%). All projects -the most recent, as well as the older ones- have contributed to this growth: projects from Group 1 (CID 2018), Group 2 (CID 2019) and Group 3 (CID 2020) have respectively produced 28, 10 and 24 additional educational products since the last reporting period. At the time of data collection, many other curricula or training packages were still under development.

The contribution of Pillar II projects to Output 4 (18 products) has not changed since last year. The key contribution comes from a fellowship programme that ended in October 2024: fellows having participated in a DeSIRA-supported Advanced Science Training claim they have inserted new training or adapted modules (at least 12) on climate change and agriculture in existing curricula in their home institutions in African countries.

In the context of DeSIRA, education-related outputs are mostly by-products of research activities. Activities include the revision or addition of academic modules, or the development of training or structure learning products from scratch. These outputs cater to a diversity of beneficiaries, such as farmers, technical staff, scientists (including graduate and post-graduate students) bankers, and policymakers, with an emphasis on sustainability to ensure continued use. Examples include formal curricula with an academic anchoring, digital learning products and training platforms, as well as operational and field-oriented training. Non-academic training programmes cover a wide range of topics and audiences, from agribusiness curriculum development for farmers to training in experimental design and data collection for researchers. Support for academic programmes focuses on incorporating concepts related to CSA, agroecology, and Knowledge Management (KM) into curricula.

The COVID-19 pandemic played a role in shaping the education and training efforts of DeSIRA projects, leading to the development and mobilisation of online training in response to pandemic-related constraints while highlighting the continued value of in-person education. The current education-related outputs of the DeSIRA initiative demonstrate the value of knowledge and innovations produced and highlight the educational potential of DeSIRA and the role it can play in supporting education to transform agriculture and food systems at national level, owing to the strong partnerships developing between European and African Research and Education institutions. Besides, DeSIRA LIFT (which ended in June 2025) was supporting the Uganda-based Regional Universities Forum for Capacity Building in Agriculture (RUFORUM) in co-certification mechanisms for professional trainings of Agricultural Innovation Facilitator.

CASSECS "Carbon sequestration in sylvopastoral ecosystems in CILSS States"

Managed by ISRA (Institut Sénégalais de Recherches Agricoles)

Senegal, Burkina Faso, Niger, Chad, Mali, Mauritania

Pillar I – Group 1

The objective is to improve the assessment of carbon footprint of Sahelian agro-silvopastoral ecosystems in order to better quantify their impacts on climate change.

In addition to research-based training, one of the objectives of this 5-year project (December 2019 - December 2024) was to develop a teaching unit on the carbon balance of agro-pastoral livestock systems. This unit was expected to be jointly developed by universities from CILSS countries (Comité Inter-État de Lutte contre la Sécheresse au Sahel or Permanent Interstate Committee for Drought Control in the Sahel) and introduced into Master's programmes in these countries. A proposal for the syllabus of the teaching unit "Climate Change and (Agro-)Pastoral Ecosystems" was presented to project partners in 2023 and validated during a regional workshop in January 2024. It is composed of three elements: (i) adaptation of the pastoral sector to climate variability and change; (ii) mitigation of greenhouse gas emissions in the pastoral sector; and (iii) integration of climate change. As of December 2024, the Université Cheikh Anta Diop de Dakar (UCAD, Senegal) was planning the integration of the teaching unit into its Master's programme in Agroforestry, Ecology and Adaptation, during the next curriculum revision cycle.

WATDEV "Climate Smart WATER Management and Sustainable DEVELOPMENT for food and agriculture in East Africa"

Implemented by AICS & CIHEAM (Agenzia Italiana per la Cooperazione allo Sviluppo & Centre International de Hautes Etudes Agronomiques Méditerranéennes - Mediterranean Agronomic Institute of Bari)

Egypt, Ethiopia, Kenya, Sudan

Pillar I – Group 3

The goal is to improve the knowledge and management of ministries and research institutions on water and to develop innovative solutions and skills of farmers and local actors on water management.

The project has developed a professional training course on "Water, soil, and crop management in climate-smart agriculture". It is comprised of 3 Modules, each spanning a duration of 5 days. The training materials have been uploaded in the Knowledge Management portal of WATDEV and can be reused.

The first module is a training for trainers "Introduction to the Implementation of the Best Management Practices and Innovations", mainly for the national research partner-organisations: Heliopolis University (Egypt); Kenya Agricultural and Livestock Research Organisation (KALRO, Kenya); Water and Land Resources Centre (WLRC, Ethiopia); Water Research Centre (WRC, Sudan). It provides insights on theoretical approaches and technical solutions on manuring, agroforestry, intercropping, Water Users' Association (WUA), crop rotation and improved seeds. It was first taught at CIHEAM Bari in December 2023 and attended by 19 trainees from Egypt, Ethiopia, Kenya, and Sudan (trainees from Sudan attended online). The project confirmed the 4 research organisations were already using the training product/material in follow up meetings at local level.

The second module focuses on "Innovative Technologies in Agriculture and Water Management" and aims to provide participants with the latest knowledge in new technologies and their applications in water management for agriculture. The intended users are the institutional and technical staff of the beneficiary ministries and local authorities. First taught in September 2024, this second module was attended by 20 trainees from the same countries. Three of the 4 PhD students supported by the project also attended.

As of December 2024, another (and third) module "Networking for cooperating, project design and funding opportunities" was yet to be fully developed and organized, (it was planned for February 2025).

Table 9: Summary of cumulative values 2019-2024 for GDIs attached to Output 4

N° of projects contributing to the GDI # Values > 0		OUTPUT 4: "Education and training programmes responsive to capacity development needs for agricultural innovation at national level are strengthened"		Pillar I	Pillar I	Pillar II	Pillar II
AGR 2024	AGR 2025	GDI #	OUTPUT 4 - Global DeSIRA Indicators	AGR 2024	AGR 2025	AGR 2024	AGR 2025
28	41	26	Number of curricula or training packages developed or upgraded	55	117	18	18

(Source: Global M&E Framework of the DeSIRA initiative, December 2025)

Colour code	GDI Title	AGR 2024	AGR 2025	(X): no expected contribution
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Each figure is the sum of the values contributed by each DeSIRA project to the GDI.

Values > 0 AGR 2025 = number of projects (all categories) having contributed a positive value to the GDI during the reporting period 2019-2024.

Group 1 (G1) = 22 Pillar I projects included in the GM&EF since 2021/22 (CID 2018)

Group 2 (G2) = 17 Pillar I projects included in the GM&EF since 2023 (CID 2019)

Group 3 (G3) = 33 Pillar I projects included in the GM&EF since 2024 (CID 2020)

Pillar II = 7 projects = 2 projects, plus 5 'sub-projects' (under SUPPORT TO CAADP AR&EO) included in the GM&EF since 2021/22

5.5 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

Table 10: List of global DeSIRA Indicators attached to Output 5

GDI #27	Number of knowledge & communication products developed
	#27A (Communication products)
	#27B (Technical reports)
	#27C (Guidance manuals)
	#27D (Databases)
	#27E (Scientific publications)

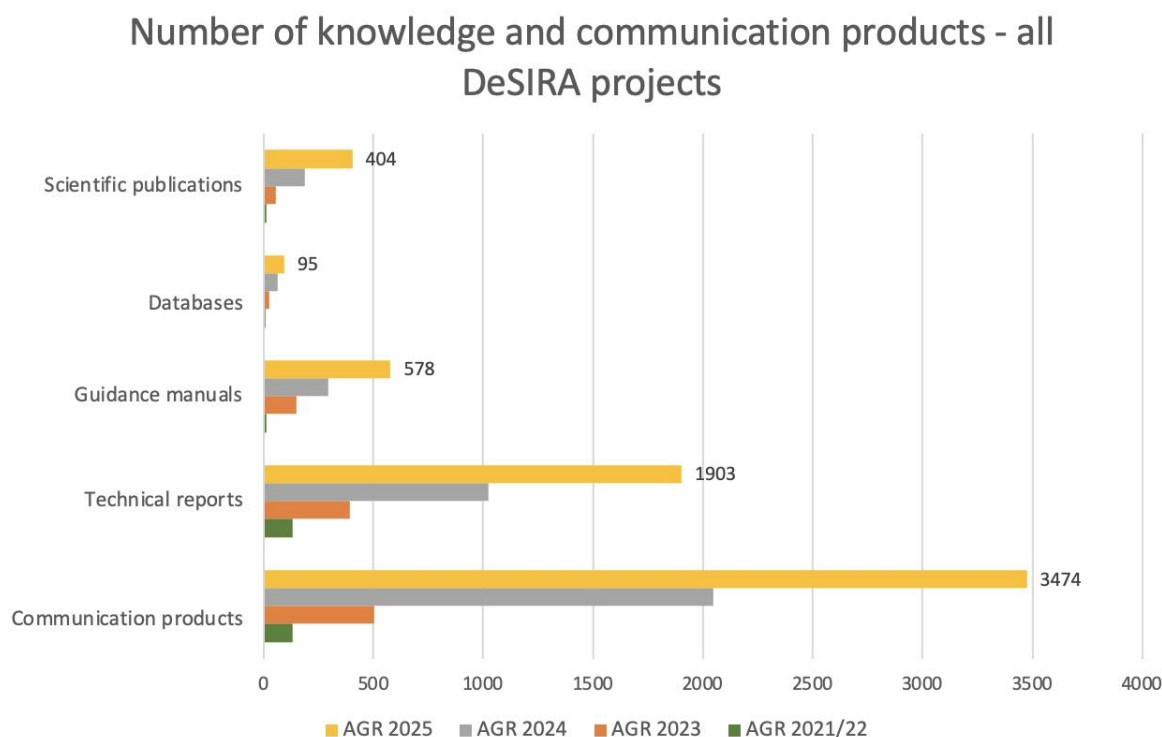
Knowledge production and dissemination are at the heart of DeSIRA projects. Knowledge and communication products are reported in AGR 2025 once finalized and accessible. For instance, the many databases developed during project implementation are reported only if and when they are accessible for external use. Scientific publications (peer-reviewed) are reported once published. Technical reports that are not available for external use are not reported. Figure 8 below tracks the year-on-year evolution of the production of different categories of knowledge and communication products. Each Annual Global Report (AGR) only covers projects that have reached at least two years of implementation, i.e. those expected to generate significant knowledge outputs. Given that project start dates span from March 2019 to July 2023, coverage has progressively expanded over time: AGR 2021/22 included 29 projects, AGR 2023 covered 46 projects while both AGR 2024 and AGR 2025 included all 79 DeSIRA projects. While the number of projects covered therefore varies by year, this reflects differences in project maturity and ensures that the comparisons across reporting years focuses on projects with a meaningful production capacity. Reporting practices for knowledge and communication products are uneven across projects. In several cases, documentation remains partial or incomplete, while others demonstrate rigorous and systematic reporting. Consequently, consolidated figures underestimate the actual volume of products generated under DeSIRA.

The data (see Figure 8) show a clear scaling-up of knowledge and communication products, as all product categories increased sharply in all reporting periods. DeSIRA LIFT, which ended in June 2025, helped projects to communicate more effectively (e.g. participatory videos, stories of change). Since AGR 2024, the number of communication products for all DeSIRA projects (e.g. seminars, videos, flyers, briefs, etc.) has increased by 70% (from 2049 to 3474). Technical documents (including Master's reports/theses) grew by 86% (from 1022 to 1903), while guidance manuals recorded a 96% increase (from 295 to 578). Databases increased by 46% (from 65 to 95). The strongest growth (113%) was observed in scientific publications, which stand at a cumulative total of 404 articles over the reporting period against 190 in AGR 2024. The publications reported in AGR 2024 mostly came from scientists involved in the implementation of Pillar I projects. In AGR 2025, the value reflects the outcomes of the work carried out by the many PhD students (344) associated with DeSIRA projects, and who were in the process of completing their degree. Additional contributions to sharing of scientific knowledge include participation in national and international scientific conferences or policy-related events (e.g. COP27, COP28).

Knowledge products illustrating the contributions of projects to the deployment of innovations take time to develop, as innovation is a long-term process. Although several Pillar I projects have now ended, the production of knowledge outputs -particularly scientific publications- will continue beyond their final reporting period. This is because many manuscripts were still under preparation, under revision, or had been submitted but were not yet published at the time of data collection for AGR 2025 (June to December 2024). As a result,

a share of these outputs will not be captured in the Global M&E Framework of DeSIRA, even though they constitute direct results of DeSIRA-supported research activities.

Figure 8: Number of knowledge and communication products



Key challenges inherent to DeSIRA include the complexity of translating research into accessible knowledge products for various audiences and ensuring their sustainable and efficient dissemination. Some of the strategies deployed to overcome these challenges include creating Knowledge Management (KM) systems, delegating KM to national partners, or integrating project products into existing platforms. Several DeSIRA projects have developed integrated web-based platforms or interconnected digital systems designed to facilitate access to and dissemination of scientific knowledge. They may combine communication outputs (e.g. videos), training modules, or provide access to scientific databases. By contrast, many other projects rely primarily on ad hoc communication channels (websites, social media, media coverage, conferences, etc).

OBSYDIA “Observatoire Pilote des Paysages et des Dynamiques Agricoles du Bénin - Zones Nord et Centre” (Pilot Observatory of Landscapes and Agricultural Dynamics in Benin - Northern and Central Zones)

Implemented by CIRAD (Centre de coopération Internationale en Recherche Agronomique pour le Développement)

Benin

Pillar I – Group 3

The scientific objective of the project is to explore and operationalize the possibilities offered by available satellite images to develop innovative indicators and maps of the dynamics of agricultural systems and landscapes in central and northern Benin.

The project has an online presence through its website (www.obsydya.org) and social media, including Facebook, LinkedIn and YouTube. During the reporting period, several communication products were produced: e.g. a newsletter, a documentary film entitled "The OBSYDYA Project" (2024). In addition, two photographic reportages document ongoing agricultural and landscape dynamics and will feed into the production of an illustrated cartographic atlas and a public photographic exhibition planned for 2026.

The project staff actively disseminated results through several national, regional and international events. For instance, the following communication "Mapping and characterization of agricultural systems in Benin using satellite remote sensing: Application of a new radiometric landscape zoning approach" was presented at a symposium on "Modelling agricultural landscapes for process analysis and simulation" held on 19–20 October 2023, in Paris, France, organized by Réseau PAYOTE, a French research network focused on agricultural landscape and territory modelling for the simulation and analysis of agronomic, ecological and environmental processes. In March 2024, the project organized a national workshop in Cotonou to present its first cartographic results.

