



CGIAR
MULTIFUNCTIONAL
LANDSCAPES

Science Program | Annual Technical Report 2025

Multifunctional Landscapes



Eastern Africa Landscape
Credit: Neil Palmer/CIAT.

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Collaborating Centers



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CGIAR Technical Reporting 2025

This 2025 Annual Technical Report forms part of CGIAR's first reporting cycle under the System Council-approved 2025–2030 Portfolio. It is grounded in the CGIAR Research and Innovation Strategy Program/Accelerator proposals and Plans of Results and Budget (PORBs) that establish each Program's and Accelerator's scope and objectives. It aligns with the Performance and Results Management Framework (PRMF 2022–2030), and the Technical Reporting Arrangement (TRA 2025–2030).

A [Program inception report](#) was developed in 2025 to document initial Program design, scope, and implementation arrangements. This report provides important context for interpreting early progress and implementation choices reported in this Annual Technical Report.

Pooled ([Window 1/Window 2, or W1/W2](#)) results are presented alongside mapped Window 3 (W3) and bilateral results. All pooled (W1/W2) results undergo [quality assurance](#) according to established standards. W3 and bilateral results are quality-assured at Center level and reviewed by Programs and Accelerators.

All data presented in this report reflect the status as of 27 March 2026 and draw on quality-assured results in the [Results Dashboard](#), unless otherwise stated. While every effort has been made to ensure data accuracy, note that further refinements are taking place and updates will be available via the CGIAR Results Dashboard.

1. Overview for 2025

Science Program title	Multifunctional Landscapes
Science Program director	Lulseged Tamene Desta
Start–end date	2025-2030
Centers involved	Alliance of Bioversity International and CIAT, CIMMYT, CIP, ICARDA, ICRISAT, IFPRI, IITA, ILRI, IWMI, WorldFish
Targeted Impact Areas	Environmental Health and Biodiversity; Climate Adaptation and Mitigation; Livelihoods and Jobs; Poverty Reduction, Nutrition, Health and Food Security; Gender Equality, Youth and Social Inclusion
Geographic focus	Colombia, Peru, Senegal, Tunisia, Kenya, Tanzania, Zimbabwe, India, Lao PDR, Cambodia, and Viet Nam
Mapped W3/bilateral projects	The detailed list of W3/bilateral projects mapped to Multifunctional Landscapes is available on pages 11–19 of the 2025 Plan of Results and Budget .
2025 budget	US\$66.7M (W1/2: US\$18.8M; W3/bilateral: US\$47.9M)

About the Program

The Program addresses the growing challenge of managing landscapes that must simultaneously deliver food, livelihoods, climate resilience, and biodiversity outcomes. It aims to drive system-level transformation by integrating sustainable production, restoration, and conservation within diverse socio-ecological contexts across Africa, Asia, and Latin America. The Program develops and applies agroecology, nature-positive, and regenerative solutions in Living Landscapes through a combination of participatory landscape diagnostics, integrated planning, markets and finance mechanisms, inclusive governance and policy engagement. Working as an integrative science-to-action platform within CGIAR, it generates evidence and scalable models for multifunctionality, delivering measurable contributions to CGIAR's Impact Areas.

Executive summary



Advancing climate-smart silvopastoral systems in Tunisia. By simplifying carob propagation, ICARDA and its partners are equipping forestry institutions with practical approaches that reduce costs, strengthen institutional capacity, and enable large-scale adoption of a species that supports biodiversity, rural livelihoods, and food and fodder security. Credit: Khalifa Jelali / DGF Tunisia.

In 2025, the Program focused on establishing operational foundations, delivering early results across its seven Areas of Work (AoWs), strengthening partnerships, and refining strategies for scaling landscape-level transformations. It also demonstrated strong internal cohesion, bringing together researchers and practitioners from 11 CGIAR Centers around a shared vision of integrated landscape solutions that benefit both people and nature.

The Program has contributed to multiple Impact Areas through 56 outcome level results¹: 94 percent contributed to biodiversity, 78 percent to climate adaptation, 74 percent to poverty reduction, 62 percent to nutrition and food security, and 51 percent to gender equality.

The Program's first year of implementation already provided clear evidence of its contribution to the identified pathways toward sustainable multifunctional landscapes. The results from 2025 highlight seven key messages, for which more detailed evidence can be found in the full report.

1. **Agroecology, nature-positive, regenerative and complementary solutions improved productivity and resilience (AoW1):** Legume–cereal forage systems improved flock fertility by 20 percent (Tunisia), biochar integration nearly doubling durum wheat grain yield (Tunisia), integrated rice-field pond systems generated up to three times more value than rice monoculture (Cambodia), and integrated farming system models improved system productivity and soil health across 120 farms (India).
2. **Participatory processes are the basis for sustainable transformation (AoW2):** The Landscape Vision-to-Action methodology developed by the Program enabled diverse stakeholders in five counties (Colombia, India, Senegal, Tunisia, and Zimbabwe) to collectively define priorities and strategies for optimized context-specific multifunctionality. Participatory rangeland management in Ethiopia, Kenya, and Tanzania reached 900,000 hectares, strengthening tenure security, coordination among stakeholders, and influencing regional policy discussions.
3. **Green enterprises, and sustainable finance built strong economic incentives for sustainable land management (AoW3):** The Incubation and Acceleration Program for Green Agribusiness reached 1,570 farmers across seven countries, supporting initiatives including organic fertilizer production in Kenya and sorghum contract farming in Zimbabwe (US\$ 496/hectare gross margin). In Kenya, community seed bank business models were developed and scaled in two counties, and 30 women in Kisumu formalized a circular bioeconomy briquette enterprise.

¹ The B-REAL project on Biodiversity for Resilient Ecosystems in Agricultural Landscapes, funded by Global Affairs Canada (GAC) under Window 2, is scheduled to end in March 2026. Therefore, many of its related results will be reported in 2026.

4. **Dialogue and engagement translated research into enabling policy environments (AoW4):** The Program's science-policy engagement has contributed to the development and adoption of several strategies and policies supporting agroecological and biodiversity-friendly transitions. These include Ethiopia's National Agroecology Strategy; the Agroecology Policy of Vihiga County, Kenya; Strategies in Peru aligned with the Kunming-Montreal Global Biodiversity Framework; and Priority-setting strategy for livestock and food security in Tunisia.
5. **Gender, youth and social inclusion reduced inequalities in access to landscape resources, decision-making, and agency (AoW5):** Primary research spanning six countries addressed gender inequality, youth barriers, and landscape governance. Two tools were co-developed and piloted to support the analysis of social and gender norms within gender-transformative research and to understand and strengthen marginalized voices in community-level decision-making.
6. **Performance metrics and digital tools strengthened evidence-based decision-making (AoW6):** Innovations such as the Metrics Library and the Holistic Localized Performance Assessment (HOLPA) platform provide policymakers and practitioners with tools to measure landscape outcomes across environmental, social, and economic dimensions.
7. **Outreach and engagements positioned the Program as a key contributor to discussions on sustainable landscape multifunctionality (AoW7):** The Program occupies a unique niche in CGIAR on environmental health and biodiversity impact research, hence the importance of global engagement which expanded through participation in international science-policy platforms and events (United Nations Environment Assembly, and the United Nations Climate Conference).

Learning from the first year of implementation has informed strategic refinement and scaling: Lessons from 2025 are informing a shift toward a more focused Program, including consolidation from seven to five AoWs and prioritization of Living Landscapes. The Program is strengthening engagement with bilateral projects and their lead Centers to facilitate delivery of outcomes. The MELIA approach is being refined to emphasize fewer, higher-quality outcome studies focused on system-level change pathways.

The Program's **key results story** features the agroecology transition in Kenya, Kiambu county. Participatory approaches, innovations monitoring, and synthesized policy-relevant evidence demonstrate scalable pathways for resilient landscapes and food systems. In Ndeiya, 200 households established kitchen gardens, 17 schools created organic gardens and tree nurseries, over 1,000 farmers were trained, and 5,000 seedlings are restoring degraded land. Farmer Research Networks and a Participatory Guarantee System now link agrobiodiversity, school meals, and markets, improving nutrition, incomes, youth engagement, and women's leadership.

High-level summary figures:

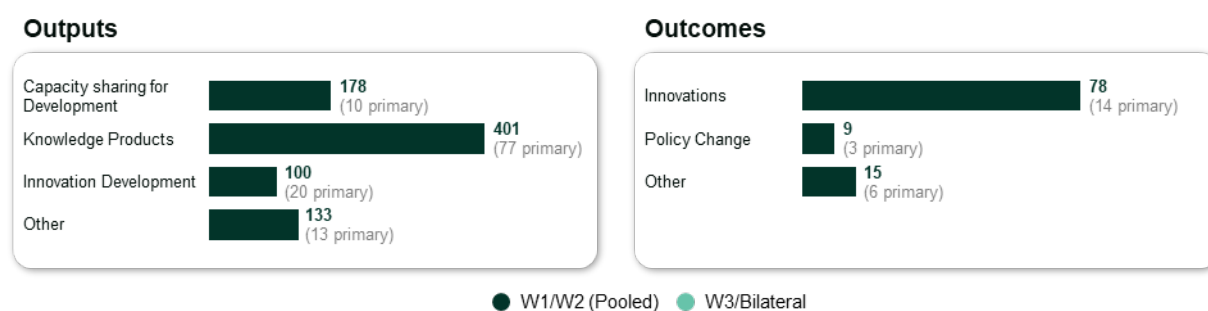


Figure 1: Number of results reported in 2025, and in parenthesis results that contribute directly to the Program's ToC targets. Based on data accurate as of 27 March 2026.

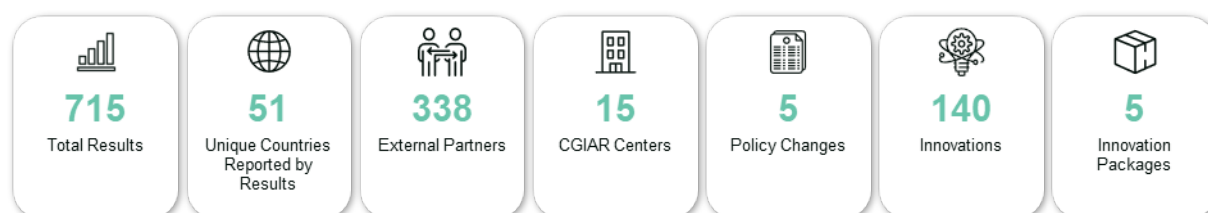


Figure 2: Key metrics reported by the Program in 2025. From 51 countries reported, over 90 percent come from 12 Multifunctional Landscape countries. From the 338 external partners reported, 72 are strategic partners who co-implemented and actively engaged in the Program, and 35 contributed directly to outcome targets. Based on data accurate as of 27 March 2026.

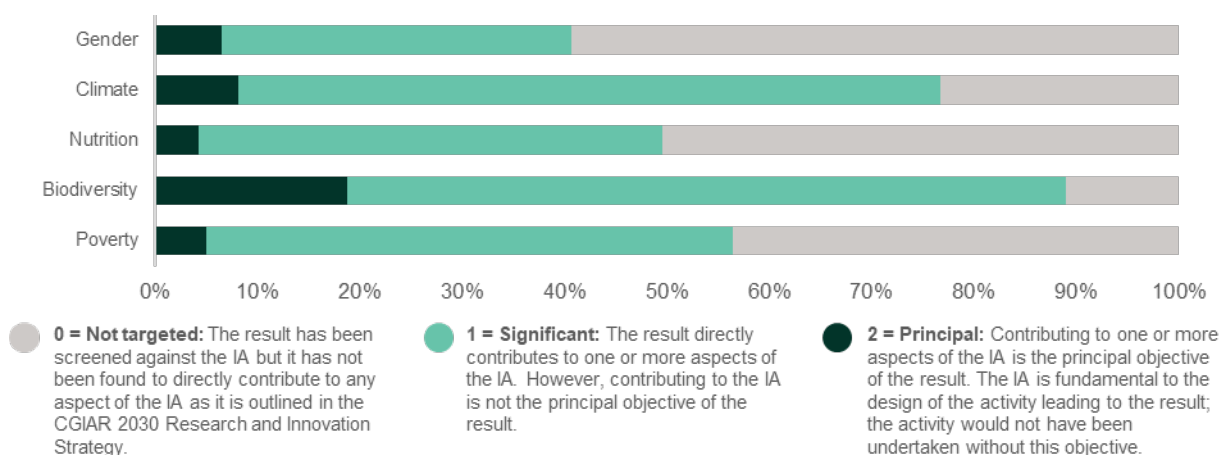


Figure 4: Number of results per Impact Area. Based on data accurate as of 27 March 2026.

“ Transitions to increased ecosystem health in multifunctional landscapes must grow from the inside out. Real change happens when we identify strong examples, like those I’ve seen in Peru and Kenya, and actively support them so others can learn and follow. Change is a slow process, but that’s how you make it happen.

Yogesh Ghore, Senior program teaching staff at Coady Institute, Canada.



2. Annual progress

2.1. Progress along the theory of change

In 2025, the Program, building on past progress, and bilaterals achieved 87 outcomes (69 innovation use results, 7 policy changes, 11 other outcomes) across seven AoWs. About 96 percent were tagged as relevant to environment and biodiversity, 78 percent to climate, and 57 percent to nutrition and gender equity, demonstrating the Program's contribution to multiple development objectives.

The Program thrives on participation, collaboration, and coordination. It engaged **3094 actors**: farmers (46 percent), government representatives (14 percent), researchers (17 percent), civil society and private sector actors (5 percent each), in 127 events across 11 countries with a gender representation of 44 percent female and 56 percent male. Thirty-eight events were focused on single actor types, usually farmers or farmer organizations; 51 events engaged 2-4 types of actors, whilst 17 events engaged seven or more stakeholder types.

Bundles of innovations fostering multifunctionality

Evidence of adoption of agroecological and nature-positive innovation bundles demonstrated great success. In Tunisia's El Kef-Siliana landscape, legume-cereal forage mixtures **raised flock fertility by 20 percent**, while combining biochar with reduced mineral fertilizer input **nearly doubled durum wheat grain yield**. A public-private partnership expanded rhizobium production **toward commercial-scale seed inoculation**.

Bundling crop rotation with legumes, organic inputs, and participatory varietal selection that involved more than 558 wheat producers in **Ethiopia** improved soil quality, stabilized yields, and enabled multiple crop cultivation on a single plot.

In **Zimbabwe**, more than 300 value chain actors continue to benefit from inclusive sorghum innovations integrating biophysical technologies, service-delivery mechanisms, and institutional arrangements.

In **Kenya and Cameroon**, the **MyFarmTrees** digital platform engaged over 6,000 farmers and more than 400 stakeholders in forest-landscape restoration activities planting over 200,000 seedlings covering 1,250 hectares.

Strengthening landscape planning and governance

Through the Landscape **Vision-to-Action** methodology, stakeholders advanced participatory planning processes in countries such as **Colombia, India, Senegal, Tunisia, and Zimbabwe** laying the foundation of 2026 Program implementation.

Participatory Rangeland Management advanced inclusive governance and land tenure security across East Africa covering 340,000 hectares in Ethiopia, 165,000 hectares in Tanzania Kiteto district and 91,000 hectares in Kenya **Baringo County**. In Tanzania, this **resulted** in reduced land use conflicts for the livestock keeper associations and residents, enhanced investment in improved breeds and rangeland restoration, and increased women participation.

In Kenya's **Wajir County**, a rangeland management institution was established, improving the rangeland management of a total of 268,580 hectares.

The Government of **Kenya** and the Intergovernmental Authority for Development member states **committed to adopt participatory rangeland management** for East Africa at the 2025 Intergovernmental Authority on Development Ministerial Conference.

Sustainable business models and policy environment

In **Tunisia**, improved olive oil and local dairy value chains integrated agroecological principles while benefiting 60 farmers and strengthening youth participation and women leadership in cooperatives.

The **Incubation and Acceleration Program for Green Agribusiness**, which started in 2024, reached 1,570 farmers across seven countries. It provided technical capacity sharing and invested US\$95,000 in 5 businesses in Kenya and Zimbabwe, expanding organic fertilizer production in Kenyan villages and sorghum production in Zimbabwe in public-private partnership (117 tons of sorghum were produced in the 2024/25 season, with US\$496/hectare gross margin).

Policy and strategy engagement produced significant results. **Ethiopia** formally adopted a **National Agroecology Strategy** with strong technical contributions from the Program and CGIAR partners. In **Peru**, dialogue supported new strategies for biotrade and biodiversity conservation, while in **Kenya, Vihiga County** adopted an agroecology policy informed by Program partners.

2025 summary of peer-reviewed publications

During 2025, the Multifunctional Landscapes Program produced 49 peer-reviewed publications (45 peer-reviewed journal articles and 4 book chapters) that advanced our understanding of food system transformation through the lens of landscape multifunctionality. These research efforts moved beyond traditional yield-centric metrics to the complex interplay between agroecology, climate resilience, and social equity. This body of work highlights that an agricultural transition requires more than just technical innovation; it suggests the need for a fundamental restructuring of power dynamics, policy frameworks, and lock-in structures to support smallholder agency and preserve landscape functions. Leveraging their interdisciplinary expertise. The Program team integrated diverse methodologies, including socioeconomic and value chain analysis, geospatial analysis, remote sensing and spatial modeling, agronomic and experimental trials, and policy and systems analysis.

Area of Work	Rating	Indicators	Met Annual Target	Achievement	Total Results
AoW1: Solutions and Innovations: Agroecology, Nature-positive, Regenerative and Nutrition-sensitive	●	9	7	92%	248
AoW2: Landscape Planning and Governance	●	4	4	100%	118
AoW3: Markets and Business Models	●	6	6	100%	117
AoW4: Institutions and Policies	●	9	8	89%	79
AoW5: Gender Equality, Social Inclusion and Fairness	●	2	2	100%	27
AoW6: Performance Assessment and Evidence Generation	●	5	5	100%	35
AoW7: Global Engagement and Learning	●	4	3	92%	35
Total		39	35	90%	659

● On track (≥80% of target achieved) ● Moderate (50–79% of target achieved) ● Behind (less than 50% of target achieved)

Ratings are based on annual target achievement of standard indicator categories within the Theory of Change (ToC). AI-generated ratings were reviewed and adjusted as needed by the Accelerator, with any updates accompanied by justifications.

Figure 5: AoW progress against targets. Based on data accurate as of 27 March 2026.

The outcome map in this report (see following two pages) provides an overview of the main 2025 outcomes by country.

PATHWAYS TO OUTCOMES

CGIAR · Multifunctional Landscapes Science Program | Theory of Change progress across



87

outcome-level results



3,094

unique actors engaged
46% farmers



127

events across
11 countries

INDIA & TANZANIA

Inclusive Landscape Planning

- Landscape Vision to Action enabled co-creation of inclusive stakeholder transition pathways
- Agroecological Homestead Model integrated indigenous women into government programs
- Youth innovation challenges incubated circular bioeconomy pilots

TANZANIA

Transformative Rangeland Management

- Targeted training empowered women to participate in leadership and manage business initiatives within livestock keeper associations
- Structured Program support addressed gender-based violence
- Participatory rangeland management led to reduced conflicts between livestock keepers and residents