These results include a set of 15 cartographic outputs: agricultural land-use maps across multiple project sites, land-cover maps at departmental scale, landscape stratification maps and vegetation dynamics maps. This substantial technical output is supported by two databases: 1/ a cartographic database of landscapes and land use is under development; 2/ a database of 32 indicators characterising agrarian systems, landscapes, their dynamics and sustainability was delivered in July 2025. The OBSYDYA platform was developed to serve as a public communication tool providing access to maps and indicators. As of July 2025, the platform was being tested internally at INRAB (Institut National des Recherches Agricoles du Bénin). Mirror installations are planned at CIRAD and possibly at the University of Parakou to ensure long-term system sustainability.

The project also supported 6 Master students who produced six theses, covering topics such as radiometric zoning, deep learning approaches for multi-sensor land-cover and land-use mapping, very-high-resolution mapping of high-value tree plantations (etc.). In addition, two guidance manuals were produced: a technical guide on building ground-truth databases for satellite image classification and an interview guide for analysing the spatial organisation of agricultural activities.

Finally, the project has produced two peer-reviewed scientific publications:

- Padonou MJDD, Denis A, Hountondji Y-CH, Tychon B, Gouwakinnou GN. 2024. Ecological sustainability indicators of agroecosystems derived from satellite remote sensing: a systematic review. Cahiers Agricultures 33:27. <https://doi.org/10.1051/cagri/2024022>.

Padonou, M. J. D. D., Denis, A., Hountondji, Y. C. H., Tychon, B., & Gouwakinnou, G. N. (2025). Multi-criteria Assessment of the Environmental Sustainability of Agroecosystems in the North- Benin Agricultural Basin Using Satellite Data. Preprints. <https://www.mdpi.com/2076-3298/12/8/271>

Table 11: Summary of cumulative values 2019-2024 for GDIs attached to Output 5

N° of projects contributing to the GDI # Values > 0		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"		Pillar I	Pillar I	Pillar II	Pillar II
AGR 2024	AGR 2025	GDI #	OUTPUT 5 - Global DeSIRA Indicators	AGR 2024	AGR 2025	AGR 2024	AGR 2025
77	79	27A	Number of knowledge & communication products developed (Communication products)	1806	3175	243	299
70	77	27B	Number of knowledge & communication products developed (Technical reports)	778	1546	244	357
47	64	27C	Number of knowledge & communication products developed (Guidance manuals)	279	521	16	57
39	50	27D	Number of knowledge & communication products developed (Databases)	56	82	9	13
40	55	27E	Number of knowledge & communication products developed (Scientific publications)	156	355	34	49

(Source: Global M&E Framework of the DeSIRA initiative, December 2025)

Colour code	GDI Title	AGR 2024	AGR 2025	(X): no expected contribution
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Each figure is the sum of the values contributed by each DeSIRA project to the GDI.

Values > 0 AGR 2025 = number of projects (all categories) having contributed a positive value to the GDI during the reporting period 2019-2024.

Group 1 (G1) = 22 Pillar I projects included in the GM&EF since 2021/22 (CID 2018)

Group 2 (G2) = 17 Pillar I projects included in the GM&EF since 2023 (CID 2019)

Group 3 (G3) = 33 Pillar I projects included in the GM&EF since 2024 (CID 2020)

Pillar II = 7 projects = 2 projects, plus 5 'sub-projects' (under SUPPORT TO CAADP AR&EO) included in the GM&EF since 2021/22

5.6 Output 6 - Science-based policy briefs are produced and dialogues on agriculture and food policy development and reform are organized

Table 12: List of Global DeSIRA Indicators attached to Output 6

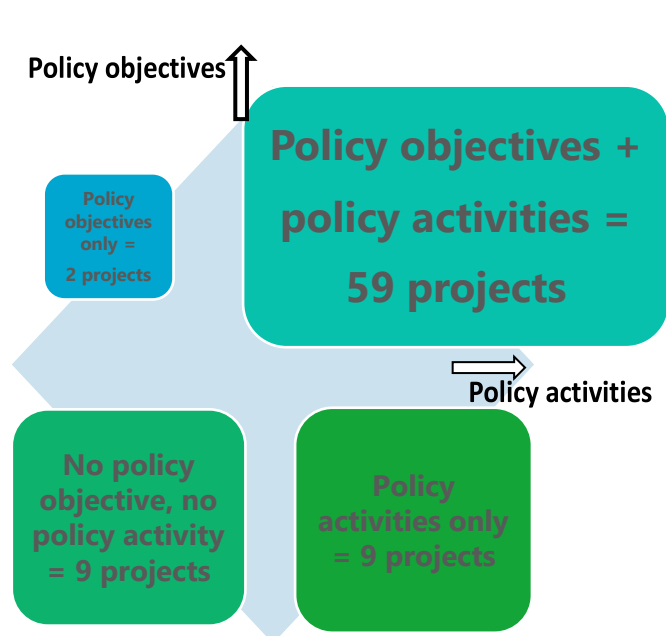
GDI #28	Number of policy-related outputs
	#28A (Documents)
	#28B (Dialogues)

There are three categories of DeSIRA projects, based on their level of policy engagement at activity/output level and their policy expectations at outcome level:

- Projects with no policy activities and no policy objectives (9 Pillar I projects, 6 from Group 1 and 3 from Group 3);
- Projects engaged in policy activities but with no specific policy objective (9 projects, all under Pillar I);
- Projects with a policy objective, whether explicit or implicit (61 projects, including 2 without formal policy activities).

Overall, the majority of DeSIRA projects include planned policy engagement. The 9 projects with no policy involvement operate exclusively at technical level (including capacity development). Among them, six had ended at the time of data collection.

Figure 9: Categories of DeSIRA projects based on the level of policy engagement



Pillar I

Over the reporting period, Pillar I projects organized 135 policy dialogues and produced 170 policy products. With the same number of projects in AGR 2024 and AGR 2025, this represents a substantial increase compared to AGR 2024 (+55% and +93% respectively), in line with the growing production of knowledge. In response to the need to scale solutions through an enabling environment, all Group 1 projects that had planned policy engagement as part of their strategy eventually delivered policy outputs, unlike in AGR 2024 when 4 projects had not produced any policy output by December 2023. All Group 2 projects include planned policy engagement. Among them, two had initiated activities, but not reported policy outputs yet during the reporting period. As for the most recent

projects (Group 3), seven of the 26 that had planned policy activities had not started implementing them yet.

Under Pillar I, policy engagement is mostly process-oriented, relying on continuous interactions and dialogue rather than stand-alone policy events. The scope of the policy dialogues varies for each project. Dialogues may engage stakeholders at local level (district, province, territorial platforms, living labs), national level (interministerial working groups, national platforms), or regional level (e.g., ASEAN, CEDEAO).

Policy documents, mostly briefs, can either conclude or support policy dialogue processes. They are typically produced in the later phase of a project cycle, as part of knowledge consolidation and policy influence efforts. The diversity of topics addressed in the policy documents/briefs reflects the diversity of innovations under co-development: e.g. "Driving Traceability: An Application of Blockchain Technology in the Ethiopian Coffee Industry"; "Digital agency: Empowering farmers to co-create knowledge on agroecology practices"; "Baobab Tree - A Valuable Underutilised Resource In Kenya Towards Food And Nutrition Security"; "Information Barriers to Promoting Climate-Smart Agriculture: Mixed Methods Evidence from Malawi"; "Effects of the EU food safety regulation on cadmium on the cacao value chains of Colombia, Ecuador, and Peru"; "Revitalizing millets for rural transformation in Nepal". In several projects, innovations were still under development and had not yet reached a level of maturity sufficient to inform policy reflection.

For policy engagement to be effective, two conditions are required: research results need to lend themselves to being translated into policies, which is not always the case, and implementation partners need to have the required knowledge and skills to engage in policy activities, which has been a point of attention throughout the implementation period. There is evidence of capacity development to support the policy activities of Pillar I projects. Support has been external and internal. Until June 2025, DeSIRA LIFT has provided support to DeSIRA projects interested in building their capacities in this domain. DISSEM-INN, funded by AFD and managed by CIRAD, also contributed to Output 6 by supporting 9 Pillar I DeSIRA projects in policy advocacy. CIRAD's long-term position in the Sahel enables this support, not easily replicable elsewhere. Internal support refers to projects which have organized CD activities targeting policy skills, such as writing workshop to facilitate the production of policy briefs. Projects benefitting from a no-cost extension were able to further consolidate their policy engagement. At the same time, policy activities and results are not always clearly identified or systematically reported, reflecting the absence of dedicated policy indicators and the secondary focus given to policy outcomes in many Pillar I projects.

Pillar II

In Pillar II, six projects were active in policy work (one ended in January 2024), having increased their output by 15% for policy briefs (60) and 28% for policy dialogues (69) since the last reporting period. Policy dialogues were mostly convened at regional level, while selected national members of regional implementing partners were supported to organize country-level dialogues, often building on regional discussions. Policy topics focus on Climate Smart Agriculture in relation to the Malabo/CAADP framework. For instance, a regional policy dialogue on climate-smart agriculture, markets and trade was followed by a country-level policy dialogue in Uganda, where the national forum addressed CSA integration into extension systems and investment plans. Another example includes support to national members in Uganda/Rwanda/Kenya to organize policy dialogues on harmonizing seed potato certification. At a more global/continental level, Knowledge Management is a key focus of policy efforts, with numerous policy briefs stemming from an annual pan-African initiative on Knowledge Management for Agricultural Development (KM4AgD). While agroecology was a marginal feature of policy dialogues in earlier reporting periods, it has become more visible in recent outputs, though it has not yet emerged as a dominant policy theme.

Artemia4Bangladesh "Introducing Circularity Through Climate-Smart Aquaculture in Bangladesh"

Implemented by WORLD FISH

Bangladesh

Pillar I – Group 2

The specific objective was to increase the productivity of salt producers and aquaculture farmers linked to Artemia-related innovative initiatives in the Cox's Bazar area.

The project, started in March 2020, has introduced an integrated artemia-aquaculture model for the first time in Bangladesh (Artemia is also known as brine shrimp and is used as feed for aquaculture). The project had not planned any policy activity. However, a revision of the National Fisheries Policy – 1998 was required in the context of the importance of aquatic food systems in food and nutrition security, environmental sustainability and resilience. To this end, and after having already organized similar dialogues in other cities, the Department of Fisheries of the government of Bangladesh convened stakeholders in Cox's Bazar for a policy dialogue on coastal and marine fisheries, and aquaculture. The dialogue was hosted by the project partners. The policy revision focused on four thematic areas: (i) enabling safe and quality seed, feed and fish production, (ii) enhancing nutrition sensitive aquaculture, (iii) promoting climate smart innovations focusing adaptation and mitigation measures and (iv) mainstreaming gender using disaggregated data for fisheries and aquaculture. Though the project partners did not produce a policy brief, they shared their experience with policy makers in all four thematic areas. The project ended in July 2024. A draft version of the National Fisheries Policy was issued in June 2025. Worldfish confirms that the policy includes, for the first time, an explicit reference to artemia in live fish culture, which the project can take credit for.

ASSET “Agroecology and Safe Food System Transitions in Southeast Asia”

Managed by AFD, implemented by GRET (Agence Française de Développement, Groupe de Recherche et d'Echange Technologique)

Cambodia, Lao PDR, Vietnam

Pillar I – Group 2

The project focuses on developing a continuum from participatory action research - co-designing territorial innovations with stakeholders to scale agroecological transitions - to policy dialogue, and on strengthening the Agroecology Learning Alliance in South-East Asia (ALiSEA), including its policy advocacy capacities.

The project supports the strengthening of science policy interfaces and multi-stakeholder policy engagement across local, national and ASEAN (Association of Southeast Asian Nations) levels. In parallel, it supports the expansion and structuring of ALiSEA and contributes to involving ALiSEA in existing national policy platforms and fora, in collaboration with ASSET's institutional partners.

Together with CIRAD and FAO, key national project partners implement policy activities: the General Directorate of Agriculture (GDA) of the Ministry of Agriculture, Forestry and Fisheries in Cambodia; the Institute of Policy and Strategy for Agriculture and Rural Development (IPSARD) in Vietnam; the Department of Planning and Cooperation (DoPC) and the Department of Agricultural Land Management (DALaM) in Lao PDR.

At local level, the project works at a provincial scale. Dialogues are either continuous (e.g. to assess the specific needs of the province in terms of policy support) or linked to specific programming (e.g. sharing & analysing best innovative policy mechanisms and policy learnings from the results of action research during an annual flagship workshop and/or a flagship policy workshop).

At national level, project partners actively support policy dialogues and mechanisms such as the Cambodia Conservation Agriculture Sustainable Intensification Consortium (CASIC), an interministerial instrument. In Lao PDR, ASSET supported the creation of the Sub Sector Working Group on Agroecology (SSWG-AE) established under the Sector Working Group on Agriculture and Rural Development (SWG-ARD), chaired by the Lao Ministry of Agriculture and Forestry, and co-chaired by the Embassy of France to Lao PDR and the FAO. In Vietnam, ASSET supported the establishment and implementation of the National Action Plan on Food Systems Transformations (NAP FST).

At regional level, CIRAD, ESCAP (United Nations Economic and Social Commission for Asia and the Pacific) and FAO, working closely with national partners and the ASEAN secretariat, supported the formulation of the “Policy Guidelines on Agroecology Transitions in ASEAN” (ASEAN Guidelines). This work was coordinated under

the Lao Initiative on Conservation Agriculture (LICA), a regional platform hosted by DALaM, endorsed by the ASEAN under the ASEAN Sector Working Group on Crops and supported by ASSET. From 2021, UN-ESCAP, CIRAD and FAO facilitated regional multi-stakeholder consultations under the lead of LICA, combining high level political representation (in relation to agriculture and food systems transformations) and strong engagement from regional organisations such as AsiaDHRRA (Asian Partnership for the Development of Human Resources in Rural Areas) and ALiSEA. In 2024, ASSET supported national consultations in most ASEAN countries and facilitated ASEAN consultations on the drafted ASEAN Guidelines. For instance, in LAO PDR, DALaM led the organisation of a SSWG-AE to introduce the ASEAN Guidelines and to help to incorporate AE into Lao Agriculture Sector Strategy. The outcomes of national and regional processes informed the final guidelines, which were adopted during the 46th ASEAN Ministers on Agriculture and Forestry Meeting in October 2024. This is a major outcome of the ASSET project, which also contributed to their alignment with broader regional strategies on sustainable agriculture, food system transformations, climate resilience and rural development. The project organized several sessions (policy brief writing workshops in Lao PDR and in Vietnam) to build the capacity of stakeholders in crafting effective policy briefs and addressing the importance of evidence-based advocacy in shaping policies. ASSET has produced several policy briefs and position papers, including:

- Creating agricultural landscapes with positive environmental outcomes,
<https://www.ASSET-project.org/news/new-publication-creating-agricultural-landscapes-with-positive-environmental-outcomes>;
- Boost Agricultural Sustainability through Crop-Livestock Integration: Insights from Điện Biên District,
<https://www.ASSET-project.org/media/fichiers/policy-brief-crop-live-stock-integration-in-dien-bien-northwestern-viet-nam-digital>.