ZIMBABWE

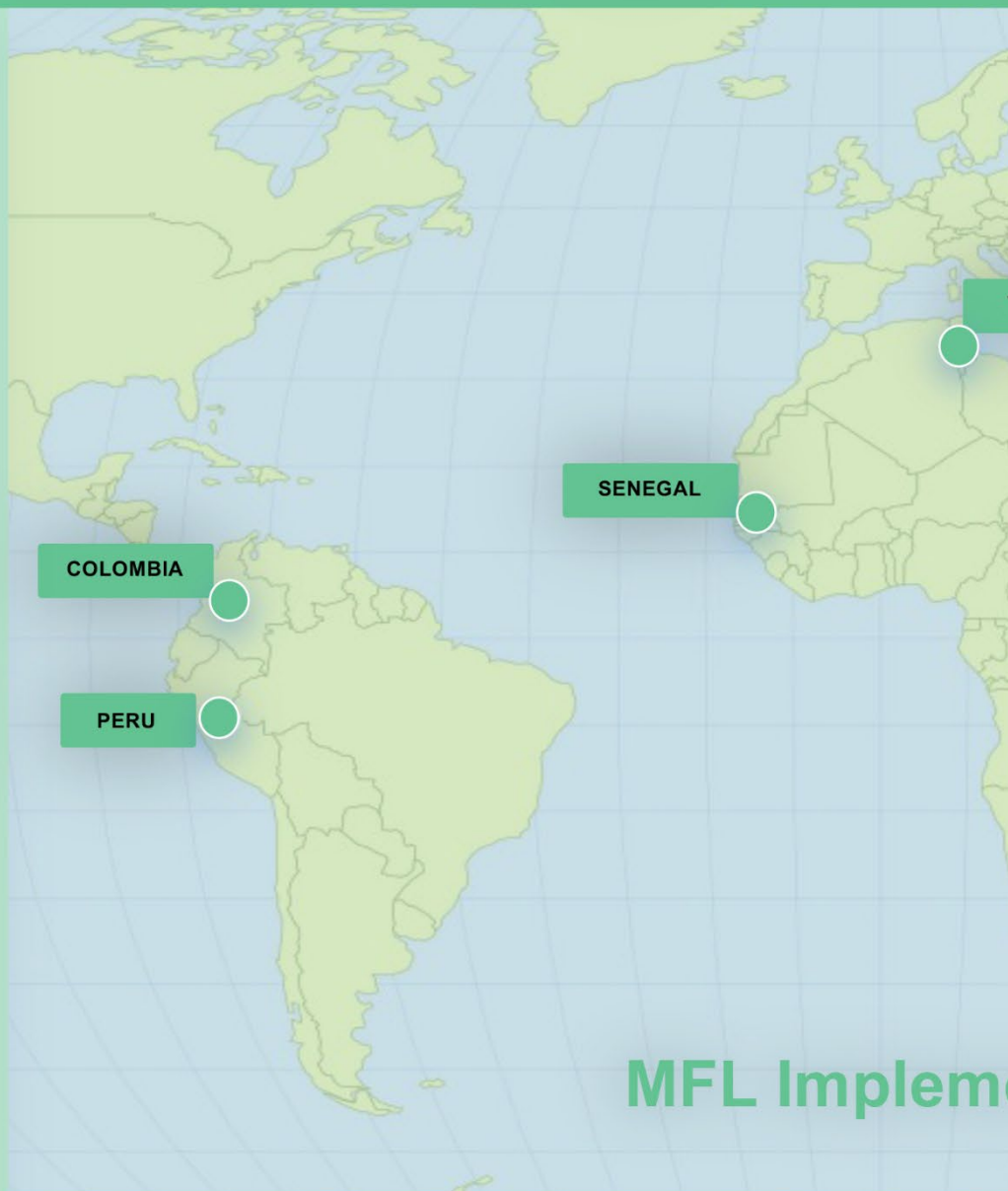
Governance & Agroecology+ Transition

- Enabled the development of an Agroecology transition strategy for Mbire District
- Mechanization of post-harvest threshing shifted traditional gender labor norms
- Incubation and acceleration programs launched for restoration-focused enterprises

ETHIOPIA

Enabling Policy Shifts

- Technical support to Ministry of Agriculture supported the adoption of the National Agroecology Strategy
- Supported Agricultural Transformation Institute to design a national rangeland monitoring system
- Contributed to Land Degradation Neutrality reporting under UNCCD



Landscape Innovation

Biochar & forage integration, Black Soldier Fly circular models, solar water systems — innovations restoring ecosystems and supporting healthy diets.



Governance & Planning

Participatory visioning, national monitoring systems, and district agroecology strategies building the evidence infrastructure for global influence.



96%

results tagged for
environment & biodiversity



78%

results tagged for
climate relevance



57%

results tagged for
nutrition & gender equity



entation Countries · 2025



Markets & Policy

Community seed banks, value chain upgrading, and national policy adoption — including three country-level agroecology strategies in 2025.



Gender Equity

Women's leadership in livestock associations, seed governance, and post-harvest mechanisation shifting structural gender labour norms.

TUNISIA & SENEGAL

Solution Bundles & Inclusive Business Models

- Biochar, legume-forage mixtures, and biofertilization co-developed and evidenced
- Upgraded business models for olive oil and dairy value chains integrating agroecological principles and social inclusion
- A network of NGOs, leader farmers, private actors and public institutions empowered for advocacy and action towards national agroecology transition

KENYA

Circular Bioeconomy & Local Policy

- Community-driven Black Soldier Fly plants converted organic waste into livestock feed and fertilizer, serving 83 farmers
- Community seed banks and aggregated farms linked biodiversity conservation with collective market engagement
- Supported Vihiga County to adopt the Agroecology Policy

COLOMBIA

Enabling Youth & Women Agency

- Digital entrepreneurship of youth strengthened through a Vocational Training Module
- Contributed to Women's agency through seed conservation and agrotourism
- Students engaged in an innovation challenge transforming organic waste

PERU

From Technical Recommendations to Regional Strategies

- Technical recommendations incorporated into Peru's Ministry of Environment guidelines for Regional Biodiversity Strategies aligned with Kunming-Montreal Global Biodiversity Framework targets
- Review of BioTrade strategy implementation plan
- Regional strategies aligned with Kunming-Montreal Global Biodiversity Framework targets

LAOS PDR & CAMBODIA

Sustainable Water & Farming Innovations

- Integrated rice-field pond systems adopted by 100+ farmers in Cambodia
- In Lao, a solar groundwater trial delivered reliable water access, reducing young women workload

2.2. Area of Work progress

Area of Work 1: Solutions and Innovations: Agroecology, Nature-positive, Regenerative and Nutrition-sensitive

AoW1 integrates science-based experimentation with local knowledge to validate, adopt, and scale solutions that support sustainable production, ecosystem restoration, and biodiversity protection on-farm, in common lands, and in protected areas.

Bundles of robust and highly adapted solutions and innovations to enhance farm-level productivity resilience and sustainability within landscapes (OP 1.1.1: refer to the full ToC for details): in 2025, a [solutions dashboard prototype](#) tracked over 250 agroecology+ innovations (agroecology, nature-positive, regenerative, and nutrition-sensitive, restorative, conservation) and enabled Artificial Intelligence (AI)-supported analysis and visualization. Across Africa, Asia, and Latin America, the Program implemented 143 socio-technical innovations across plot, community, landscape and multiscale levels.

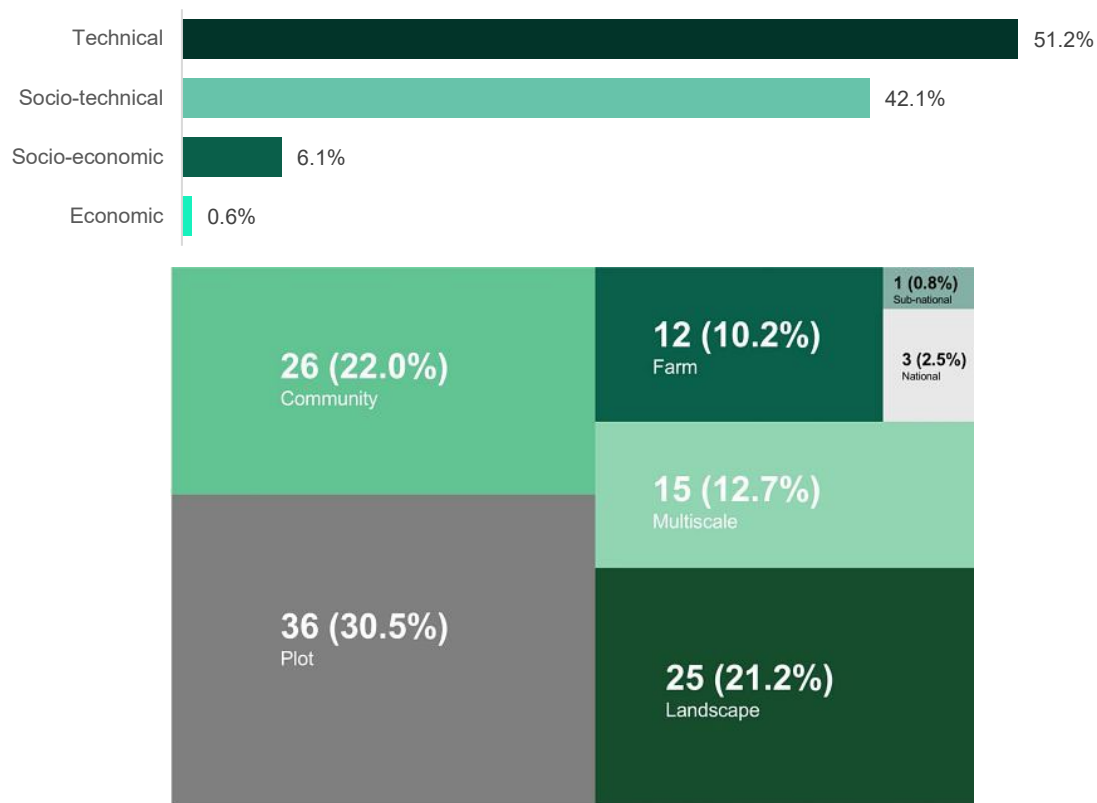


Figure 6 above: Type and percentage of technical innovations implemented by the Program in 2025. Based on data accurate as of 26 March 2026.
Figure 6 below: Scale targeted by the innovations.

In [Western Kenya](#), a community-operated black soldier fly facility processed 24.73 metric tons of organic waste, producing livestock feed and organic fertilizer for 83 farmers, with projected annual revenues of 1.65 million Kenyan shillings. In Makueni, Kenya, 75 farmers applying farmyard manure achieved [maize grain yields](#) of 4.7 t/ha compared with 4.0 t/ha in control plots, while [pest incidence](#) dropped from 8.1 percent to 2.9 percent under integrated pest management, enabling farmers to reduce reliance on synthetic inputs and lower farm costs.

In [Cambodia](#), the Program, in collaboration with the Sustainable Animal and Aquatic Foods Program and the Scaling for Impact Program, supported the adoption of integrated rice-field pond systems [by 126 farmers](#). By combining fish, rice, and vegetables within a single field, this approach generated up to three times more value compared to rice monoculture. The practice has also been integrated in Cambodia's Nationally Determined Contributions NDC 3.0.

In India (Mandla landscape), [agroecological homestead models](#) supported through government convergence reached over 100 farmers, enhancing nutrition, income diversification, and [women's agency](#) through diversified, integrated production systems. The Indian Council of Agricultural Research (ICAR) led the [co-piloting of five integrated farming system \(IFS\) models](#), supported by capacity building, programmatic convergence, and local extension systems, enabled scaling to 75 farmers, improving system productivity and soil health.

To advance **climate-smart adaptation and mitigation strategies and recommendations for climate-integrated landscape management (High Level Output (OP) 1.1.2: (refer to the Program's ToC for details)**, the Program worked with the Climate Action and Sustainable Animal and Aquatic Foods Programs to **improve the accuracy of livestock greenhouse gas inventories and support credible national climate commitments**. Findings highlight the need for **system- and breed-specific** emission factors that better capture the diversity of production systems and livestock breeds.