More can be found at: <https://www.asset-project.org/publication/policy-brief>

Table 13: Summary of cumulative values 2019-2024 for GDIs attached to Output 6

N° of projects contributing to the GDI # Values > 0		OUTPUT 6: "Science-based policy briefs are produced and dialogues on agriculture and food policy development and reform are organized"		Pillar I	Pillar I	Pillar II	Pillar II
AGR 2024	AGR 2025	GDI #	OUTPUT 6 - Global DeSIRA Indicators	AGR 2024	AGR 2025	AGR 2024	AGR 2025
34	44	28A	Number of policy-related outputs (Documents)	88	170	52	60
34	50	28B	Number of policy-related outputs (Dialogues)	87	135	54	69

(Source: Global M&E Framework of the DeSIRA initiative, December 2025)

Colour code	GDI Title	AGR 2024	AGR 2025	(X): no expected contribution
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Each figure is the sum of the values contributed by each DeSIRA project to the GDI.

Values > 0 AGR 2025 = number of projects (all categories) having contributed a positive value to the GDI during the reporting period 2019-2024.

Group 1 (G1) = 22 Pillar I projects included in the GM&EF since 2021/22 (CID 2018)

Group 2 (G2) = 17 Pillar I projects included in the GM&EF since 2023 (CID 2019)

Group 3 (G3) = 33 Pillar I projects included in the GM&EF since 2024 (CID 2020)

Pillar II = 7 projects = 2 projects, plus 5 'sub-projects' (under SUPPORT TO CAADP AR&EO) included in the GM&EF since 2021/22

6 Progress towards Outcomes

6.1 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

Table 14: List of global DeSIRA Indicators attached to Outcome 1

GDI #8	Number of climate-smart or agroecological innovations taken up by smallholder farmers #8A (Products, technologies, models, systems, strategies) #8B (Services, decision making tools, governance mechanisms)
GDI #9	Number of smallholder farmers who have taken up at least one climate-smart or agroecological innovation
GDI #10	Number of DeSIRA projects for which the expected rate of implementation of innovations by targeted farmers has been met
GDI #11	Number of DeSIRA projects having at least one documented strategy to disseminate or scale up innovations

Outcome 1 captures the transformation of outputs into sustainable changes for the target groups of Pillar I projects, i.e. smallholder farmers. Changes in their capacity and resilience mostly stem from the combined contribution of the following four outputs: smallholder farmers are actively involved in multi-stakeholder mechanisms and participate in the design of innovations (Output 1); this creates an enabling environment for the development of innovations for use at farm level (Output 2); farmers develop their capacity through a diversity of activities, while key institutional actors of the agricultural services and support systems are also strengthened (Output 3); in addition, innovation processes generate science-based knowledge and evidence accessible to farmers (Output 5). By contrast, the development of curricula and training packages (Output 4), as well as policy efforts (Output 6), are expected to generate longer-term systemic effects and therefore do not directly influence Outcome 1, within the timeframe of the DeSIRA initiative. Changes observed at farm level may provide a meaningful indication of a project's effectiveness. However, beyond project outputs, the extent to which such changes materialize also depends on structural conditions, such as the existence of a supportive enabling environment (functional innovation support services, market dynamics, policy frameworks), which lie largely beyond the direct control of Pillar I projects.

While the number of Pillar I projects has remained constant, the share of projects contributing to GDI #8 has increased since AGR 2024. Twelve additional projects (52, up from 40) confirm the uptake of production-oriented innovations (products, technologies, models, systems, strategies) by smallholder farmers. Sixteen additional projects (44, up from 28) report the implementation or use of enabling innovations (services, decision making tools, governance mechanisms), a 57% increase, which reflects research and innovation efforts aimed at removing barriers to the uptake of production-oriented innovations.

Over the reporting period, it is estimated that smallholder farmers have taken up a cumulative 856 climate-smart or agroecological innovations, including 734 production-oriented innovations and 122 enabling innovations. This represents approximately 43% of all innovations developed or under development for use at farm level (GDI #22 reports a cumulative 1,992 innovations; see Table 5) since the start of the DeSIRA initiative. This proportion has steadily increased year on year, compared to 34% in AGR 2024 and 21% in AGR 2023.

This growth concerns all project groups, both the older ones (+45% for Group 1 and +37% for Group 2) and the more recent projects (+80%). For projects approaching completion or having ended over the reporting period, teams have conducted studies to assess the implementation of these innovations. However, this task can be methodologically complex and time-consuming, which explains why some projects have chosen not to

undertake such assessments, considering it premature to draw conclusions about uptake, and even more about adoption. It is important to underline that agricultural innovation processes do not always lead to innovations that can be implemented by farmers because they are inherently selective: some solutions prove more relevant, feasible, or attractive to farmers, while others may not move beyond the testing phase. A degree of attrition between the total number of innovations under development and those ultimately taken up is normal, as it is structurally embedded in the innovation cycle. The faster progress observed in multi-stakeholder innovation processes within Group 3 can largely be explained by contextual and operational factors. Unlike Group 1 and Group 2, Group 3 projects were less affected by the restrictions imposed during the COVID-19 pandemic. In addition, the proportion of projects implemented in fragile contexts (e.g. countries facing security challenges and/or political instability) is significantly lower in Group 3 compared to the older projects.

In many projects, farmers have started implementing the co-developed innovations. However, given the length of agricultural research and innovation processes, projects cannot confirm sustained long-term adoption. In the context of DeSIRA, “uptake” therefore describes implementation with the intention to continue, rather than fully established adoption. Reported uptake is based on the analysis of progress reports and oral inputs by implementing partners, who have generally included only those innovations for which there is evidence that farmers intend to continue using them without project support. These GDI values are conservative estimates due to underreporting, as some projects did not provide exact uptake data. Besides, levels of evidence vary across projects depending on their stage of implementation. GDI #8 reflects the broad definition of innovations used across projects, encompassing varieties, practices, technologies, services (e.g. financing mechanisms, seed supply models), as well as bundled approaches, which combine several complementary practices (e.g. introduction of improved varieties combined with agroecological practices and advisory support) implemented together as a coherent system rather than as standalone innovations. Innovations at system level (e.g. agroecological systems) are expected to diffuse more slowly, as they are more complex to implement than a given technique (e.g. composting) or product (e.g. new variety), but they may generate deeper changes in terms of income, sustainability or resilience.

Over the reporting period, 55 projects together report that a cumulative 367,977 smallholder farmers are using at least one innovation co-developed and/or introduced in the project context. As mentioned under Output 3 (on outreach and capacity development), five large-scale projects, each having reached at least 32,000 farmers, account for 58% of the total number of farmers reached by R&I activities. One of these projects was not yet able to provide figures on farmers implementing innovations. The remaining four large projects together report 217,820 farmers having taken up at least one innovation, representing 59% of the GDI #9 value. Beyond these large projects, 50 Pillar I projects contributed 150,157 smallholder farmers to this indicator. Overall, the value of the indicator has increased by 39% compared to the previous reporting cycle. While approximately two-thirds of this growth is driven by the largest projects, the upward trend is confirmed across all projects.

There is no systematic tracking of the number of women farmers directly reached by R&I activities. Based on available but incomplete information, it was conservatively estimated that women represented at least 17% of smallholder farmers reached by R&I activities (116,000 women out of 694,297 farmers, see Output 3, GDI #23). However, when reporting against GDI #9 (number of smallholder farmers who have implemented at least one innovation), although women beneficiaries are still not systematically or consistently reported across all projects, there is an effort to provide gender-specific data. Among the projects that do report sex-disaggregated figures, 90,360 women farmers are identified as having taken up at least one innovation. This represents approximately 25% of the total number of smallholder farmers reported as using these innovations (367,977).

Changes at farm level are confirmed by implementing partners, but progress reports lack detailed analysis of changes and sustainability perspectives. In order to capture the effectiveness of innovations from a “use” standpoint, several projects (20) focus on the rate of implementation (GDI #10) rather than the number of farmers (GDI #9), with 14 projects reporting that they met their target rates, up from 6 under AGR 2024. Out of 72 Pillar I projects, 18 did not contribute to GDI #9 over the reporting period. Among them, about two-

thirds do not work at farm level. The remaining projects have not started reporting on the uptake of innovations owing to slow implementation processes and one project will not report at all, as it closed in July 2025 without having developed any innovations.

At the time of data collection (June to December 2025), 50 Pillar I projects (out of 72) had been granted a no-cost extension, ranging from 3 to 24 months, with some projects benefiting from two extensions. This has provided critical time to finalize innovation processes, evaluate the effectiveness of the activities and engage in dissemination or scaling.

It is important to note that dissemination builds on knowledge and communication to spread awareness and to ensure that the target audience has access to the information. Scaling goes beyond dissemination by ensuring that innovations are expanded and integrated into regular practice on a broader level. It includes scaling out, involving more farmers and covering larger areas; scaling up, addressing the institutional changes required to sustain and extend innovation processes, with the involvement of additional organisations; and scaling deep, which refers to changes in actors' values, attitudes and practices required for the deployment of the innovation.

The tracking of projects with a documented strategy to scale innovations beyond their target groups (GDI #11) started with AGR 2023. The contribution of Pillar I projects to GDI #11 increased from 51 in AGR 2024 to 63 in AGR 2025. However, the existence of a scaling strategy does not necessarily mean that it is formally documented. In several cases, the strategy is embedded in the project's theory of change but remains implicit. Several projects frame scaling as knowledge generation and policy influence (briefs, dialogues) rather than expanding their reach beyond their target groups. They explicitly state that they were not designed for dissemination, but they may nevertheless rely on large national or regional development projects and donor programmes to promote their outcomes. An external mechanism "DISSEM-INN", funded by AFD and coordinated by CIRAD, helped some of the older projects in the Sahel to formalise and structure their dissemination approaches.

Among projects that have co-developed and validated innovations with farmers, many have entered a dissemination and/or a scaling phase (in addition to those projects that have ended during the reporting period). The strategy often relies on development intermediaries such as extension agents, farmers' organisations, NGOs, as well as peer-to-peer mechanisms such as farmer field schools, exposure visits, seed redistribution, cascade training or the mobilisation of "champion" farmers as local multipliers. Several projects have a more comprehensive scaling strategy, aiming at integrating their approach into ministries, national programmes, curricula, public extension systems, or AKIS structures. Digital tools and knowledge platforms are increasingly used as dissemination channels. Websites, online dashboards, repositories, mobile applications, WhatsApp groups, social media campaigns, and communities of practice are used to extend outreach and facilitate knowledge sharing beyond direct beneficiaries. At the same time, important structural limitations remain. Except for projects with a strong development orientation or those embedded in large-scale implementation frameworks, many research and innovation projects still need to consolidate partnerships with development actors to scale effectively. Strengthening collaboration with NGOs, UN agencies, extension systems, producer organisations, and policy institutions remains critical, not only to disseminate innovations to a broader group of smallholder farmers, but also to create the enabling conditions for scaling, including capacity development at scale, engagement of new actors, institutional anchoring, and supportive policy environments.

Some Pillar II projects include activities and innovation processes for the benefit of smallholder farmers, but they do not monitor changes at the farm level. One of them contributes to scaling innovations in the area of extension and advisory services but does not report on the uptake by farmers.

InACC “Integrated Approach to Climate Change in Rice Production”

Implemented by GIZ (Gesellschaft für Internationale Zusammenarbeit)

Nigeria

Pillar I – Group 3

The project contributes to improving the climate resilience of smallholder rice farmers and agro-pastoralists in two States of Nigeria by introducing, adapting and promoting climate-smart practices for rice cultivation and innovations in livestock fodder production/management.

As of March 2025 (end date of implementation), 16,360 smallholder rice farmers (the target group was 20,000) and 534 agro-pastoralists (1000) were applying at least one innovation promoted by the project. The 70% target rate of implementation was met for the rice farmers (82%) but not met for the agro-pastoralists (53%). According to the endline survey, rice farmers are reported to have taken up at least two good practices (transplanting of improved seedlings and organic manure application) while implementing two new production systems including: a rice-agroforestry system and a rice-shrubs and vegetable system. The use of other good practices, which were not innovative but had not been widely used at baseline, has increased (e.g. tractor services, biological control). A range of innovative livestock management and fodder production techniques used by agro-pastoralists includes: hay production; silage production; livestock feed from rice by-product; silvo-pasture.

In the 32 communities of intervention, the project has introduced a governance mechanism known as “Reflective Structured Dialogue”. It is a platform designed to resolve conflicts over natural resources within or between groups of rice farmers or agro-pastoralists, on the basis of mutual exchange and trade relations. Peace and Reconciliation Committees were established in each community to resolve conflicts before they escalate into crises, while the project trained facilitators to support the committees. According to the endline survey, 87% of the respondents (farmers) reported having trade relationships with agro-pastoralists (e.g. dairy, fodder manure) compared to 72% at baseline. The project has also trained rice farmers in contract farming, introducing this new service to facilitate market linkages with private sector actors (processors). However, the project could not confirm the level of use of this service.

The project dissemination and scaling strategy was underpinned by the training of 240 agricultural extension agents and lead farmers. Most agents belonged to State Agricultural Development Programmes. The use of extension agents by rice farmers rose from 14% (baseline) to 70% (endline), and the use of lead farmers rose from 1% to 18%.

ReSI-NoC « Renforcer les systèmes d’innovation agricole en vue de promouvoir des systèmes de production agricole et d’élevage économiquement rentables, écologiquement durables et socialement équitables dans la région du Nord au Cameroun » (Strengthen agricultural innovation systems in order to promote economically viable, environmentally sustainable, and socially equitable crop and livestock production systems in the Northern region of Cameroon).

Implemented by CIFOR-ICRAF (Centre for International Forestry Research - World Agroforestry)

Cameroon

Pillar I – Group 2

The project targets rural communities living close to protected areas in the Northern Region of Cameroon, introducing existing varieties and practices into a new agroecological context.

The project involved 1,900 smallholder farmers. It conservatively estimates that when implementation ended in December 2024, 488 beneficiaries (including 48% women) were using at least one of the 15 technical

innovations promoted by the project (grafting, Assisted Natural Regeneration, bamboo propagation, improved fodder cultivation practices, new fodder species, new varieties of mango, maize, soybean, groundnut, and upland rice).

At community level, the project developed an advisory support service for farmers known as “Rural Resource Centre” (RRC), to demonstrate and promote agroforestry practices, as well as to facilitate access to improved varieties. Four RRCs were set up near protected areas, with three of them considered operationally autonomous when the project ended.

The project’s dissemination and sustainability strategy was structured around the consolidation and formalisation of the RRCs. These centres were conceived as community-based hubs, with a view to anchoring innovations locally while enabling their dissemination. As part of its exit strategy, the project built the communities’ awareness of the importance of legally structuring the RRCs into formal cooperatives, a formal status that would allow access to financing schemes, strengthen their institutional credibility, and enhance their capacity to engage with public authorities and development partners. However, sustainability remains partly contingent on the regularisation of the RRCs’ land tenure and continued support from public services or follow-up projects. Since the RRC model is an innovative concept that needs further strengthening, it was planned that another ICRAF project (Cameroun Septentrion Vert) would continue to support them once the DeSIRA project ended.

Table 15: Summary of cumulative values 2019-2024 for GDIs to Outcome 1

N° of projects contributing to the GDI # Values > 0		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"		Pillar I	Pillar I	Pillar II	Pillar II
AGR 2024	AGR 2025	GDI #	OUTCOME 1 - Global DeSIRA Indicators	AGR 2024	AGR 2025	AGR 2024	AGR 2025
40	52	8A	Number of climate-smart or agroecological innovations taken up by smallholder farmers (Products, technologies, agricultural practices, farming systems)	464	734	0	0
28	44	8B	Number of climate-smart or agroecological innovations taken up by smallholder farmers (Services, decision making tools, governance mechanisms)	65	122	0	0
42	55	9	Number of smallholder farmers who have taken up at least one climate-smart or agroecological innovation	264697	367977	0	0
6	14	10	Number of DeSIRA projects for which the expected rate of implementation of innovations by targeted farmers has been met	6	14	0	0
51	64	11	Number of DeSIRA projects having at least one documented strategy to disseminate or scale up innovations	51	63	0	1

(Source: Global M&E Framework of the DeSIRA initiative, December 2025)

Colour code	GDI Title	AGR 2024	AGR 2025	(X): no expected contribution
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Each figure is the sum of the values contributed by each DeSIRA project to the GDI.

Values > 0 AGR 2025 = number of projects (all categories) having contributed a positive value to the GDI during the reporting period 2019-2024.

Group 1 (G1) = 22 Pillar I projects included in the GM&EF since 2021/22 (CID 2018)

Group 2 (G2) = 17 Pillar I projects included in the GM&EF since 2023 (CID 2019)

Group 3 (G3) = 33 Pillar I projects included in the GM&EF since 2024 (CID 2020)

Pillar II = 7 projects = 2 projects, plus 5 'sub-projects' (under SUPPORT TO CAADP AR&EO) included in the GM&EF since 2021/22

6.2 Outcome 2 – Innovation capacities of research, technical and development institutions as well as capacities of farmers' organisations to support agriculture innovation processes are strengthened

Table 16: List of global DeSIRA Indicators attached to Outcome 2

GDI #12	Number of organisations increasing their capacity to innovate in the area of agriculture and food systems
	#12A (Regional or international)
	#12B (National or subnational research institutions)
	#12C (National or subnational technical/development institutions)
	#12D (National or subnational FOs, NGOs, CSOs)
GDI #13	Number of new institutional partnerships on agriculture and food systems triggered by DeSIRA projects

The “capacity to innovate” refers to the capacity to identify constraints and opportunities and to mobilise resources to adapt and respond to challenges. It includes technical and functional capacities at individual, organisation and system levels. Institutional capacities refer to the capacity of organisations to manage resources to achieve their objectives. Outcome 2 strives to capture changes in innovation capacity at the organisation level. An increase in capacity should be the result of strengthening activities in at least one capacity area with project support (e.g. organisation, networking/collaboration, human resources, technical expertise, internal policies, governance, finances, management, monitoring & learning, advocacy, strategic thinking, etc.). According to DeSIRA’s theory of change, all outputs are expected to stimulate and develop the capacity to innovate of a large range of actors: multi-stakeholder approaches and inter-institutional cooperation; innovation processes at farm, institutional and private sector levels; strengthening of technical and functional capacities at the individual and organisational levels; strengthening of education and training programmes; knowledge generation and interaction with policy makers. While the DeSIRA strategy is expected to stimulate and develop the capacity to innovate of a large range of actors, in practice very few Pillar I projects assess the effects of capacity building at organisation level. Most projects implicitly assume that training and other types of institutional support lead to increased capacities to innovate. The contribution of Pillar I projects to Outcome 2 is therefore assessed through the verbal declarations of implementing partners and information (mostly found in progress reports) supporting these declarations.

One of DeSIRA’s primary objectives is to reinforce institutional capacities at national level. Table 17 disaggregates the data by category of national or sub-national organisation: research institutions (including universities), technical/development organisations (e.g. ministries, territorial bodies), farmers’ organisations (FOs), and NGOs (including civil society organisations, CSOs). Several project teams also reported capacity strengthening of international or regional organisations, including European institutions. While GDI #12 provides the numerical count of these organisations, interviews with project teams proposed qualitative explanations on how and why innovation capacities have improved. It should also be noted that the number of organisations involved in the implementation of DeSIRA projects (see Table 1) does not correspond to the number of organisations whose capacities are strengthened (Table 17), as involvement does not necessarily imply institutional development, and vice versa.

Many organisations, particularly research institutions, are involved in more than one DeSIRA project, across and within project groups and pillars. This leads to duplication when quantitative project-level values are aggregated to calculate the value of GDI #12. At pillar level, values for both AGR 2024 and AGR 2025 include duplicates. However, the cumulative values for all DeSIRA projects (Pillar I and II) only refer to unique organisations (no duplicates). Over the reporting period, all DeSIRA projects contributed to enhancing the capacities of 1,748 organisations (all categories, no duplicates). The value has increased by 21% since AGR 2024 (up from 1440).

Figure 10: Categories of organisations strengthened by DeSIRA projects



Farmer Organisations (FOs) continue to represent the largest share of strengthened organisations, accounting for 40%, and their number has increased by 15% (up from 607 in AGR 2024). According to the implementing partners, 699 FOs, operating at national or subnational levels, were either in the process of being strengthened or had been created with DeSIRA support. Local NGOs (12%; 207) are also benefitting from their involvement in projects with new knowledge and methods to support farmers. The reinforcement of technical competencies also targets

ministries and their directorates, and other national or subnational technical bodies (22% of all organisations; 384). This is achieved through trainings, methodological guidelines, and the upgrading of operational systems (e.g. laboratories, meteorological stations, GIS platforms, surveillance systems, digital monitoring tools). National research entities (15%; 268) have improved their capacities through training and participation in R&I activities using up-to-date methods, enabling scientific achievements. Improvements have also been reported among international and regional organisations, including European institutions, which represent 15% of the organisations strengthened.

Pillar I

Most Pillar I projects contribute to Outcome 2. There is evidence of improved institutional capacity across many organisations involved in R&I projects. Although information on institutional change remains limited and fragmented because most projects lack a formal assessment methodology, Implementing Partners often confirm that capacity development (CD) contributes to enhanced capacities. That said, this does not fully capture the true, complex, and extensive influence of DeSIRA at institutional level, especially under Pillar I, where institutional capacity development is often more implicit than explicit.

Implementing Partners of Pillar I projects report strengthened capacities to support transformative research in agri-food systems (innovation system thinking, agroecological approaches, etc.) among several organisations with a regional or international reach. They have observed changes in ways of working, methodological approaches, and collaboration dynamics. Capacity strengthening is associated with the adoption of new tools and methodologies, exposure to new country and socio-technical contexts, as well as South–North exchanges and research collaborations. For instance, digital platforms have improved regional data sharing and the harmonisation of breeding- and seed-related information. Implementing Partners also highlight an enhanced ability to interact with new categories of actors, operate at different scales, and manage knowledge more strategically. As a core feature of most projects, participatory approaches have further reinforced organisations' capacity to support co-innovation processes. This broad category of organisations, defined by the scope (regional/international), includes a diversity of actors, such as: large European research bodies (e.g. France-based CIRAD "Centre de Coopération Internationale en Recherche Agronomique pour le Développement"; Netherlands-based WUR "Wageningen University & Research"); non-European international re-

search bodies (e.g. all but one CGIAR centres are involved in at least one DeSIRA project); regional research organisations (e.g. Costa-Rica-based CATIE “Centro Agronómico Tropical de Investigación y Enseñanza”); international NGOs (e.g. AVSF “Agronomes et Vétérinaires sans Frontières”; GRET “Groupe de Recherche et d’Echange Technologique”; Rikolto; Practical Action, etc.); large regional networks of farmers’ organisations (e.g. ROPPA “Réseau des organisations paysannes et de producteurs de l’Afrique de l’Ouest”; EAFF “East African Farmers Federation”) or multi-stakeholder networks (e.g. ALiSEA “Agroecology Learning Alliance in South East Asia regional network”).

The main drivers of capacity strengthening identified for international and regional organisations are also valid at national level. National research institutions also report improvements linked to the adoption of new tools and methodologies, participation in multi-actor platforms, learning-by-doing approaches, and exposure to new contexts. Similarly, project teams report that engagement in participatory processes and closer interaction with farmers contributes to reshaping research approaches and practices and improves institutional support to innovation processes. In addition, investments in laboratories, equipment, and digital infrastructure expand operational research capacity. Institutional strengthening also stems from supporting many professionals in postgraduate research and from adjusting existing curricula or developing new ones, developing new modules based on project innovations. A limited number of Pillar I projects have implemented activities directly aimed at strengthening internal management and coordination functions, including administrative, financial, and monitoring capacities. Institutional partnerships emerging from project activities both contribute to and reflect a growing capacity, with the number of such collaborations having increased by 27% (from 299 to 381) since the last reporting period. One large global project reports 61 formal cooperation agreements on agroecology linking FOs and research institutes to conduct action research. Such partnerships contribute to a better co-design and scaling of innovations.

Over the reporting period, 263 Africa-based research institutions (with national, regional or international reach) either were involved in the implementation of at least one DeSIRA project and/or benefitted from capacity development activities. Of these, 71 were involved in more than one project, including 37 engaged in at least three projects. While institutional CD is not always coordinated among projects supporting the same organisation, cumulative benefits from multiple engagements may point at a broader institutional gain for the targeted institution. A few actors (e.g. CIRAD, FAO, GIZ) play a crucial role in developing links between the DeSIRA projects in which they participate, strengthening the capacity of the institutions to contribute to changes at scale. In addition, DeSIRA LIFT has developed a Community of Action and Reflection, which brought together team members of the R&I projects of [the DeSIRA Initiative](https://www.desiraliftcommunity.org/) (<https://www.desiraliftcommunity.org/>).

Many project teams claim that the FOs they work with better understand their environment and have developed skills to support farmers in innovating processes, especially in the area of agroecology. FOs strengthen their capacities primarily through active involvement in on-farm trials, demonstration plots and action research. Through learning-by-doing, they reinforce technical skills in agroecological practices, seed production, agroforestry, livestock management and climate-smart approaches. In several cases, the creation or legal registration of cooperatives and community-based organisations provides tangible evidence of improved governance and organisational capacity. Where capacity development plans exist, they address administrative, financial and business management functions (e.g. business plan development, contract management, record-keeping). The provision of equipment and infrastructure further improves their operational capacity. Participation in multi-stakeholder platforms enhances their ability to engage with external actors and innovation processes. Many FOs need more time to build on the projects’ benefits. However, over the reporting period, several of them have been able to expand networks, mobilise resources and improve market linkages. NGOs play a key role in facilitating linkages between research, governmental bodies and FOs, and supporting management functions and economic ties with value chain actors. Moreover, NGOs themselves strengthen their capacities through training sessions, exposure to new thematic areas, monitoring tools and innovation platforms. In a virtuous cycle, this enhances their facilitation role and the quality of support provided to producer organisations.

The strengthening of agricultural extension and advisory services continues, as many projects work directly with Agricultural Extension Services, agricultural development programmes, district technical services, or para-public advisory agencies. Extension agents are trained in new technical areas (e.g. agroecology, climate-smart agriculture, seed systems, GHG monitoring, food safety) and equipped with tools to better support innovation and assist farmers. Several projects have contributed to integrating extension services and agricultural advice in digital platforms and mobile applications. Innovations promoted by the projects are sometimes integrated into district plans, municipal budgets, or national strategies, suggesting institutional benefits beyond individual capacity development. However, in the absence of assessment methodologies, strengthened advisory capacity is assumed rather than measured, on the basis of participation in training, involvement in multi-actor platforms, or equipment provision.

Pillar II

A large Pillar II action (comprised of five projects) aims to build institutional capacity in five key African Agriculture Research and Extension Organisations (AR&EOs), including four regional organisations and one pan-African organisation. The results identified under AGR 2024 are confirmed and further reinforced in AGR 2025. Capacities (measured annually at project level) show sustained progress, supported by strengthened cooperation and increasing institutional interoperability among the five organisations, notably through joint MEL systems, harmonised tools, shared planning processes and coordination mechanisms. All five organisations are becoming more robust and strategic in the way they fulfil their mandate. This is evidenced in their enhanced capacity to mobilise resources and their subsequent engagement in and contribution to major regional and pan-African initiatives or platforms on agroecological transition, CSA, soil health and food and nutrition security (e.g. revitalisation of the CSA Alliance in West Africa and establishment of a CSA Alliance in Central Africa, soils observatory proposal for the African Union Commission (AUC), participation in the AUC-led initiative "Africa Fertilizer and Soil Health (AFSH) Summit", Africa-wide Extension Week, etc.). Although the number of institutional partnerships has continued to increase, the emphasis is on consolidating and operationalising long-term partnerships rather than merely multiplying partnerships. Institutional strengthening is also evidenced in formal collaborations with international organisations implementing other DeSIRA projects (e.g. CGIAR, FAO, GFAR, WUR, IICA), thereby reinforcing both the internal coherence of the five organisations and the overall effectiveness of the DeSIRA initiative.

The capacity of the five AR&EOs to support other regional organisations and national entities by promoting institutional tools, good practices and innovation platforms has also improved. AR&EOs report improved participation, monitoring and coordination capacities among members, and continued active involvement of regional FOs in CSA alliances and related platforms. In addition, the reach beyond the traditional institutions is visible (e.g. engagement with private sector actors through trade fairs, and youth-oriented organisations). The key challenge ahead lies in strengthening tangible benefits for members, fostering ownership, securing member-generated resources and further consolidating the continental coordination role of these AR&EOs. It is important to note that the outcomes of AR&EOs' support to national member organisations (typically research and/or extension bodies) remain only partially captured in progress reports. Moreover, attribution remains a challenge as the reporting does not always allow for distinguishing between partnership/institutional capacity gain and event attendance/participation.