The **MyFarmTrees** digital platform expanded, linking seed systems, restoration monitoring, and economic incentives. Nearly 6,000 farmers in **Kenya and Cameroon** participated in forest landscape restoration using native species, supported by more than 300 local tree nurseries and digital payments to over 400 stakeholders. **Country modules** were developed for Viet Nam (577 tree species) and Malaysia (213 native species). In **Kenya**, 726 nursery operators and seed collectors were trained, and 15 nurseries were certified through a formal audit process.

In Peru and Colombia, the user base of the **EncontrAR Knowledge Platform** for climate adaptation grew to 5,190 users in 2025, more than four times the 2024 level, reflecting a pattern of continuous activity throughout the year.

Protected area management (OP 1.2.4: refer to the full ToC for details) advanced in Colombia's Cumbal Indigenous Reserve through the **B-REAL project**. Through **participatory planning** and agrobiodiversity risk assessments, communities are documenting local agrobiodiversity, including native potatoes and Andean tubers such as *oca*, *mashua*, and *olluco*, laying the basis for strengthening seed systems, value chains and local capacity.

In close coordination with local stakeholders, **integrated solutions** were explored for the conservation of the fragile paramo ecosystem.



Figure 7: The forgotten and underutilized species of the indigenous reserve of Gran Cumbal, Colombia. Credit: Vernooy, 2025.

Agrobiodiversity and nutrition-enhancing innovation bundles (OP 1.2.5: refer to the full ToC for details) uses school meal programs as an entry point to improve diets while supporting diverse, local food systems. Activities included a global **scoping review**, and a piloted **monitoring tool** for agrobiodiversity, gender, and social inclusion in school meal programs. Initial activities in **Kenya** (also see the key results story) and **Colombia** (curriculum for schools, in Spanish) engaged children and teachers to strengthen links between local livelihoods, community knowledge, and diverse food heritage.

Priorities for 2026 include stronger attention to nature conservation elements such as wildlife corridors (e.g., Zimbabwe), pollinator support, and biodiversity monitoring using eDNA, while clearly articulating the gene-to-landscape approach. Key attention will be given to substantiate the role of Agroecology+ solutions (organic and bioinputs, circular economy, etc.) to reduce risk and promote resilience at times of crisis such as the war in the Middle East.

Area of Work 2: Landscape Planning and Governance

Inclusive land and resource use planning ensures that the needs, knowledge, and rights of all stakeholders, especially local and marginalized communities, are considered, leading to more equitable and sustainable decisions that reduce conflict and environmental degradation.

To build **contextual understanding in each multifunctional landscape (OP 2.1: refer to full ToC for details)**, AoW2 collaborated with AoW6 to consolidate country-specific available data and maps:

- **India:** Vulnerability analysis and climate risk mapping of priority tree species (see Figure 9 below), and the establishment of a bioacoustics monitoring system in farmscapes.
- **Peru:** Development of a dataset on neglected crop species.
- **Viet Nam:** Identification and validation of soil erosion hotspots and interventions.
- **Kenya:** Vulnerability, conservation, and restoration priority mapping for native tree species.

AoW2 contributed to the World Bank flagship report Agriculture Rooted in Biodiversity. Research explored links between natural habitat proximity and ecosystem service delivery, particularly pollination and carbon storage. Planning for ecosystem services included pollination assessments and a synthesis of evidence on the multifunctional benefits of agrobiodiversity.

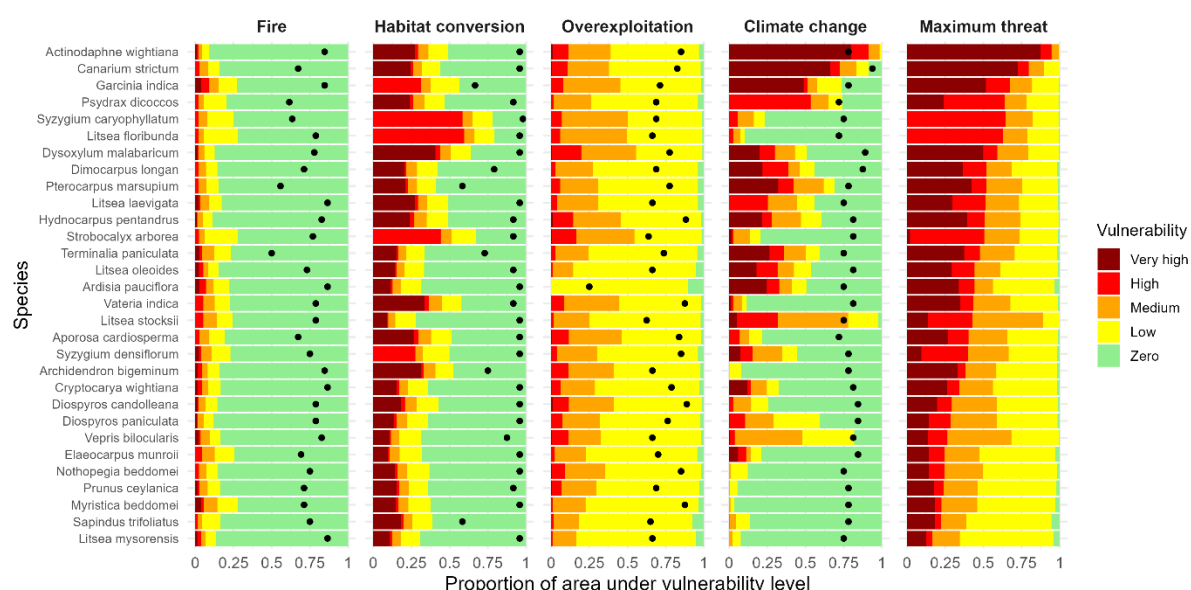


Figure 8: Tree species vulnerability assessment of Western Ghats, India.

A major achievement was adapting the visioning process (OP 2.2: refer to full ToC for details), originally developed under the CGIAR Initiative on Agroecology, to multifunctional landscapes. This resulted in the **Landscape Vision-to-Action (LV2A) methodology**, applied in **Mandla and Akole (India)**, **Mbire (Zimbabwe)**, and initiated in **Cumbal (Colombia)** and **Fatick (Senegal)**, where the process supported the development of a 10-year action strategy for the local agroecological transition network, DyTAEL. The participatory method provides building blocks for a theory of change guiding stakeholder action toward landscape outcomes. LV2A will serve as the first step in integrated land-use planning across multifunctional living landscapes in 2026.

To optimize land and resource use (OP 3.2: refer to full ToC for details), AoW2 has advanced an innovative integrated land-use planning framework. Preparatory consultations were held in Colombia's multifunctional living landscapes with livestock producers to promote sustainable production systems balancing conservation and development goals. In Zimbabwe, **land use and land cover mapping** was completed that will serve as a basis for 2026 and beyond actions. A Community of Practice was established to advance spatial planning tools, including Digital Twin and **Landscape and Land Targeting Tools** and explore applications of AI. With bilateral funding from the Italian Cooperation Agency, a technical, multiscale analysis assessed environmental, productive, and governance dynamics in 46 prioritized municipalities of Colombia's Central Region.

AoW2 also develops locally contextual restoration tools for degraded landscapes, including improved seed system delivery mechanisms (seed zone maps, registries, and registration processes), a tree diversity restoration (D4R) **decision-support tool** and **dissemination materials** (developed in India but adaptable elsewhere), and the **MyFarmTrees digital platform**. These integrated tools serve analysis across the value chain: nursery identification and establishment, tree sourcing, and suitability with planning, monitoring, and incentivizing.

The **CGIAR Ecosystems Advisory Group** was established to foster collaboration across the Multifunctional Landscapes and Sustainable Animal and Aquatic Foods Programs by developing an integrated framework to evaluate ecosystem services in livestock production systems.

In 2026, AoW2 will focus on forecasting and modeling using spatial tools, and on developing frameworks and tools to optimize land-use and management solutions across multifunctional living landscapes. Work on governance will be included in AoW4.

Area of Work 3: Markets and Business Models

AoW3 advances green businesses, circular economy approaches, and ecosystem service valuation to support investment and long-term viability, while co-creating knowledge on markets and consumer preferences to drive adoption of Agroecology+ solutions.

A strong emphasis is placed on improving market readiness of **producer organizations, local institutions, and private sector actors through demand-driven capacity strengthening (OP 3.1: refer to full ToC for details)** of 518 individuals who participated in 21 events, mostly in Kenya (250), Senegal (116), and Colombia (100).

A series of value chain analyses (Table 1) lays the foundation for **green business model opportunities (OP 3.2: refer to full ToC for details)**.

Country and district	Value chain
Colombia (Nariño)	Maize. Holistic farm business models with four farmer leaders to promote agroecological transitions (productive diversification, native varieties, seed custody, residue management).
India (Maharashtra)	Rice. Market opportunities for indigenous rice systems (community seed banks, traditional processing methods, circular reuse of by-products).
Ethiopia (Doyogena)	Wheat. Analysis and co-design of upgrading strategies for three cooperative business models in four wheat clusters (TRANSITIONS project).
Peru (Ucayali and Arequipa)	Camu Camu. Participatory value chain and innovation system analysis. Alpaca and vicuña fiber case study (project “Sustainable Investments for Large-scale Rangeland R”).
Senegal (Fatick)	Goat and cow milk. Four business models based on consumer preference analysis .
Tunisia (Elles-Sers)	Olive oil. Development of a protected designation of origin (IPSR) , and a gender inclusive scaling pathway .
Africa and Latin America	Livestock and rangeland restoration through livestock value chains, with Sustainable Investments for Large-Scale Rangelands Restoration (STELARR) in Africa and Latin America .

Table 1. Value chain analyses conducted in 2025

Results on co-designed **inclusive market and non-market mechanisms for optimizing ecosystem services (OP 3.3: refer to full ToC for details)** include a [competitive grant contest](#) (ResCA) facilitated in Cumbal, Colombia, to promote on-farm agrobiodiversity conservation, supporting 124 farmers with the establishment of conservation plots for 16 native potato, corn, quinoa and bean varieties. In Tunisia, a [framework](#) integrating value chain analysis and ecosystem service valuation was developed to support more sustainable market mechanisms. The STELARR project explored [carbon market](#) opportunities to support rangeland restoration.