MAKIS "Malagasy Agricultural Knowledge and Innovation Systems"

Implemented by CIRAD (Centre de Coopération Internationale en Recherche Agronomique pour le Développement)

Madagascar

Pillar I – Group 3

The project aims at improving the capacities of agricultural development actors to support innovation in rural areas of Madagascar.

MAKIS is one of the few Pillar I projects that implements a structured plan to strengthen the capacities of its partner organisations: the farmers' organisation FIFATA (Flkambanana Fampivoarana ny Tantsaha); the farmers' organisation RCCE (Réseau des Coopératives de Commerce Equitable), supported by the French NGO AVSF (Agronomes et Vétérinaires sans Frontières); the Malagasy NGO CTAS (Centre technique Agro-écologique du Sud), supported by the French NGO GRET (Groupe de Recherche et d'Echange Technologique); and the Malagasy NGO PARTAGE (Participation à la Gestion de l'Environnement).

In collaboration with "Expert Synergy Consulting" (a consulting firm based in Burkina Faso), CIRAD has developed a mechanism to diagnose organisational capacities to support agricultural innovation in the context of Madagascar. This new institutional approach, supported by a MEL tool, has been used to raise awareness of the complexity of innovation processes and to conduct participatory diagnostics of partners' capacity to support producers. Based on these diagnostics, organisational capacity strengthening action plans were finalised. Each action plan consists of axes of change, capacities to be strengthened, activities to be implemented, a timeline, designated responsibilities and a budget, as well as gradual progress markers associated with each activity. Capacity strengthening targets strategic flexibility, development of tailored services, organisational learning, network facilitation, the mobilisation of specific skills. Each organisation is expected to co-develop innovative tools, services or procedures adapted to its context: (i) the seed selection and multiplication scheme for potato and rainfed rice developed by FIFATA in the Vakinankaratra region; (ii) RCCE's actions in the Atsinanana region; (iii) the "Maîtres Exploitants" scheme in the Itasy region (Agrisud); and (iv) the lead farmers within CTAS agroecological blocks.

In addition, the project contributes to strengthening FOFIFA (National Center for Applied Research in Rural Development) and the Ministry of Agriculture through the development of two institutional innovations:

- a quantitative model assessing the economic impact of innovation adoption; it simulates farm-level economic outcomes under different practices, including agroecological options, to inform the development of policy instruments in support of agroecology by the Ministry of Agriculture. The model is developed by FOFIFA research teams in collaboration with CIRAD and co-financed by two DeSIRA projects involving FOFIFA (MAKIS and DINAAMICC).
- a Multi-Agent System (MAS) to support innovation at farm level; the model aims to better understand and anticipate the complexity of innovation support (e.g. costs and spatial coverage when mobilising technicians or lead farmers). It will generate knowledge to inform dialogue with NGOs, FOs, private actors and ministries on extension and advisory services, helping to improve the effectiveness of their interventions.

SUPPORT TO CAADP AGRICULTURAL RESEARCH AND EXTENSION ORGANISATIONS

"CCARDESA - Centre for Coordination of Agricultural Research and Development for Southern Africa"

Managed by IFAD (International Fund for Agricultural Development), implemented by AFAAS

Countries directly targeted under the DeSIRA project: Botswana, Eswatini, Mozambique, Namibia, Tanzania, Zambia, Zimbabwe

Pillar II

The focus of this action is to strengthen the architecture and governance of Africa's continental and sub- regional agricultural research and innovation organisations, enabling them to effectively support national agricultural research and innovation systems, with the objective of enhancing the performance of these systems towards contributing to the achievement of national food and agriculture development goals and targets.

Outcome 2 is illustrated for CCARDESA, one of the five organisations targeted by the action (AGR 2024 focused on the outcomes for AFAAS "African Forum for Agricultural Advisory Services").

Changes in the institutional capacity of CCARDESA are monitored in four domains (technical, organisational, fiduciary and MEL) according to a protocol, similar for all 5 CAADP AR&EOs. Over the reporting period, CCARDESA reports strengthened institutional performance, reflected in improvements in governance systems, financial management procedures and internal coordination mechanisms. The Secretariat has expanded its human resources (including finance, programme and information, communication and knowledge management functions), revised internal manuals and enhanced due diligence readiness.

These changes have contributed to making CCARDESA a reliable regional implementing partner, with a stronger capacity for mobilising resources. CCARDESA is now a key implementer in several regional initiatives, for instance the "Growing Greener" project commissioned by the German government, and the World Bank-supported "Food System Resilience Program" (FSRP), where the organisation leverages its regional networks. The DeSIRA-supported project has also strengthened collaboration and coherence among the five AR&EOs and contributed to reinforcing links with the African Union Commission. Jointly implemented actions include foresight training, Agricultural Innovation System - Policy Practice Index (AIS-PPI) capacity development, harmonised MEL systems, joint resource mobilisation, and continental policy dialogues.

CCARDESA's capacity to establish long-term partnerships has increased. The number of formalised institutional partnerships has progressively increased over the years, reaching 22 active partnerships as of December 2024. These include both North-South (e.g. with Agrinatura, GIZ, Global Research Alliance on Agricultural Greenhouse Gases) and South-South collaborations (e.g. the Zambia-based Regional Network of Agricultural Policy Research Institutes or ReNAPRI; the Zimbabwe-based Centre for Agriculture and Food Policy or CAFPP). Under DeSIRA, several MoUs were renewed or expanded, indicating a consolidation of the partnerships rather than ad hoc engagement.

Strengthened partnerships have reinforced CCARDESA's role as a regional facilitator of agricultural innovation systems. It has supported sub-regional organisations on foresight, Climate Smart Agriculture and policy practice tools; national research institutions on knowledge management and Malabo reporting processes; technical and development institutions (ministries, statistics offices, planning departments) on policy coherence and cross-border trade; and farmers' organisations, NGOs and youth networks on innovation uptake and advocacy.

Table 17: Summary of cumulative values 2019-2024 for GDIs attached to Outcome 2

Number of projects contributing to the GDI # Values > 0		OUTCOME 2: "Innovation capacities of research, technical and development institutions as well as capacities of farmers' organisations to support agriculture innovation processes are strengthened"		Pillar I	Pillar I	Pillar II	Pillar II	ALL	ALL
AGR 2024	AGR 2025	GDI #	OUTCOME 2 - Global DeSIRA Indicators	AGR 2024 (*)	AGR 2025 (*)	AGR 2024 (*)	AGR 2025 (*)	AGR 2024 (**)	AGR 2025 (**)
41	50	12A	Number of organisations increasing their capacity to innovate in the area of agriculture and food systems (Regional or international)	119	166	99	110	155	190
66	70	12B	Number of organisations increasing their capacity to innovate in the area of agriculture and food systems (National or subnational research institutions)	249	289	87	104	223	268
57	65	12C	Number of organisations increasing their capacity to innovate in the area of agriculture and food systems (National or subnational technical/development institutions)	254	323	56	119	278	384
53	59	12D	Number of organisations increasing their capacity to innovate in the area of agriculture and food systems (National or subnational FOs, NGOs, CSOs)	583	846	52	70	784	906
			TOTAL	1205	1624	294	403	1440	1748
44	53	13	Number of new institutional partnerships on agriculture and food systems triggered by DeSIRA projects	158	221	141	160	299	381

(Source: Global M&E Framework of the DeSIRA initiative, December 2025)

(*) Includes duplicates except for GDI #13 (Number of new institutional partnerships)

(**) **NO DUPLICATES**

Colour code	GDI Title	AGR 2024	AGR 2025	(X): no expected contribution
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Each figure is the sum of the values contributed by each DeSIRA project to the GDI.

Values > 0 AGR 2025 = number of projects (all categories) having contributed a positive value to the GDI during the reporting period 2019-2024.

Group 1 (G1) = 22 Pillar I projects included in the GM&EF since 2021/22 (CID 2018)

Group 2 (G2) = 17 Pillar I projects included in the GM&EF since 2023 (CID 2019)

Group 3 (G3) = 33 Pillar I projects included in the GM&EF since 2024 (CID 2020)

Pillar II = 7 projects = 2 projects, plus 5 'sub-projects' (under SUPPORT TO CAADP AR&EO) included in the GM&EF since 2021/22

6.3 Outcome 3 – “Private sector capacities and value chains of agri-food systems are strengthened”

Table 18: List of global DeSIRA Indicators attached to Outcome 3

GDI #14	Number of sustainable or climate-smart innovations taken up by agriculture and food-related MSMEs
GDI #15	Number of agriculture and food-related MSMEs which have taken up at least one sustainable innovation
GDI #16	Number of agriculture and food-related MSMEs strengthened or created
GDI #17	Number of food value chains supported
GDI #18	Number of full-time food industry-related jobs created

Pillar I

The number of Pillar I projects supporting value chains and private sector actors is not as high as the number of projects supporting smallholder farmers, as the primary focus of Pillar I is research and innovation at farm or territorial level. Nevertheless, many projects have engaged Micro, Small or Medium-size Enterprises (MSMEs) through their participation in multi-stakeholder innovation platforms (Output 1) and the co-development of innovations (Output 2) aimed at supporting the production of inputs (e.g. seeds, feed) and post-harvest activities (e.g. storage, processing, marketing). Besides, many MSMEs have also benefitted from training sessions (Output 3) and evidence-based knowledge generated by the projects (Output 5). Several projects have set up innovation funds and provided small grants to facilitate MSME participation.

The overall contribution of Pillar I to Outcome 3 has steadily increased over the reporting period, with 49 Pillar I projects (out of 72) supporting a total of 219 food value chains (VCs) in 45 countries across Africa (31 countries), Latin America and the Caribbean (7), Asia (6), and the Pacific (1). Given that the number of projects has remained constant in AGR 2024 and AGR 2025, this represents a significant increase (+52 VCs, 31%). All groups have been active: older projects (Group 1 and Group 2) remained focused on increasing their support to the private sector, contributing an additional 25 VCs (112, up from 87), while newer ones (Group 3) contributed 27 VCs (107, up from 80). However, understanding the influence and impact of DeSIRA projects on private sector actors remains difficult, since most projects do not systematically track what happens beyond their direct activities.

Support to value chains includes technical innovation (products, processing, equipment) and the development of more strategic instruments (business models, financing mechanisms, partnerships). Compared to last year, a higher number of innovations are reported as implemented and in use, rather than being at prototype or pilot stage. Over the reporting period, a substantial number of innovations (174, + 58%) have been taken up by agriculture and food-related MSMEs. The strongest contribution to this growth comes from the newer projects, but the older projects have also continued to support innovation processes for private sector actors.

Some projects support holistic, system-wide improvements, covering production, processing, marketing and governance (e.g. forage master plan model integrating seed systems, grazing management, and business planning; integration of traceability tools, incentive mechanisms, and financing schemes to strengthen trust, efficiency, and environmental performance across the cocoa value chain), while others focus on specific segments within the value chain (e.g. egg and papaya powder processing technologies; solar-powered threshing equipment). Technological innovations frequently include energy-efficient solutions for processors. Several projects focus on the development of value-added products derived from local raw materials (e.g. cacao, coconut, milk, pigeon pea) or by-products (e.g. coffee residues), leading to the production and commercialization of new consumer products (e.g. enriched foods, cosmetics, nutraceuticals), or agricultural inputs (e.g. biofertilizers,

biochar). Increasingly, projects have supported business-oriented innovations, including new marketing models, contractual arrangements and financing mechanisms that not only facilitate smallholder farmers' access to services, but also reinforce the economic viability of private sector actors across the value chain. In addition, several projects explicitly report supporting MSME participation in trade fairs or commercial events.

Over the reporting period, 42 Pillar I projects have contributed to strengthening or creating a total of 2,258 MSMEs involved in input production, service provision, waste valorisation and food processing. A single Latin American project accounts for 1,378 of these MSMEs, reflecting a strong focus on small rural business development. Overall, 565 of the 2,258 MSMEs are reported to have adopted at least one innovation. A few projects support existing incubators (e.g. guiding start-ups interested in agroecology and associated enterprises).

The relevance of the GDI #18 on job creation (also a Global Europe Result Framework indicator) is debatable considering the very limited contribution from DeSIRA projects (only 5 Pillar I projects contribute to GDI #18) or the absence of monitoring (at project level) related to this GDI.

Pillar II

The contribution of Pillar II to Outcome 3 is more limited and stems from African regional organisations. Over the reporting period, they have engaged 72 private sector entities (against 38 in AGR 2024) primarily through national fora and initiatives, training and peer learning activities, and policy dialogues. Under Pillar II, private sector strengthening typically results from indirect institutional effects, whereby strengthened country fora or regional institutions contribute to enhancing the visibility and market access of their private sector members. The focus is on embedding private sector actors within innovation systems and facilitating innovative partnerships (e.g. youth accelerator programme) to foster cross-border trade, investment in climate-smart technologies, and business development. In addition to traditional agribusiness actors, digital agricultural service providers are increasingly represented among supported companies (e.g. a weather intelligence company). One regional organisation supported company participation in an Agricultural Innovation and Technology Market (MITA), facilitating connections between private buyers and research-based suppliers.

TRANSFORMA INNOVA "Climate intelligent agriculture and value chains in Costa Rica"

Implemented by GIZ (Gesellschaft für Internationale Zusammenarbeit GmbH)

Costa Rica

Pillar I – Group 3

The objective is to support Costa Rica's national transition to low-emission, climate-resilient and sustainable agricultural production systems, in the selected key agricultural sectors of Musaceae, coffee, and livestock.

The project partner ICAFE (Instituto del Café de Costa Rica) has extended small grants to 21 beneficiaries to foster innovation in the coffee value chain. Beyond production-related technologies, several innovations focus on the use of by-products from coffee processing such as generation of high-nutritional food subproducts from coffee pulp; production of inoculated biochar with microorganisms for nutrient fixation for application on coffee farms; alternative wastewater management technology for coffee processing; production of pellets from coffee husks; infusion of organic coffee leaves.

The project has supported the participation of small coffee producers in international and national events to promote low-emission (deforestation-free) coffee. For instance, with ICAFE and PROCOMER (National Export Promotion Agency), it supported the participation of 11 coffee-exporting organisations in the 2024 World of Coffee fair in Copenhagen. As of February 2025, the project has assessed the needs and potential improvement pathways towards low-carbon production for 56 small coffee processors.

To support the meat value chain, the development of a national standard for eco-labelling of meat products is underway, carried out in collaboration with value chain stakeholders and the Technical Standards Institute of Costa Rica. The eco-labelling standard is based on criteria for low-carbon agricultural production and primarily targets meat processors. Other innovations in the livestock/meat sector stem from 5 livestock-related enterprises (typically cattle rangers wanting to expand beyond the production level or actors of the supply chain associated with livestock production) and aim at recycling nutrients, reducing the use of external inputs and lowering environmental impact by improving the management of water, manure and biological resources. For instance, a project develops locally adapted microbial consortia extracted from pasture ecosystems for use as biofertilizers and probiotics: the purpose is to replace imported products with site-specific microbial solutions. Another project integrates biodigesters, biofertilizers, biochar, and reuse of agro-industrial by-products: the innovation lies in combining existing technologies into a single system that reduces emissions and operating costs.

Table 19: Summary of cumulative values 2019-2024 for GDIs attached to Outcome 3

N° of projects contributing to the GDI # Values > 0		OUTCOME 3: "Private sector capacities and value chains of agri-food systems are strengthened"		Pillar I	Pillar I	Pillar II	Pillar II
AGR 2024	AGR 2025	GDI #	OUTCOME 3 - Global DeSIRA Indicators	AGR 2024	AGR 2025	AGR 2024	AGR 2025
17	25	14	Number of sustainable or climate-smart innovations taken up by agriculture and food-related MSMEs	110	174	0	0
16	21	15	Number of agriculture and food-related MSMEs which have taken up at least one sustainable innovation	289	565	0	0
39	42	16	Number of agriculture and food-related MSMEs strengthened or created	1280	2258	38	72
41	49	17	Number of food value chains strengthened	167	219	0	9
2	5	18	Number of full-time food industry-related jobs created	1980	5952	0	0

(Source: Global M&E Framework of the DeSIRA initiative, December 2025)

Colour code	GDI Title	AGR 2024	AGR 2025	(X): no expected contribution
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Each figure is the sum of the values contributed by each DeSIRA project to the GDI.

Values > 0 AGR 2025 = number of projects (all categories) having contributed a positive value to the GDI during the reporting period 2019-2024.

Group 1 (G1) = 22 Pillar I projects included in the GM&EF since 2021/22 (CID 2018)

Group 2 (G2) = 17 Pillar I projects included in the GM&EF since 2023 (CID 2019)

Group 3 (G3) = 33 Pillar I projects included in the GM&EF since 2024 (CID 2020)

Pillar II = 7 projects = 2 projects, plus 5 'sub-projects' (under SUPPORT TO CAADP AR&EO) included in the GM&EF since 2021/22

6.4 Outcome 4 – The agriculture and food systems policy environment is improved at national or international level

Table 20: List of global DeSIRA Indicators attached to Outcome 4

GDI #19	Number of policies, strategies or plans, fostered by multi-stakeholder processes, under development or endorsed by the relevant authorities
GDI #20	Number of 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

Output 6 tracks the number of policy products (dialogues, briefs) generated by DeSIRA projects to inform policies and contribute to an enabling environment for innovation. However, the transformation of outputs into outcomes is a difficult process, as it usually falls within the sphere of interest of the project rather than its sphere of control. Over the reporting period, among the 59 projects with policy objectives, 47 claimed a tangible outcome (policy, strategy or plan under development or endorsed), including 42 from Pillar I and 5 from Pillar II. Twelve projects with explicit policy objectives did not report a positive result in this area, including two that ended during the reporting period without achieving their stated policy objective. This does not necessarily mean that policy engagement has stopped, as at least one implementing partner indicated that advocacy efforts may continue beyond the DeSIRA timeframe. Most of the remaining ten projects are among the more recent projects and have yet to deliver policy outcomes.

A few DeSIRA projects operate in the same country, and different projects have sometimes contributed to the same policy processes. Moreover, given the diversity of DeSIRA projects, the same country may be influenced in multiple policy areas and be listed several times under GDI #20. Similarly, some strategies and policies of regional or global organisations have been influenced by more than one DeSIRA project. This leads to duplication when project-level data are aggregated to calculate GDI #19 and GDI #20. At pillar level, values reported in AGR 2024 and AGR 2025 include such duplicates. However, cumulative values for all DeSIRA projects (Pillar I and Pillar II) refer only to unique policies, countries and large organisations.

Together, DeSIRA projects contributed inputs to 232 policy processes in 41 countries and for 15 regional or international organisations (no duplicates). As mentioned in AGR 2023 and AGR 2024, policy outcomes achieved by partner organisations are not consistently highlighted or well-documented in project reports, making it difficult to fully capture DeSIRA's policy influence in the context of the GM&EF. However, DeSIRA LIFT has conducted [a learning review to assess the impacts of the DeSIRA initiative at policy level](#).

Under Pillar I, the breakdown of the total number of policies, strategies or plans under development or endorsed, and to which projects have contributed (217) is as follows: the older projects (Group 1 and Group 2) account for 47% and report a 23% increase over AGR 2024, while the most recent ones (Group 3) account for 53% and report a 40% increase over AGR 2024. This suggests that project partners have sustained their engagement in policy-related activities, which is consistent with the fact that all DeSIRA projects have reached at least four years of implementation during the reporting period. At this stage of implementation, scientific evidence generated by the projects is generally sufficiently consolidated to support dialogue processes and the preparation of policy briefs, which typically leads to an intensification of policy engagement, provided it aligns with ongoing policy agendas at national or local levels.

The nature of DeSIRA-supported policy outcomes remains broad. Influence is exerted at multiple levels (global, regional, national, municipal, county), predominantly at national and subnational levels. At regional level, examples include the ASEAN Guidelines for Agroecological Transition adopted by ASEAN (Association of Southeast Asian Nations), as well as continental frameworks such as the Africa Climate Smart Agriculture Framework (ACSAF) and the Soils Initiative in Africa (SIA). At national level, projects have contributed to the revision or development of policies

such as (the list is not exhaustive) the Ghana Fertilizer Policy, the National Agricultural Extension Policy in Nigeria, the Kenya Agricultural Extension Policy, the National Action Plan for Food Systems Transformation in Vietnam, the Cuban Food Sovereignty and Food and Nutritional Security Law; the Presidential Decree “On Additional Measures to Increase Efficiency Through the Integration of Science, Research, Knowledge, and Production” in Uzbekistan; and production standards (egg powder and dried papaya) endorsed by the Ethiopian Council of Ministers. At subnational level, influence is evidenced in county-level livestock legislation and development plans in Kenya; provincial livestock and forage strategies in Vietnam; commune-level development planning in Cambodia; the Low Carbon Agriculture Plan for the State of Pará (Brazil); and Participatory Integrated Land Use Planning adopted by six local governments in Ethiopia.

In many countries, several DeSIRA projects were simultaneously active and involved in a diversity of policy processes. For instance, over the reporting period, four projects provided inputs to the following policies in Rwanda: Agriculture Strategic Plan (revision); Strategic Plan for the Environment and Natural Resources Sector 2024–2029; Ministerial Guidelines for Clean cooking Technologies; Fifth Strategy for Agricultural Transformation; National Action Plans to promote PUE technologies (Productive Use Energy); Customized Agriculture Extension Services (CAES) roadmap.

AGR 2025 confirms the predominance of contributions to policies at national or regional levels, with aim at facilitating the agroecological transition (the list below is not exhaustive):

National Strategy for the Development of Agroecology in Burkina Faso (SND-AE 2023-2027) - *approved*
 National Strategy for the Production of Ecological and Organic Agriculture in Benin (SNAEB, 2022-2030) - *approved*
 Kenyan National Agroecology Strategy for Food Systems Transformation (NAS-FST 2024-2033) - *approved*
 Action plan of the National Consultation Framework (CCN) for the AE transition in Cote d'Ivoire – *status unknown*
 National Agroecology Strategy in Ethiopia – *status unknown*
 National Ecological Organic Farming Strategy in Tanzania (NEOAS 2023-2030) - *approved*
 National Action Plan for Food Systems transformation in Vietnam – *approved*
 ASEAN Policy Guidelines on Agroecology Transitions - *approved*
 Roadmap for the implementation of agroecology in national policies and strategy in Lao PDR – *status unknown*
 Action plan to the National Agroecology Policy in Colombia – *status unknown*
 National Agroecological Production Plan in Brazil – *status unknown*
 Implementation framework of the Cuban Food Sovereignty and Food and Nutritional Security Law – *ongoing*

Several policies, strategies or plans influenced by DeSIRA projects have already been approved at national level. However, policy influence based on scientific evidence is a long process, which takes several years. Moreover, the status of the policy outcomes of each project is not always known. Information on policy achievements is also limited for Pillar II projects. They have identified and reported 19 policy outcomes (up from 14 in AGR 2024), but some AR&EOs do not systematically follow up on the outcomes of their support at national level. As a result, their influence may be underestimated.

Prosilience “Enhancing soils and agroecology for resilient agri-food systems in Sub-Saharan Africa”

Implemented by GIZ (Gesellschaft für Internationale Zusammenarbeit GmbH)

Benin, Ethiopia, Kenya, Madagascar

Pillar I – Group 3

The specific objective is to enhance the agroecological transition towards sustainable agri-food systems in the four partner countries.

The project ended in March 2025. It developed innovations contributing to the agroecological transition with a view to integrate them into national and/or decentralized strategies, plans, and policy frameworks. During the reporting period, it reported several policy contributions.

Benin

- National Strategy for Ecological and Organic Agriculture (SNDAEB); The strategy includes incentive measures in favour of agroecology, notably the promotion of Participatory Guarantee Systems (PGS) for agroecological products and seeds, as well as the promotion of agroecological input production and distribution by the private sector.
- National Agricultural Investment and Food and Nutrition Security Plan (PNIASAN-3)
- 4th generation of the Municipality Development Plans (PDC 4) integrating agroecology. Two municipalities (Glazoué and Dassa) have finalized their PDC, while two others (Banté and Savalou) were developing their PDC.
- Agricultural Research Strategy of Benin (SRAB)

Kenya

- National Agroecology Strategy for Food System Transformation (2024)

Madagascar

- National Strategy for Producer Services, developed by the Ministry of Agriculture and Livestock, which aims to harmonise resilient and sustainable interventions targeting Malagasy farmers. The strategy addresses technical advisory services, support in inputs and materials, and places particular emphasis on cooperative structuring and market access, taking into account the economic conditions of producer households across Madagascar's regions.
- Regional Agroecology Strategies for two regions (Androy and Boeny).
- Regional Development Plan (Androy).

In addition to the above, the project supported the development of annual plans for two CoMADI (Community management agricultural development initiative for sustainability and community empowerment) in Ethiopia. A CoMADI is a community-based initiative aimed at managing agricultural development (including the use of resources and land) in a participatory and sustainable manner, while empowering local communities (Chiga and Diga).

SUPPORT TO CAADP AGRICULTURAL RESEARCH AND EXTENSION ORGANISATIONS

"AFAAS - African Forum for Agricultural Advisory Services"

Managed by IFAD (International Fund for Agricultural Development), implemented by AFAAS

Countries directly targeted under the DeSIRA project: Kenya, Ghana, Mali, Malawi, Madagascar, Liberia, Nigeria, Uganda, Cameroon, Ethiopia, South Africa

Pillar II

The focus of this action is to strengthen the architecture and governance of Africa's continental and sub- regional agricultural research and innovation organisations, enabling them to effectively support national agricultural research and innovation systems, with the objective of enhancing the performance of these systems towards contributing to the achievement of national food and agriculture development goals and targets.

AFAAS has implemented various initiatives to equip country fora and partner organizations with the knowledge and tools to advocate for climate-relevant policies and enhance cross-border markets and trade reforms. AFAAS is also

leveraging AGRA (Alliance for a Green Revolution in Africa) to enhance the efficiency and effectiveness of agricultural extension and advisory services (AEAS) by strengthening extension systems, digitization, and private sector engagement in selected African countries.

Ethiopia – The country has reviewed its extension policy to adopt a pluralistic AEAS approach, incorporating CSA principles. The approach aims to strengthen farmers' participation and to make extension services more responsive to local needs and community dynamics, rather than strictly top-down.

Kenya – The country forum (KeFAAS) was key in supporting the review of the agricultural policy in response to the country's devolution experience. The Kenya Agricultural Extension Policy, 2023, aims to further revitalize extension and advisory services across the country.

Malawi - Over the reporting period, AFAAS has supported the policy efforts of its national forum (MaFAAS) to contribute to the development of a comprehensive policy framework to streamline agricultural services. For instance, in 2022, MaFAAS organised an extension week/dialogue and produced a position paper on standardized and harmonized extension delivery. In 2024, AFAAS organized a policy dialogue and policy training in Malawi, under the theme "Mainstreaming Private sector led models, the digital economy, Climate Resilience and cross border trade aspects in Agricultural Extension and Advisory Services in Africa". The national extension policy was launched during the 7th Africa-Wide Agricultural Extension Week in 2025. Policy efforts have also resulted in increased funding for extension worker recruitment and the promotion of MaFAAS members to higher positions within the national extension framework.

Nigeria – The national forum (NiFAAS) has been at the centre of the policy process since 2022. It spearheaded the finalisation and the launch of the National Agricultural Extension Policy (NAEP) during the 6th Africa-Wide Agricultural Extension Week in 2023. The policy integrates climate-smart technologies, innovation and management practices in extension services. Nigeria is now developing regulations, which also require parliamentary approval.

Rwanda - The Customized Agriculture Extension Services (CAES) is the overarching framework for extension services (under the Ministry of Agriculture). AFAAS facilitates stakeholder engagement, knowledge sharing, and partnerships among government, private sector, and farmer organizations to strengthen the CAES roadmap. Through its collaboration with the AGRA project, AFAAS contributes to digitalization, private-sector advisory development, and inclusive extension systems aimed at increasing smallholder adoption of climate-resilient, sustainable farming practices and enhancing coordination and learning across Africa's agricultural extension landscape.

Table 21: Summary of cumulative values 2019-2024 for GDIs attached to Outcome 4

N° of projects contributing to the GDI # Values > 0		OUTCOME 4: "The agriculture and food systems policy environment is improved at national or international level"		Pillar I	Pillar I	Pillar II	Pillar II	ALL	ALL
AGR 2024	AGR 2025	GDI #	OUTCOME 4 - Global DeSIRA Indicators	AGR 2024 (*)	AGR 2025 (*)	AGR 2024(*)	AGR 2025(*)	AGR 2024 (**)	AGR 2025 (**)
40	47	19	Number of policies, strategies or plans, fostered by multi-stakeholder processes, under development or endorsed by the relevant authorities	165	217	14	19	179	232
41	47	20	Number of 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	78	87	12	18	51	56

(Source: Global M&E Framework of the DeSIRA initiative, December 2025)

(*) Includes duplicates

(**) **NO duplicates**

Colour code	GDI Title	AGR 2024	AGR 2025	(X): no expected contribution
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Each figure is the sum of the values contributed by each DeSIRA project to the GDI.

Values > 0 AGR 2025 = number of projects (all categories) having contributed a positive value to the GDI during the reporting period 2019-2024.