Actions for **sustainable financial mechanisms (OP 3.4: refer to full ToC for details)** included the continuity of an [incubation and acceleration program](#), supporting three green agribusinesses in Kenya, Tunisia, and Zimbabwe. In Kenya's Kisumu, supported by PELUM Kenya, 30 women producing biomass briquettes formalized their collaboration as a women-led circular bioeconomy enterprise, and community seed bank business models were developed and scaled in Kisumu and Vihiga counties. Circular Bioeconomy Innovation Hubs have been established in [India](#), [Viet Nam](#), and [Ghana](#), in collaboration with the Food Frontiers Program. A [technical brief on financing mechanisms for resilient multifunctional landscapes](#) synthesized evidence from Africa, Asia, and Latin America, identifying critical gaps in smallholder financing and proposing pathways to scale.

In 2026, AoW3 will continue with increased emphasis on sustainable finance mechanisms and ecosystem service valuation, integrated in scaling landscape solutions.



In Ndeiya, Kenya, farmers learned participatory guarantee systems and business model development for a pumpkin processing enterprise.
Credit: Esther Kagai / CSHEP

Area of Work 4: Institutions and Policies

AoW4 places emphasis on enabling and strengthening governance; supporting policy design and alignment across sectors; strengthening institutional coordination and collaboration; facilitating multi-stakeholder dialogue and negotiation; and building capacities to support decision makers at all levels in managing inclusive multifunctional landscapes sustainably.

Local, national and regional strategies advanced in 5 countries with the support of the Multifunctional Landscapes Program:

- **Ethiopia.** National Agroecology Strategy (ENAS), also supported by the TRANSITIONS project with CIFOR-ICRAF.
- **Kenya.** Vihiga County Agroecology Policy and Makueni Agroecology Policy draft addressing biodiversity loss, soil fertility, inclusion, markets, and research.
- **Tunisia.** Strategic priority setting of the l'Office de l'Elevage et des Pâturages (OEP) in support for livestock farmers and food security.
- **Peru.** Integration of biodiversity guidance into regional strategies aligned with the Kunming–Montreal Global Biodiversity Framework.
- **Peru.** The development of Peru's regional Biotrade Strategy with an agroecology focus with the Regional Biotrade Management Commission (includes regional government officials, institutional partners, and key stakeholders).
- **Asia-Pacific.** In collaboration with Genebanks, the Asia-Pacific Forestry Commission encourages members to document and sustainably manage tree seed sources to support national and regional forest restoration goals.
- **Kenya.** Wajir County a rangeland management institution was established, improving the rangeland management of a total of 268,600 hectares; the Government of Kenya and the member states of the Intergovernmental Authority for Development committed to adopt participatory rangeland management for East Africa at the 2025 Intergovernmental Authority on Development Ministerial Conference.

Capacity development (OP 4.2.1, 4.3.2: refer to full ToC for details) and engagement (OP 4.2.2: refer to full ToC for details) were strategic for advancing policy processes and contributed to several of the results above. For example, the development of Peru's regional Biotrade Strategy, strongly supported by CGIAR through the Agroecology Initiative, illustrates the value of sustained stakeholder engagement. Through the Regional Biotrade Management Commission, which includes regional government officials, institutional partners, and key stakeholders, workshops were held to review implementation progress and validate a plan prioritizing short- and medium-term actions, strengthening collective ownership.

The Program co-produced a **portfolio of context-specific knowledge and methods relevant for policy, investment processes (OP 4.1: -refer to full ToC for details) and institutional empowerment (OP 4.3.1-refer to full ToC for details)**. Among the globally relevant resources that were developed are findings on collective action and facilitation tools through **experiential learning games** in three continents. A **tenure and governance assessment** synthesis clarified how institutional design underpins multifunctionality. Collaborating with the Climate Action and the Policy Innovations Programs, a **book chapter on environmental sustainability** synthesized five decades of evidence at the land–water–energy–agrifood nexus. Assessments of **externalities** and **economic performance** of nature-positive practices were published. A **literature review** analyzed why some agrifood systems cannot transition to sustainable alternatives.

Selected Area of Work 4 Country Publications

Ethiopia

Forging Ethiopia's food future through its groundbreaking national agroecology strategy

Kenya

The hidden costs of gendered inequities: Findings from true cost accounting of cropping systems

Peru

Recommendations for the implementation of the European Union Regulation on Deforestation-Free Products (EUDR) in Ucayali (in Spanish)

Tunisia

Political economy of agroecological transitions of pastoralism

Policies and development models for "sustainable" agriculture in Tunisia

Assessment of agricultural policy bias through the Kaleidoscope Model

Behavioral governance tools for multifunctional forest landscapes in Tunisia: Evidence from the Sajnen Forest

Zimbabwe

Policy coherence and collisions in multifunctional landscapes in Zimbabwe

From 2026 on, this AoW expands its portfolio to include research on gender, youth and social inclusion as well as increased emphasis on multifunctional landscape governance.

Area of Work 5: Gender Equality, Social Inclusion and Fairness



The Program advances gender equality, youth and social inclusion (GEYSI), and fairness in multifunctional landscapes. In 2025, AoW5 generated primary research and developed methodologies and tools applied across target countries aiming at addressing the root causes of inequality between women and men and other forms of discrimination in access to resources, decision-making, and agency.

Research contributing to **GEYSI-responsive and transformative approaches from individual to landscape scales (OP 5.1: -refer to full ToC for details)** included studies on gendered use and conservation of biodiversity in [Colombia](#) and [Peru](#). [Feminist leadership*](#), gendered [land rights](#), and [land use](#). Decision-making, empowerment and resilience were also focal areas for primary research conducted in [Tunisia](#), [Zimbabwe](#), [Kenya](#) and [Laos PDR](#).

“ The intersection of gender, land rights, climate change, and governance remains a focal point of contemporary discussions on justice, sustainability, and development. Women, despite their extensive contributions to agriculture, water management, and environmental conservation, continue to face systemic exclusion from control and decision-making around land tenure and climate adaptation policies and practices.

Najjar, Shadrack, and Ahmed (2025) in Gender & Development, AoW5 study on feminist leadership.

The Program team contributed to the development of two tools in collaboration with CGIAR, Programs, and Accelerators. One [tool](#) supports analysis of social and gender norms within gender-transformative research, having been piloted in [Laos PDR](#) and published with the Gender Transformative Research Methods Community of Practice (GTRM CoP), the HER+ Initiative, and the Gender Accelerator. The second [tool](#) focuses on understanding and strengthening marginalized voices in community-level decision-making, published with the GTRM CoP. The AoW contributed to a [brief](#) on responsible scaling for impact, reinforcing inclusive approaches to scaling innovations.

Peer-reviewed publications supported the development of **social incentives and behavioral change mechanisms** that enable individuals and organizations to shape inclusive and thriving multifunctional landscapes (**OP 5.2: -refer to full ToC for details**). These included the [ACT conceptual framework](#) on agency and behavior change for transforming agrifood systems and research on [youth perspectives and aspirations in agroecology](#). With support from the Food Planet Prize and the Curt Bergfors Foundation, a [survey-based tool](#) was developed and piloted under AoW6 to help schools, Program teams, and local actors assess how school meal systems incorporate agrobiodiversity and include gender and marginalized groups in planning and decision-making.

The Program assessed the level of integration of GEYSI within its research and management practices. Findings include that at the country level, Zimbabwe integrated GEYSI most strongly in their activities (see [blog post](#) and reports on [land use](#) and [water and gender](#)).

Starting in 2026, GEYSI will be better integrated across AoWs with a dedicated focal point to facilitate integration of GEYSI across the Program. GEYSI research, such as studies on policy and institutional capacity in multifunctional landscapes for youth inclusion, will be undertaken by AoW4.

Area of Work 6: Performance Assessment and Evidence Generation

AoW6 made substantial progress in developing and deploying tools, frameworks, and participatory processes needed to assess how landscapes perform across multiple dimensions simultaneously.

Under **holistic cross-scale performance assessments (OP 6.1: refer to full ToC for details)**, the [Metrics Library](#) provides a one-stop resource to identify appropriate metrics for evaluating agrifood system performance. It is a collaboration between the Program and the CIFOR-ICRAF-led EU-funded TRANSITIONS Metrics project based on a comprehensive systematic review of over 10,000 metrics. The library is being co-refined within the community of practice of the Transformative Partnership Platform on Agroecology (TPP), a key partner of the Program.

Progress on the **development of the codesign of context-specific performance assessment frameworks (OP 6.2: refer to full ToC for details)** includes the Local Indicator Selection Process (LISP). LISP supports participatory identification of robust, measurable indicators across agricultural, environmental, social, and economic dimensions. Tested across diverse contexts (for example, in [Tunisia](#)), the 2025 guide supports teams in co-designing indicators that reflect local priorities while aligning with broader agroecological assessment frameworks.

Synthesis reports consolidating existing evidence on multifunctional performance have been elaborated for all landscapes and published for [Peru](#), [Kenya](#) ([Lake Victoria](#) and [Lower Eastern Integrated Landscape](#)), [India](#) and [Tunisia](#). These reports consolidate evidence on multifunctional landscape performance and identify critical data, knowledge, and information gaps.

Additional results include a performance assessment in Laos PDR on [farmer-managed solar-powered groundwater irrigation](#), a [systematic review](#) of 206 assessment approaches of food and agricultural systems, and a [citizen science-based agroecology self-assessment framework](#). Bilaterally funded work in Brazil on the [TerraBio tool](#) and [TerraSocio](#) demonstrated innovative, scalable performance monitoring.