Group 1 (G1) = 22 Pillar I projects included in the GM&EF since 2021/22 (CID 2018)

Group 2 (G2) = 17 Pillar I projects included in the GM&EF since 2023 (CID 2019)

Group 3 (G3) = 33 Pillar I projects included in the GM&EF since 2024 (CID 2020)

Pillar II = 7 projects = 2 projects, plus 5 'sub-projects' (under SUPPORT TO CAADP AR&EO) included in the GM&EF since 2021/22

7 Impact prospects

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.

Table 22: List of global DeSIRA Indicators attached to impact prospects

GDI #1	Number of smallholder farmers who claim socio-economic gains, a positive impact on agroecosystems and/or feel better equipped to cope with climate change-related shocks
GDI #2	Number of smallholder farmers expected to benefit from innovations disseminated beyond the projects' target groups
GDI #3	Number of hectares of agricultural or pastoral land where innovative climate-smart or agroecological practices have been introduced #3A (By target groups) #3B (By indirect beneficiaries)
GDI #4	Number of DeSIRA interventions claiming a positive, documented impact on agroecosystems at farm level
GDI #5	Number of DeSIRA interventions claiming a positive, documented contribution to the status and role of smallholder female farmers or female food entrepreneurs
GDI #6	Number of organisations strengthened by DeSIRA projects, able to document a positive impact of the project on the transformation of agriculture and food systems at national, regional or international level
GDI #7	Number of endorsed policies, strategies or plans supported by DeSIRA projects and demonstrating a positive impact on the transformation of agriculture and food systems at national, regional or international level

At the scale of the initiative, it is difficult to frame impact prospects because of the diversity of the DeSIRA projects. The impact indicators proposed under the DeSIRA initiative aim to capture benefits, mostly at farm level.

As projects come to completion, evaluations are conducted to assess their impact on target groups. These evaluations typically rely on sample-based surveys, allowing farmers to report on the usefulness and benefits of the innovations they have started implementing. Impacts are measured in terms of productivity, ecosystem effects, and broader socio-economic outcomes (income, food security). However, it should be noted that some projects which initially intended to measure impact through such surveys ultimately did not carry out these assessments, due to constraints related to cost, time and/or methodological challenges.

Impact on target groups, at farm level

Pillar I projects are geared towards contributing to a key GDI at impact level (GDI #1), which measures the number of smallholder farmers directly targeted by the projects, and who state that they have experienced socio-economic benefits and improved resilience to climate-related risks, by implementing the innovations they have co-developed with project partners. Under AGR 2025, 47 projects intend to measure farm-level impact. However, several Pillar I projects are not expected to contribute to GDI #1. Apart from one project that focuses on MSMEs (i.e. not on smallholder farmers) and a few projects targeting farmers, but not intending to measure impact, most of these projects do not work at farm level and/or focus on innovations that do not translate into measurable farm-level impacts (e.g. support to agricultural innovation systems; performance metrics to support agroecological transitions).

Among the projects which were expected to report benefits at farm level, the number of projects claiming a contribution to impact (i.e. GDI #1) has doubled since the last reporting period AGR 2024 (29 against 15). This includes 18 projects from the older groups (Group 1 and Group 2) and 11 more recent projects (Group 3).

Though the cumulative number of farmers claiming a gain in terms of resilience to climate change (typically an increase in revenue, better technical knowledge) has increased by 111% (from 45,932 to 96,796) since the last reporting period, it remains limited under AGR 2025. As mentioned under previous AGRs, the capacity to assess impact varies across projects, as measuring impact is often a challenge (complex methods to be developed, resources to be invested). Second, as it takes time to generate impact, a project with a fixed duration often does not provide the appropriate scope for evaluating the effects of public investments. Third, R&I projects mainly contribute to change by providing knowledge, methods and technologies. By developing participatory research, by implementing multi-stakeholder approaches and by designing a clear strategy for dissemination and scaling, they facilitate the deployment of innovations. Development actors such as NGOs or FOs are then able to scale and disseminate these innovations. This is confirmed by the fact that three projects only account for 60% of the AGR 2025 value. These projects usually include a strong development component (training of farmers and service provision at scale by involving development organisations in the consortium, partnering with farmers' organisations) or they have the capacity to cover broader areas through activities involving key value chains actors and/or spanning over several countries (e.g. a regional system to control fruit flies in orchards of 15 West African countries; innovative water and energy solutions in 5 countries of East Africa).

Table 23 presents the conversion dynamics along the results chain of the DeSIRA initiative between AGR 2024 and AGR 2025. By comparing absolute figures and key ratios from reach to use and from use to reported benefits, the table provides, beyond the scale of the outreach, a measure of the effectiveness of translating engagement into a sustained use of innovations and tangible impact among smallholder farmers. These ratios should be interpreted as indicative trends rather than precise measurements. The robustness of the data is inherently linked to the quality and completeness of project-level reporting, and not all Pillar I projects are able to provide full data across GDI #23, GDI #9 and GDI #1.

Table 23: Pillar I – Conversion ratios along the result chain

Global DeSIRA Indicator (GDI) Number of SmallHolder Farmers (SHFs)	Result Chain	AGR 2024 Value	AGR 2024 Ratio (%)	AGR 2025 Value	AGR 2025 Ratio (%)
GDI #23 (Output 3) Number of SHFs reached by research & innovation initiatives	Reach	411,021	na	694,297	na
GDI #9 (Outcome 1) Number of SHFs who have taken up at least one climate-smart or agroecological innovation	From reach to use = <i>SHF using innovations</i> / <i>SHF reached</i>	264,697	64%	367,977	53%
GDI #1 (Impact) Number of SHFs who claim socio-economic gains, a positive impact on agroecosystems and/or feel better equipped to cope with climate change-related shocks	From use to benefit = <i>SHF reporting benefits</i> / <i>SHF using innovations</i>	45,932	17%	96,796	26%
Global Impact	From reach to benefit = <i>SHF reporting benefits</i> / <i>SHF reached</i>	45,932	11%	96,796	14%

Source: Global M&E Framework of the DeSIRA initiative, December 2025

Between the two reporting periods, outreach expanded substantially, while the implementation ratio among smallholder farmers declined from 64% to 53%. However, a higher share of smallholder farmers using innovations reported benefits in AGR 2025 (from 17% to 26%) resulting in an improvement in the overall reach-to-benefit ratio (from 11% to 14%).

32 Pillar I projects reported more than 300,000 ha, where sustainable practices were introduced over the last reporting period. This value includes surfaces under crops, agroforestry, forage production, aquaculture, as

well as pastures, grazing lands, as well as forest land restored or protected for productive use (e.g. non-timber forest products, coffee).

Wider impact

At initiative level, GDI #2 was designed to capture the extent to which smallholder farmers, beyond the target groups, may benefit from innovations. Over the reporting period, 28 Pillar I projects collectively reported more than 1,970,764 potential beneficiaries, with one project alone accounting for 51% of this total. In most cases, these figures are programmatic estimates based on development partnerships and anticipated dissemination pathways (e.g. campaign outreach or institutional mandates to serve a specific population of farmers). In practice, very few projects have been able to document spill-over effects beyond the direct target groups who engaged with innovation processes. Most projects cannot estimate how many additional smallholder farmers could benefit if innovations were fully disseminated and therefore report no value. As a result, although some figures appear substantial in absolute terms, the cumulative value is likely to underestimate the wider potential reach. One exception concerns a regional African extension organisation strengthened under Pillar II. While it does not reach farmers directly, it seeks to track how innovations are disseminated through national fora and extension systems, which it supports. It estimates that up to 6 million smallholder farmers could potentially benefit from innovations promoted through these multi-actor platforms, via public or private extension services, agri-dealers and farmer organisations that are members of the fora.

Impact on agroecosystems

The number of projects reporting a positive and documented impact on agroecosystems at farm level has increased from 18 to 33 since the last reporting period. More Pillar I projects are now able to provide evidence that changes in practices are occurring and that these changes are starting to translate into measurable environmental effects. Pillar I projects reported more than 300,000 ha, where sustainable practices were introduced over the last reporting period. This value includes surfaces under crops, agroforestry, forage production, aquaculture, as well as pastures, grazing lands, as well as forest land restored or protected for productive use (e.g. non-timber forest products, coffee). In several cases, documentation refers to reduced use of synthetic fertilizers or pesticides, increased use of organic inputs, improved pasture management, tree planting and agroforestry expansion, increase of biomass in pastoral systems, or reduced livestock pressure on rangelands. Some projects also rely on structured tools such as TAPE or environmental footprint assessments to document agroecological transition at farm level. However, in many cases, what is documented remains at the level of practice change rather than long-term ecosystem outcomes. While certain projects report measurable indicators (e.g. hectares under agroecological management, percentage of farmers adopting agroecological practices, fertilizer reduction per unit of production, biomass increase), broader impacts such as sustained carbon sequestration, biodiversity recovery, or long-term soil regeneration are often still under evaluation. Several projects explicitly state that the duration of the intervention is too short to fully document agroecosystem-level impact. Some projects also point to potential trade-offs. For example, innovations such as solar water pumps may improve productivity but raise questions about groundwater sustainability. This illustrates the complexity of documenting agroecosystem impact, which depends not only on technical change but also on time, monitoring capacity, and the ability to attribute environmental trends to project activities. Overall, documented evidence has increased, but impact measurement remains uneven across projects.

Impact on gender balance

As clearly stated in the Commission Implementing Decisions, the DeSIRA initiative is expected to play a role in promoting gender equality and women's empowerment. Over the reporting period, 25 Pillar I projects reported a documented contribution to the status and role of women, against 7 in AGR 2024. Evidence of concrete changes has therefore increased. Documented results include: women's participation in formal decision-making processes at FO level; strengthened leadership roles through Women Leadership Academies or structured gender action plans; improvements in gender parity indicators; joint household decision-making through

Gender Household Approaches; creation of women-led enterprises; access to financial resources through savings groups or business plans; and measurable improvements in women's social or economic situation as captured by project-specific indicators. In some cases, gender specialists have been recruited and gender assessments conducted.

In contrast, many other projects remain at a gender-sensitive stage, focusing on inclusion rather than empowerment. They report high female participation rates in activities (sometimes above 50%), the involvement of women in producer organisations or through value chain activities. While these elements confirm attention to gender, they do not demonstrate a measurable change in women's status, role or decision-making power. Several projects do not plan to measure impact on women's status or role beyond participation. In other cases, impact measurement is planned for endline evaluations, and current evidence remains qualitative (case stories, testimonials, communication products).

Institutional and policy impact

Two GDIs measure the transformative impact of DeSIRA projects on agriculture and food systems. GDI #6 focuses on organisations able to document a positive project impact on system transformation. GDI #7 identifies policies that effectively contribute to transforming agricultural systems. However, most projects were not designed to assess impact at system and policy levels, making it difficult, if not unlikely, to fully observe these impacts within the timeframe of the DeSIRA initiative. As a result, when impact exists, it is often implicit rather than clearly documented. Moreover, attribution remains challenging where multiple actors contribute to national processes.

Although it is often too early to claim significant systemic change, several DeSIRA projects are well positioned to influence agricultural systems. Over the reporting period, 24 projects (20 under Pillar I and 4 under Pillar II) reported a total of 98 organisations (without duplication, 76 from Pillar I and 22 from Pillar II) able to transform institutional benefits into systemic impact. This is a substantial increase compared to the previous reporting period, when 9 projects reported 31 organisations. These organisations are among those for which institutional and/or innovation capacity has been strengthened by the DeSIRA projects (see Outcome 2).

Evidence of transformative change is beginning to emerge. For example, in Nepal, stakeholders in 19 municipalities were trained in climate-resilient planning and public investment strategies. As a result, all 19 municipalities have integrated climate-resilient activities into their annual agricultural programmes, aligned with jointly identified priorities and supported by dedicated budgets. This has led to investments in key agricultural infrastructure, such as cold storage facilities and collection centres, strengthening local value chains by reducing post-harvest losses, improving market access and enhancing water availability. In turn, this has increased productivity and resilience among farming communities. Under Pillar II, one project reports that five country fora are able to document a positive impact on agricultural extension systems at national level.

The transformative impact of policy change remains less tangible than systemic changes triggered by targeted institutions. Only four projects claimed a positive contribution to GDI #7. Most implementing partners emphasize that significant policy shifts require more time to materialise, especially those linked to new development models such as agroecology. An example of policy impact is illustrated by a regional project in West Africa, which contributed to upgrading a national centre of specialisation into a regional centre of excellence, enabling research to be conducted at regional level and harmonising research protocols. This led to the adoption of a fruit fly surveillance system by 15 West African countries, allowing them to export mangoes to the European Union. The policy dimension of this impact is reflected in the institutionalisation and public financing of the surveillance system, with several governments (e.g., Côte d'Ivoire, Guinea) allocating national resources to support monitoring and control activities. While exporting countries have benefited directly, the broader adoption of the surveillance system has strengthened mango production systems across the region, including in countries that do not export.

SAFEVEG “Safe locally-produced vegetables for West Africa’s consumers”

Managed by the Netherlands’ Ministry of Foreign Affairs, implemented by WorldVeg (the World Vegetable Center)

Benin, Burkina Faso, Mali

Pillar I – Group 2

The project tests agricultural and post-harvest practices and technologies, as well as new varieties, with a view to contribute to increased vegetable production in urban and peri-urban areas in Benin, Burkina Faso and Mali.

The project targets 10,000 small-scale vegetable producers, mainly through Vegetable Business Networks (VBNs). It also aims to reach approximately 80,000 additional producers through a scaling-up strategy.

In practice, the project has reached 21,750 beneficiaries, including 11,000 internally displaced people in Burkina Faso, who received vegetable seed kits through INERA (Institut de l’Environnement et de Recherches Agricoles). This seed distribution was not initially planned. Among the 10,000 targeted producers, 3,839 smallholders implemented new production and post-harvest conservation practices. However, the number of farmers using improved seeds is unknown.

The project conducted an impact study within the VBNs to assess changes in farmers’ income, trust within farmers’ organizations, access to credit, and business planning capacities. The study also evaluated the effects of seed kit distribution on income and varietal adoption. Overall, 4,298 small-scale producers are estimated to have increased their productivity and/or income. The final report indicates “positive changes in livelihoods and social practices across the three countries. Improved access to finance enabled participants to secure regular loans and strengthen their business planning skills, increasing their credibility with micro-finance institutions. Agricultural production improved through better farm management and the adoption of good agricultural practices. Stronger contractual relationships enhanced trust among value chain actors and improved market access. Farmers also improved their financial management, price negotiation, and business organization skills, resulting in higher incomes.”

Sustainable agricultural practices were implemented on 19,785 hectares. However, the project does not measure impact on agro-ecosystems.