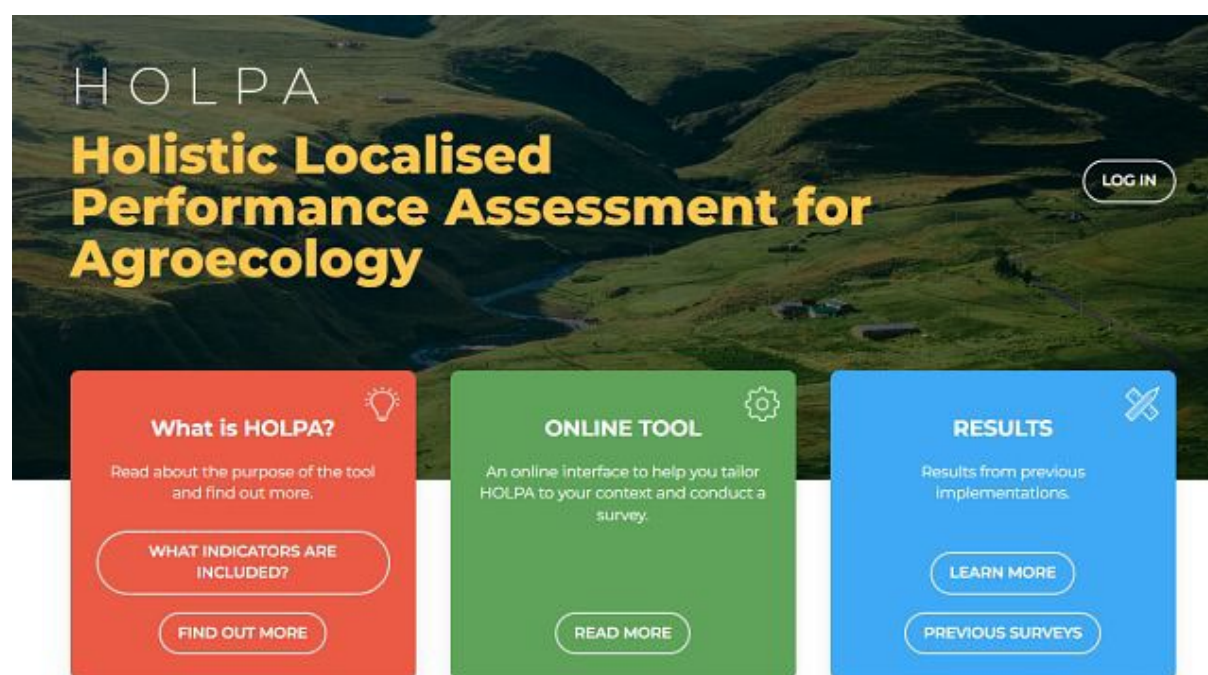


Figure 9: The HOLPA platform (Screenshot, 19 March 2026).

A **stakeholder-centered knowledge and information hub (OP 6.3: refer to full ToC for details)** was developed with the Holistic Localized Performance Assessment (HOLPA) online platform as a pivotal innovation. The new HOLPA platform enables diverse users to apply the tool in different contexts and provides an overview of the results from nearly 2,000 households in 9 countries. AoW6 contributed to capacity sharing including leading a [peer-to-peer modelling training](#) event in Ethiopia. As part of its outreach activities, AoW6 research was presented at [Tropentag](#) and the British Ecological Society symposium on [Nature and Food](#), also contributing to seminal global science-policy processes, particularly the [Food, Agriculture, Biodiversity, Land-use and Energy \(FABLE\) consortium](#), and the [EAT-Lancet Commission 2.0](#).

As part of Digital twin landscapes (OP 6.4- [refer to full ToC for details](#)) a [synthesis paper](#) has been produced*.

“ At watershed and landscape scales, Digital Twins (virtual replicas of physical systems that stay synchronized with the real world) typically operate as hybrid systems, periodically fed by gauges and satellite data to support allocation, drought planning, and land-degradation strategies. [...] Digital Twins can increase decision-making efficiency, improve cross-border coordination, and enable proactive resource management. Piloting and scaling responsibly hinges on codesign with institutions, investment in data and human capital, and interoperable, open architectures that keep annual costs manageable.

**Azzarri, C., Orjuela Ramirez, G. (2025) Digital twin applications: Linking earth observation, models, and decision-making for multifunctional landscapes. P. 15*

Starting in 2026, AoW6 will be more strongly connected to the Program's MELIA activities. The harmonized cross-CGIAR assessment framework for environmental health and biodiversity will be embedded within this AoW, complementing landscape-specific, demand-driven assessment approaches.



Area of Work 7: Global Engagement and Learning



To build an enabling environment for capacity sharing (OP 7.1: refer to full ToC for details), AoW7 supported a series of high-level training events, for example in [India](#) and

An established CGIAR [Multifunctional Landscapes Community of Practice](#) (OP 7.2: refer to full ToC for details) is facilitating connections among researchers (including most CGIAR Centers, Programs and Accelerators), practitioners, and policy makers, fostering knowledge exchange, adaptive learning, and coordinated efforts, for example through a series of webinars.

The Program CoP contributed to the **collaborative design of training strategies** (OP 7.3: refer to full ToC for details), advancing the adoption of knowledge management toolkits for accessing evidence-based resources and decision-support tools, for example through the [Water Impact Calculator](#) or a tool aimed at [Bridging Landscape-Level Insights and Plot-Scale Actions through a Natural Resource Management](#).

Impact indicators for biodiversity and environmental health (OP 7.4: refer to full ToC for details) were formulated with large cross-sectorial input to support assessing impacts at scale and facilitate systematic monitoring and evaluation of landscape outcomes, and promoting consistent reporting and informed decision-making at local, regional, and global levels. This approach is designed to align with international processes such as the Kunming-Montreal Global Biodiversity Framework (KMGBF) and Land Degradation Neutrality (LDN) targets.

The Program engaged in global **processes and science-policy interfaces** (OP 7.5: refer to full ToC for details). The Program contributed to CGIAR's accreditation as an intergovernmental organization to the United Nations Environment Assembly (UNEA) in 2025 and strengthened its positioning by leading [side events](#) that showcased scalable solutions aligned with UNEA resolutions. At the United Nations Climate Conference (COP30) in Brazil, the Program contributed to two engagement events focused on [biological solutions](#) for climate-resilient agriculture and [presenting country innovations](#). Engagement with rangeland and pastoral policy audiences happened at multiple high-level forums globally at the International Union for Conservation of Nature (IUCN), and the Food and Agriculture Organization of the United Nations (FAO) as well as in [Tunisia](#). AoW7 participated in [Tropentag 2025](#), with a workshop on landscape multifunctionality and its benefits, co-organized with the Global Landscapes Forum (GLF), the United Nations Convention to Combat Desertification (UNCCD), the German Agency for International Cooperation (GIZ) (Economics of Land Degradation Initiative), and the University of Marburg.

From 2026 onward, global engagement and scientific advocacy will be fully integrated within Program management and strongly aligned with the AoW on Governance, Institutions, Policy and Inclusion, as well as Performance Assessment and Evidence Generation.

3. Partnerships

The Program developed its partnership landscape with a focus on intentional collaboration, co-creation, and uptake, including policy engagement (see AoWs 4 and 7). The Program invested approximately US\$3 million in partnerships which contribute to the ToC by supporting evidence-based decision-making, strengthening institutional coordination, and enabling the scaling of innovations. The featured partners illustrate the strength, strategic value, diversity, and contribution of key partnerships, many of which have been cultivated over years.

Partnership landscape and strategic collaborations

Among the over 300 partners reported in 2025, strategic formal partnerships developed with 72 diverse and complementary organizations supported the co-development of solutions and the scaling of innovations across multiple levels and regions. Partners included 15 national agricultural research and extension systems (NARES), 20 non-governmental organizations, 9 government institutions, 8 research organizations, 8 private companies and trust funds, and 5 farmer associations and networks. The Program has continued to strengthen its long-standing partnerships with national governments, including in Ethiopia, India, Kenya, and Tunisia.

Among these partners, 49 organizations were contracted partners, receiving close to US\$3 million in Program funding to support collaborative research, landscape implementation, and capacity-sharing activities. Top partners in terms of the number of reported results include international research organizations including, the French Agricultural Research Centre for International Development (CIRAD) and CIFOR-ICRAF, NARES (National Institute of Agronomic Research of Tunisia [INRAT], Bureau of Livestock and Pastures [OEP] in Tunisia, Agrosavia in Colombia), Ministries (Institution of the Agricultural Research and Higher Education [IRESA] in Tunisia), national non-governmental organizations (Professional Assistance for Development Action [PRADAN] in India and Participatory Ecological Land Use Management [PELUM] in Kenya), and community-based organizations (Community Sustainable Agriculture Healthy Environmental Program [CSHEP], Kenya).

Diving into Program's outcome-driven partnerships

CIRAD has been the partner leading implementation of activities in Senegal and has also contributed significantly to results in AoW2 ([Vision-to-Action](#) and identification of [local indicators](#)), and AoW3 (targeted [value chains](#): goat, cow, millet; analysis of consumer preferences).

The collaboration with **CIFOR-ICRAF** includes performance assessment and evidence generation (see AoW6) and coordinating implementation in Kenya. It also contributes to the implementation of agroecological innovations across the Lower Eastern Integrated Landscape through the B-REAL project (with many results to come in 2026). In Ethiopia, CIFOR-ICRAF co-supported the Ethiopian Ministry of Agriculture in developing a [national agroecology strategy](#). In Peru, collaboration was strategic with the Ministry of Environment on [incorporating biodiversity conservation guidelines into regional strategies](#). The Program participates in the Transformative Partnership Platform on Agroecology (TPP) coordinated by CIFOR-ICRAF.

OEP, INRAT and **IRESA**, long-standing national partners of ICARDA in **Tunisia**, contribute to co-developing agroecology+ solutions related to sustainable livestock, agrosilvopastoral systems, and participatory rangeland management. OEP [integrated biofertilization technology into its national strategy](#) and [co-developed forage seed mixtures and rhizobial inoculation](#) with INRAT. Together, these partners [drove adoption of forage innovations by over 230 farmers](#) and [contributed to a 20 percent increase in flock fertility](#) in the multifunctional landscapes in El Kef-Siliana.

In **Kenya**, **CSHEP** is serving as host center for the Living Landscape in Kiambu, and **PELUM Kenya** is at the core of landscape transformation. PELUM, together with the County Governments of Kisumu and Vihiga and the Dryland Natural Resource Center (DNRC), among others, fostered transitions towards Agroecology+ solutions through [farm aggregation, capacity strengthening, bioeconomy models](#), and work with [youth and women](#) or as key contributor to [Kenya's Vihiga County adopting an agroecology policy](#).

In Cumbal, southern **Colombia**, the national NARES **AGROSAVIA** functions as both an innovation partner and a scaling partner to advance agroecological transitions and agrobiodiversity conservation. Co-leading field work in Cumbal, AGROSAVIA also contributes to [the dataset on neglected and underutilized species seed systems in Colombia](#), focused on Andean tubers conserved in the Cumbal territory, and is a named partner in [the catalogue of Phureja potato landraces in the Cumbal Indigenous Reserve](#), a multi-year participatory characterization effort involving indigenous farmers, students, and scientists.

In **India**, the partnership with **PRADAN** and the **BAIF** foundation working with marginalized communities across rural India focused on the Living Landscapes in Madhya Pradesh and Maharashtra. Examples of work include gender, youth, and social inclusion with the co-facilitation of a study on youth perceptions and stakeholder commitment to agroecological transitions, which secured local commitments to organize youth into collectives for training and information access. PRADAN also supported research on biopesticide use in India and a study on

fish smoking as a women-driven livelihood activity in Mandla, both contributing evidence on gender-differentiated outcomes in agroecological systems.

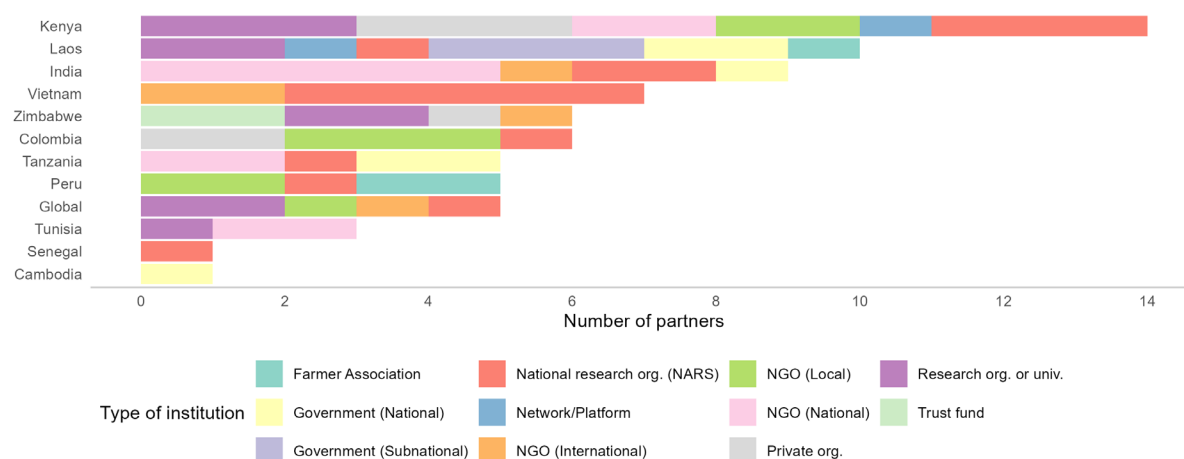


Figure 10: 72 strategic partners, by country and type of institution. Based on data accurate as of 27 March 2026.

Cross-Portfolio partnerships

The Program collaborated with multiple Programs and Accelerators. Work with Scaling for Impact strengthened food system governance in [Cambodia](#) and delivered farmer training. Collaboration with Climate Action in [India](#) aligned research and institutional partners around common landscape sites and shared monitoring frameworks. With Sustainable Farming, the Program developed water and soil management solutions in [India](#) and [Kenya](#). Also in [India](#) and [Kenya](#), joint efforts with Better Diets and Nutrition linked agrobiodiversity to school meals and diet outcomes across CGIAR's Programs. The Digital Transformation Accelerator collaborated on the [Metrics Library](#), and a [digital twins framework paper](#). Collaboration with the Sustainable Animal and Aquatic Foods Program in [Tunisia](#) explicitly bridged the Programs' mandates around sustainable livestock systems and landscape restoration.

4. Adaptive management

Evidence and learning

The Program generated meaningful progress across all five 2030 outcome pathways, as shown in Section 2.1 of this report on progress against the theory of change. In 2026, the Program will make a concerted effort to demonstrate the role of agroecology+ solutions in reducing risk and promising resilience of smallholders at times of crisis such as the one in the Middle East.

A lot has been learnt from the various engagements in 2025. Consultations with different partners and the Program Leadership Team enabled adaptations to be made in the overall framing as well as positioning of the Program, including its focus on AoWs — where we suggested the use of “Agroecology+ Solutions and Innovations” with the “+” aimed to accommodate regenerative, nature-positive, restorative and other complementary solutions. Our “Pause and Reflect” meeting that took place in Leuven (16-18 December 2025), which included funders, was instrumental to elaborate on the domains of the Program aligned to global planetary boundaries. In addition, Program-level coordination, collaboration and partnership were discussed. We also reflected with key partners (e.g., WUR, 1000 landscapes for 1 billion people, Commonland, etc.) to gather their views on the Programmatic and Technical components of the Program. The valuable feedback collected will inform necessary adaptations.

AoW1 will mostly continue as designed, although a revision of the ToC pathways related to nutrition outcomes and protected area management (2030 OC-1) is underway to reflect more realistic targets and investment. A need to be more intentional on water resources development and management is also recommended, which will be considered during the Adapt phase of the adaptive management cycle in the Q2 Program revision in 2026.

For AoW2, spatial analysis outputs (climate risk mapping of priority tree species in India; land use and land cover mapping in Zimbabwe), demonstrated the value of forecasting and modeling approaches, informing a decision to increase emphasis on these tools for optimizing land-use and management solutions in 2026.

AoW3 will strengthen its focus on sustainable finance mechanisms and ecosystem service valuation, responding to evidence that business model development is progressing while sustained revenue and financial independence beyond project support remains weak.

AoW4 has been broadened to include governance, global policy engagement, and GEYSI. Advances on policy influence (see section dedicated to AoW4) confirmed the importance of embedding policy engagement as a core function of the Program. A dedicated GEYSI focal point will coordinate related work across AoWs, responding to the assessment that gender-transformative outcomes, while present, are not yet systematically tracked across the Portfolio.

AoW6 (AoW5 from 2026 onwards) has been more strongly connected to the Program's MELIA activities by integrating a deliverable on Landscape Appropriate Impact Assessment and System Level Theory of Change to capture systemic changes, and to the task of developing impact indicators on environmental health and biodiversity (formerly in AoW7).

Major activities under AoW7 are now hosted under the Program Management Unit (PMU) to coordinate efforts related to outreach, engagement and communication. CGIAR Independent Science for Development Council (ISDC) and Independent Advisory and Evaluation Services (IAES) reviews in 2025 pointed to the need for demonstrating landscape-level systems change. Following restructuring of the Program, the new MELIA plan will be reoriented around a smaller set of high-quality, theory-grounded outcome studies, focusing on system-level change pathways.

Considering funding availability and the requirements to coordinate efforts and deliver the work at the landscape level, the Program has re-prioritized focus areas for 2026. Accordingly, four ecoregions and six countries (Colombia, Peru, Tunisia, Ethiopia, Kenya, India) have been prioritized as Multifunctional Flagship Living Landscapes (MFFLLs) with full cross-AoW implementation while the sites in Senegal, Côte d'Ivoire, Zimbabwe, India, Laos PDR-Cambodia-Viet Nam (lower Mekong) are considered Multifunctional Strategic Living Landscapes (MFSLLs) with more targeted outcome orientation.

W1/2 funding and financial planning

As 2025 was a transition year from CGIAR's previous Initiatives to the 2025-2030 Portfolio, the Program's main financial challenge was to integrate and allocate funding to activities coming from three different Initiatives (Agroecology, Nature Positive Solutions, and Livestock and Climate) and the Environmental Health and Biodiversity Platform.

The US\$18.8 million allocated to the Program through W1/2 funding in 2025 represented less budget than 2024's allocation to the activities that were to be integrated during the transition. In addition to this, funding expectations that served as a basis for early 2025 planning were not met. These factors compelled the Program to make

significant changes to the geographical and implementation scope of the Program, as explained in the section on evidence and learning above.

The prioritization process considered commitments from country governments, on-the-ground-partnerships, and the existence of enabling conditions. The Program looked for cost-effectiveness through close collaboration at the Portfolio level, while CGIAR Centers and implementing partners were encouraged to budget expenses in accordance with the country and activity prioritization decisions, attaining financial efficiency.

W3/Bilateral data

The Program occupies a unique niche in CGIAR on environmental health and biodiversity impact research. It mapped 25 bilateral projects with a total of US\$47.9 million, of which 11 reported results to the Program. These projects contributed 85 results to the Program's ToC, mainly in capacity sharing (38) and knowledge products (32), across 10 countries and all AoWs. Five innovations and one policy change were reported, mainly in monitoring and evidence generation.



Figure 11: Overview of results reported by bilateral projects in 2025. Based on data accurate as of 27 March 2026.

Three major bilateral projects contributed to 2030 outcomes:

1. **Outcome 3 on inclusive innovations:** The French Facility for Global Environment (FFEM) project on promoting sustainable opportunities in the cocoa value chain has a US\$2.3 million budget (Jan–Dec 2025) and is implemented by the Alliance of Bioversity and CIAT, generating 25 results.
2. **Outcome 4 on inclusive land and resource-use planning and landscape governance.** The L-IUC001 Sustainable Investments for Large-scale Rangeland Restoration project has a US\$1.98 million budget, is implemented by ILRI, and produced 17 results.
3. **Outcomes 3 and 5 on inclusive innovations and policy engagement.** The IFAD (EC) TRANSITIONS project on agroecological transitions has a US\$720,000 million budget, is implemented by the Alliance, and generated 10 results.

It is noticeable that from the 25 bilateral projects mapped to the Multifunctional Landscapes Program, only 11 projects (and four Centers – the Alliance of Bioversity International and CIAT, ILRI, CIP) reported results. Starting in 2026, the Program is strengthening engagement with bilateral projects and their lead Centers to encourage further reinforcement of results and improve the visibility of landscape-related outcomes across CGIAR. Enhancing communication and advocacy will enable more strategic collaboration to mobilize new bilateral funding opportunities and partnerships.

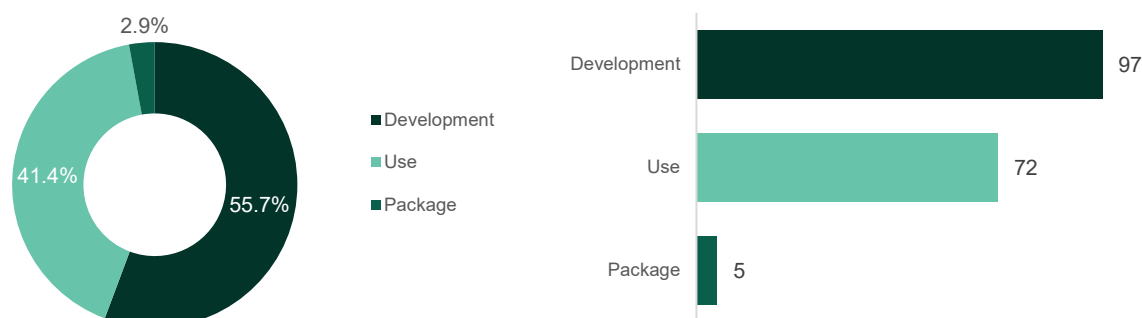
Risk management

The Program identified and designed a management plan for eight different risks, of which the top *five are listed in the table*. Some risks are related to natural disasters, social unrest, and shifting government priorities, which may disrupt activities. Conflicting stakeholder interests, trade-offs in innovations, and limited incentives could hinder adoption of solutions. Funding uncertainties and management changes may also affect implementation. Overall, these risks could impact continuity, partnerships, research effectiveness, and achievement of Program goals.