Regarding gender and youth inclusion, more than 55% of the VBNs are led by women or young entrepreneurs. The project plans to conduct a dedicated study to assess its impact on the living conditions of women and youth.

Beyond the farm level, the impact is also significant for key actors in the horticultural value chain. Before the intervention, vegetable seeds were largely absent from national seed catalogues. As a result of project support, eight local or national seed companies (three in Benin, two in Mali, and three in Burkina Faso) now produce and market quality vegetable seeds. Prior to the project, these companies did not sell vegetable seeds in Benin, but mainly sold imported vegetable seeds in Burkina Faso, and focused primarily on cereal seeds in Mali.

SUSTENTA e INOVA - Sustainable and innovative agriculture and value chains in the Brazilian Amazon

Implemented by SEBRAE/PA (Serviço de Apoio às Micro e Pequenas Empresas do Estado do Pará)

Brazil

Pillar I – Group 3

The project operates in three distinct territories in the state of Pará:

-Marajó Island is known for its complex ecosystems and the presence of traditional communities; activities aim at landscape restoration and sustainable business development.

-Xingu (Transamazônica): in this area, the project focuses on improving the livelihoods of family farmers through sustainable practices, agroforestry systems, and efforts to increase market access.

- Capim River (Belém-Brasília Highway): activities revolve around policy support, sustainable agro-industrial practices, and innovative business initiatives, engaging cooperatives and rural enterprises.

In terms of reach, the project has trained 1,948 beneficiaries in sustainable natural resource management practices. Among them, an estimated 1,028 smallholder farmers are applying innovative practices, including agroforestry systems, minimal-impact technologies, stingless bee farming and no-fire farming techniques. In addition, both cattle ranchers and agricultural producers have started using a green financial product linked to sustainable practices and environmental regulations. On Marajó Island, beneficiaries have co-developed and are now using an innovative governance mechanism for the collective production of non-timber forest products (NTFPs): the "Reference Centers for Low-Impact Management of Native Açaí Groves."

A mid-term evaluation was conducted with contributions from 128 beneficiaries across the three project areas. Perceptions of impact were overwhelmingly positive: 98% reported increased production (of which 41% reported growth exceeding 50%); 96% stated that their household income increased; 87% reported that the project helped prevent the opening of new areas (avoided deforestation); and 73% reported land restoration effects, in line with the fact that the project did support the restoration of 1,078 hectares of degraded pastures and forests through Agroforestry Systems (AFS) based on cocoa or açaí.

The mid-term evaluation also indicates that 87.5% of surveyed beneficiaries now avoid practices that lead to deforestation, adopting less invasive management techniques. These perceived agroecosystem-level improvements are expected to be confirmed through the measurement of the project's key performance indicator: "Reduction in the average deforestation rate observed in the territories".

Most MSMEs in the cocoa value chain historically belong to men, reflecting land ownership patterns in the area. The project has supported the creation of several chocolate businesses by women. According to the project, interviews and reports from these business owners suggest a positive impact on women's roles.

In terms of institutional impact, EMBRAPA reports that the project has changed the way it operates at community level by integrating communities into its governance processes. This shift has been institutionalized within EMBRAPA's Amazon branch and mainstreamed into its planning strategies and implementation approaches, including beyond the project area, and has reportedly influenced practices at federal level.

At policy level, the project contributed to the implementation of state and municipal sanitary regulations for family agro-industries in Pará, particularly the Artisanal Production Seal issued by ADEPARÁ (Agência de Defesa Agropecuária do Estado do Pará). This instrument certifies compliance with sanitary and environmental standards, facilitating formalization and market access for small-scale producers, including chocolate producers. Chocolate agro-industries are now formally subjected to artisanal production standards and state sanitary inspection. The project supported the adaptation of five SMEs to this new regulation, including compliance with Good Manufacturing Practices, infrastructure standards and documentation requirements.

Table 24: Summary of cumulative values 2019-2024 for GDIs attached to impact prospects

N° of projects contributing to the GDI # Values > 0		IMPACT: "The DeSIRA initiative contributes to the climate-relevant, productive, and sustainable transformation of agriculture and food systems in low and middle-income countries"		Pillar I	Pillar I	Pillar II	Pillar II
AGR 2024	AGR 2025	GDI #	Global DeSIRA Indicators	AGR 2024	AGR 2025	AGR 2024	AGR 2025
15	29	1	Number of smallholder farmers who claim socio-economic gains, a positive impact on agroecosystems and/or feel better equipped to cope with climate change-related shocks	45932	96796	0	0
16	28	2	Number of smallholder farmers expected to benefit from innovations disseminated beyond the projects' target groups	595216	1970764	0	0
25	32	3A	Number of hectares of agricultural or pastoral land where innovative climate-smart or agroecological practices have been introduced (By target groups)	116496	301646	0	0
1	1	3B	Number of hectares of agricultural or pastoral land where sustainable innovative climate-smart or agroecological practices have been introduced (By indirect beneficiaries)	13200	14964	0	0
18	33	4	Number of DeSIRA interventions claiming positive, documented impact on agroecosystems at farm level	18	33	0	0
7	25	5	Number of DeSIRA interventions claiming positive, documented contribution to the status and role of smallholder female farmers or female food entrepreneurs	7	25	0	0
9	24	6	Number of organisations strengthened by DeSIRA projects, able to document a positive impact of the project on the transformation of agriculture and food systems at national, regional or international level	15	76	16	22
2	4	7	Number of endorsed policies, strategies or plans supported by DeSIRA projects and demonstrating a positive impact on the transformation of agriculture and food systems at national, regional or international level	2	18	0	0

(Source: Global M&E Framework of the DeSIRA initiative, December 2025)

Colour code	GDI Title	AGR 2024	AGR 2025	(X): no expected contribution
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Each figure is the sum of the values contributed by each DeSIRA project to the GDI.

Values > 0 AGR 2025 = number of projects (all categories) having contributed a positive value to the GDI during the reporting period 2019-2024.

Group 1 (G1) = 22 Pillar I projects included in the GM&EF since 2021/22 (CID 2018)

Group 2 (G2) = 17 Pillar I projects included in the GM&EF since 2023 (CID 2019)

Group 3 (G3) = 33 Pillar I projects included in the GM&EF since 2024 (CID 2020)

Pillar II = 7 projects = 2 projects, plus 5 'sub-projects' (under SUPPORT TO CAADP AR&EO) included in the GM&EF since 2021/22

8 Conclusions

In line with the Annual Global Reports (AGR) 2021/22, AGR 2023 and AGR 2024, AGR 2025 builds on the Global Monitoring and Evaluation Framework (GM&EF) and reports on the extent to which the overarching objectives of the DeSIRA initiative are being achieved. For the second consecutive year, this exercise encompasses all DeSIRA projects, making the comparison between AGR 2024 and AGR 2025 more straightforward. This includes 72 Pillar I projects, focused on Research and Innovation (R&I) in agricultural and food systems, and 7 Pillar II projects aimed at strengthening the capacities of regional and international organisations (refer to Annex 1). AGR 2025 broadly covers the implementation period 2019-2024. However, the cut-off date for reporting varies across projects, ranging from June 2024 to October 2025, with 33 projects reporting data up to November 2024, December 2024 or January 2025 (refer to Annex 2). During the reporting period, 32 projects reached completion. For these projects, the data included in AGR 2025 represents the final project data. Overall, the annual review reinforces and expands upon the conclusions reached in AGR 2024.

The GM&EF is specifically designed to apply to all DeSIRA projects. While the differences in objectives between the Commission Implementing Decisions 2018, 2019, 2020 are limited, the difference in nature, scope and objectives between and within Pillar I and Pillar II, as well as the extreme diversity of Pillar I (R&I) projects explain why each DeSIRA project contributes to certain results at initiative level, but not to all, and why the contribution of some projects to global results and indicators weighs more heavily than others. Within Pillar I, beyond differences in scope and activities, a key difference between projects lies in the balance between research activities aiming at producing scientific knowledge, and development activities focused on disseminating technologies or strengthening capacities.

Furthermore, while every project explicitly contributes to certain initiative-level objectives, with clear information reflected in their reporting, all projects also implicitly contribute to many Global DeSIRA Indicators. Their activities generate outputs of global interest that drive changes relevant to the DeSIRA initiative. However, these contributions are often not captured by project-level indicators or not sufficiently highlighted in progress reports, making direct interactions with project teams essential to identify and document implicit contributions to the GM&EF.

The GM&EF strives to capture and illustrate the broad and potentially far-reaching influence of DeSIRA. While the main conclusions have not changed substantially since the previous reporting period, AGR 2025 offers additional nuance and complementary elements that further strengthen the analysis.

- The DeSIRA initiative has reached a mature stage, as reflected in the very limited growth in the number of researchers and research organisations involved in its implementation since the last reporting period. At the same time, the number of farmers' organisations and private sector actors engaged in project activities continues to increase, suggesting that projects are multiplying partnerships to facilitate the dissemination of innovations.
- The differences previously observed between the more recent and the older Pillar I projects in terms of progress in the implementation of activities have gradually diminished over the course of implementation. Most of the older projects were granted no-cost extensions, which has enabled them to absorb or mitigate pandemic-related delays and to consolidate the results of their innovation processes.
- Stakeholders have started reaping the benefits of the substantial efforts invested in developing new or strengthening existing multi-stakeholder innovation mechanisms. Rooted in close collaboration between researchers and farmers, and supported by NGOs, private sector actors and extension services, these mechanisms are now beginning to demonstrate their added value. They are increasingly recognised not as project-related processes, but as strategic activities. As research results become more tangible, the

added value of these collaborative mechanisms becomes clearer, reinforcing their recognition among R&I projects.

- The support to innovation, including co-design and deployment, is a key feature of R&I projects. The data point not only to a quantitative increase in innovations across all R&I projects (both older and more recent projects) but also to a qualitative shift towards more system-oriented innovations. Combined with the continued expansion of knowledge and communication outputs for all categories of actors, this highlights the added value of no-cost extensions and the full deployment of the DeSIRA initiative.
- Across indicators counting individuals (particularly farmers and technical staff), reported figures remain highly conservative and are likely underestimated. This reflects persistent measurement challenges, including a lack of disaggregation between categories of beneficiaries, aggregation of participants rather than unique individuals, and risks of double counting across activities. In response, the GM&EF has applied cautious rules when consolidating data. For technical staff, there is clear evidence that capacity development is widespread, even if measurement remains uneven and often underestimates the scale of support provided. For researchers, the data provided by the projects are more reliable.
- With a growing number of contributions stemming from research and innovation processes under Pillar I, education-related products, although not an explicit objective of DeSIRA, have become a tangible result of the initiative. The increasing number of finalized and reusable curricula and training products reflects the projects' investment in long-term capacity building.
- The ratio between innovations taken up by farmers and those intended for use at farm level has continued to increase over the years, reflecting the overall progress of the DeSIRA initiative despite limitations in reporting on uptake, and driven by all R&I projects.
- Though the strengthening of the capacity of organisations to support innovation processes and dissemination is a key expected outcome of the DeSIRA initiative, most projects do not properly capture and document this dimension. In parallel with the expansion in the number of innovations for use at farm level, innovations targeting institutions have steadily progressed. Present across all DeSIRA projects, institutional innovations are increasingly embedded in national and local structures, through tools, mechanisms and services that both strengthen these structures and aim to support farmers in the long term. Under Pillar I projects, institutional capacity strengthening appears less as a direct outcome of training activities than as the cumulative effect of sustained engagement of researchers and technical staff in innovation processes. Across Pillar I projects, institutional change is often implicit (i.e. more often observed than formally assessed), embedded in methodological experimentation, participatory approaches and inter-institutional collaboration rather than explicitly planned or measured. While such engagement reshapes organisational practices and ways of working, the absence of dedicated assessment methodologies limits the ability to capture and attribute these changes. By contrast, under Pillar II, institutional strengthening is more deliberately structured and strategically coordinated, though its longer-term and downstream effects remain only partially visible. That said, among the many organisations strengthened by Pillar I projects, a growing number have already demonstrated a capacity to transform institutional benefits into systemic impact. This is fully in line with the overall objective of the DeSIRA initiative.
- The impact of projects on value chains and private sector actors remains difficult to assess. In addition to the primary focus of Pillar I projects on farm-level R&I, systematic monitoring of changes at the private sector level is largely absent. Quantitatively, support to the private sector has grown, in the number of projects engaging upstream and downstream actors, in the number of innovations targeting value chain actors and in the number of MSMEs strengthened or created. Qualitatively, implementing partners describe a diversity of approaches, from targeted support to specific segments of value chains to more holistic, system-wide strategies that consider multiple value-adding activities and actors. However, when

considering the objectives of strengthening agricultural production systems and facilitating the deployment of innovations at scale, there is insufficient systematic evidence to demonstrate that one type of approach leads to better outcomes than another in the context of the DeSIRA initiative.

- Converting scientific evidence into sustained influence is a long-term, complex process that often extends beyond project control. However, driven by knowledge production and opportunities to engage in policy reform, project partners strive to bridge science and policy through dedicated capacity development and are increasingly involved in shaping the enabling environment for innovation processes and scaling. The diversity of policy domains and levels influenced so far, from national agroecological strategies to regional frameworks and local development plans, highlights the breadth of DeSIRA's reach. On the negative side, current documentation remains uneven and limits the visibility of DeSIRA's influence. Initiatives such as the DeSIRA LIFT learning review are important steps to better understand policy-level impacts and to strengthen partners' capacity to engage effectively in the science-policy interface.
- The DeSIRA initiative is expected to play a role in promoting gender equality and women's empowerment. Overall, except for a few projects that have a comprehensive, gender-focused strategy, many Pillar I projects lack a formal gender strategy and many others, among those which claim a gender strategy, acknowledge difficulties in its implementation. The number of projects reporting documented contributions has increased, but the evidence varies widely across projects. A few projects demonstrate measurable progress, whereas most others cannot substantiate tangible changes in women's empowerment. The overall contribution of the DeSIRA initiative to women's empowerment, especially in the context of climate change, is likely to remain limited.
- Dissemination and scaling strategies of Pillar I projects remain highly relevant to the overall objective of the initiative. While R&I projects typically do not engage in large-scale deployment, they initiate scaling processes by generating knowledge, strengthening capacities and embedding innovations within multi-stakeholder and institutional structures. The number of projects reporting a documented scaling strategy has continued to increase. No-cost extensions have enabled consolidation of uptake and dissemination efforts. However, scaling outcomes remain uneven, as effective deployment remains dependent on development partnerships and the broader enabling environment.

9 ANNEXES

ANNEX 1 List of DeSIRA projects included in the Annual Global Report 2025

ANNEX 2 Overview of projects' status and implementation periods covered by the Annual Global Report (AGR) 2025, for each DeSIRA project