Read Multifunctional Landscape's [Risk Register](#), which includes the top five submitted risks for 2025 and related actions and controls to manage those risks.

Demand and scaling readiness

While the Program builds on lessons and experiences from its Initiatives, many of these were exploratory efforts that require further piloting. However, agroecology, nature-positive, and regenerative solutions have already been widely applied across living landscapes. An exemplary work that is being scaled includes My Farm Trees as a restoration and monitoring tool. Not only has it been scaled across countries but also adopted by other institutions such as [IUCN](#), the [Global Environment Facility \(GEF\)](#), and the [World Bank](#).



Figures 12 and 13: Innovations by results type. Based on data accurate as of 27 March 2026.

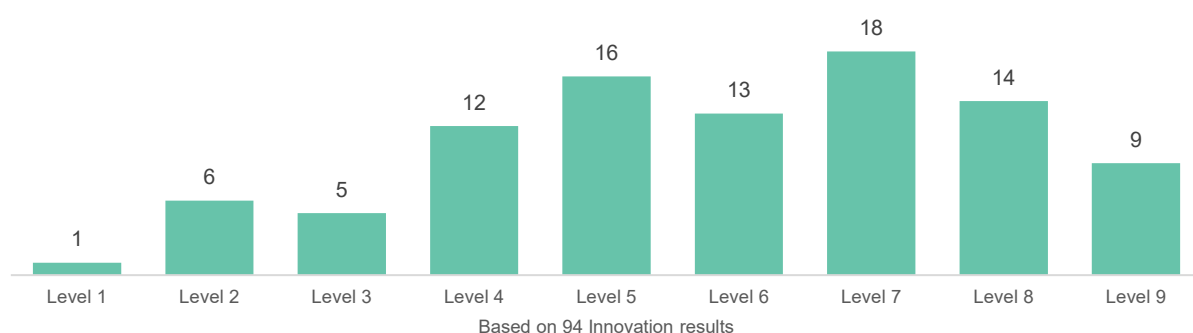


Figure 14: Innovation readiness distribution. Based on data accurate as of 26 March 2026.

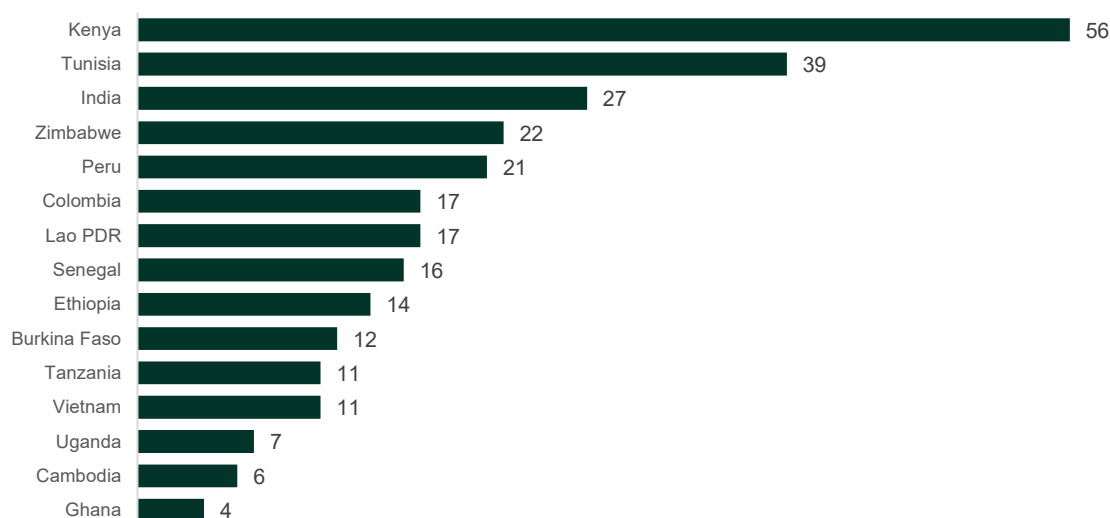


Figure 15: Number of innovations for the top 15 countries. Based on data accurate as of 26 March 2026.

Gap to address. Innovation use, with 20 results that contribute directly to the Program ToC targets, is still concentrated in a few countries, such as Kenya and Tunisia, with weaker evidence from West Africa, South Asia, and Southeast Asia. Business model development is progressing, while sustained revenue or financial independence beyond project support is still nascent. Circular bioeconomy innovations, which are relatively novel, such as the Black Soldier Fly plant in Kenya and biogas adoption in India, show promise but remain small in scale. Finally, gender-transformative outcomes are present but not yet systematically tracked across the Portfolio.

The Program's solutions require time for testing, piloting, and scaling, as well as significant resources and early investment in coordination and communication. Accordingly, the Program should not be assessed against other Science Programs and Accelerators in terms of outputs and outcomes at comparable scale, funding levels, or time horizons.

5. Key result story

From scarcity to resilient landscapes: Ndeiya's agroecology shift

Once reliant on food aid, women and youth in Ndeiya, Kenya, are betting on agroecology, school gardens, and farmer networks to strengthen markets, nutrition, and resilience.



Sylvia Wangui, a CSHEP program officer, facilitates the Ndeiya Farmer Research Network (FRN). Working with more than 50 lead farmers, she coordinates on-farm trials and guides farmers through co-design cycles that test agroecological practices under local conditions. Credit: Alliance Bioversity CIAT.

Kenya is advancing an agroecology transition supported by a national strategy informed by CGIAR. In Ndeiya, Kiambu County, partners are applying participatory approaches to develop scalable, climate-resilient food systems. More than 1,000 farmers have been trained; 200 households have established kitchen gardens; 17 schools have set up organic gardens and tree nurseries; and 5,000 tree seedlings are supporting land restoration. A network of Farmer Researchers and a Participatory Guarantee System group, together with the Community Sustainable Agriculture Healthy Environmental Program (CSHEP) training center, are now working to link agrobiodiversity, school meals, and markets — improving nutrition, incomes, youth engagement, and women's leadership.

The semi-arid and peri-urban Ndeiya Sub-County in Kenya has long been defined by scarcity. The area receives only about 500 mm of rainfall annually, and water is so limited that many families ration it strictly for drinking. Crop failures are common under these dry conditions, and conventional maize and beans often fail. Biodiversity also remains minimal. As a result, more than 2,600 households (approximately 6.5 percent) depend on government relief food.

Today, Ndeiya is part of Kenya's broader transition toward agroecology. This shift has also been supported by the Multifunctional Landscapes Program through its Biodiversity for Resilient Ecosystems in Agricultural Landscapes (B-REAL) project, funded by Global Affairs Canada (GAC). The Program is working with partners such as CSHEP to demonstrate pathways toward climate-resilient food systems. Founded by Esther Kagai, a first-generation Africa Women Leaders in Agroecology mentee, CSHEP has established two training centers and trained more than 1,000 farmers in agroecological practices such as composting, soil regeneration, crop diversification, and water-efficient kitchen gardening.

Building on this foundation, the Program connects [agroecology to wider food systems through school meals](#), one of the world's largest social safety nets, which reach about 466 million children globally and represent US\$84 billion annually. In Ndeiya, this linkage has created a practical entry point for transforming both production and

consumption. At the request of the Kiambu County government, the Multifunctional Schools Network now includes all 17 public comprehensive schools in the area, reaching about 6,000 students. More than 700 of these students participate in 4K Clubs, school-based groups that provide hands-on learning in agriculture and life skills.

Through this network, agroecological practices extend beyond farms into schools. With support from CSHEP, teachers and students have established organic gardens and multipurpose tree nurseries designed to require minimal water. Schools are also emerging as hubs for environmental learning and agrobiodiversity conservation, with plans underway to establish community seed banks to safeguard local crop varieties.

These school gardens directly link agroecology with nutrition and education. They supply vegetables for school meals while equipping students with practical knowledge on composting, mulching, biodiversity, and sustainable food production.

At the landscape level, restoration efforts reinforce these gains. Through incentives linked to the Farmer Research Network, farmers receive multipurpose tree seedlings during experimentation cycles, while schools participate in tree-planting campaigns. Together, these efforts have produced and planted approximately 5,000 seedlings over the past three years (starting during the Agroecology Initiative) with an additional 5,000 planned for early 2026, contributing to land restoration and strengthened climate resilience.

The impacts of these integrated efforts are increasingly visible. More than 200 households now maintain kitchen gardens, improving nutrition, reducing food expenses, and generating income from vegetable sales. Youth who had previously disengaged from agriculture are returning to participate in agroecological activities, including tree nurseries and small enterprises. One example is George Muturi, whose vermicompost business has grown substantially and now employs eight youth. With Program support, his production capacity has increased from 4–6 tons per month to about 12–16 tons per month. In the past year alone, the partnership has also empowered more than 300 youths from 15 youth groups through capacity-building in vermicomposting, Black Soldier Fly (BSF) farming, and good business practices such as proper record-keeping and marketing in Kiambu County.

To further strengthen the link between agroecology and markets, the Program has supported training and official certification of a Participatory Guarantee System (PGS) group. The Ndeiya PGS group Ki-Smart includes 74 farmers from the Farmer Research Network supported by Sylvia Wangui. This participatory certification mechanism verifies agroecological and organic practices and allows participating farmers to access the East African organic mark, Kilimo Hai. Through produce aggregation, joint marketing, and small-scale processing, PGS members can reach more stable markets and secure better prices.

Together, these initiatives link agrobiodiversity, school meals, and markets while strengthening local institutions. Ndeiya demonstrates how participatory innovation and agroecology can transform degraded landscapes into climate-resilient food systems improving nutrition, incomes, youth engagement, and women's leadership.

“ In partnership with the Multifunctional Landscapes Program, we have changed the mindset of farmers, women and youth, who actively adopt agroecology as a sustainable approach to agriculture and ensure that their households are food secure. Working with the 4K Clubs in Ndeiya, we can see hope and future leaders in the food system whose capacity and skills are strengthened through our partnership.

Sylvia Wangui, CSHEP program staff.

Contributing Centers: Alliance of Bioversity International and CIAT, CIFOR-ICRAF, IITA

Contributing external partners: Community Sustainable Agriculture and Healthy Environment Program (CSHEP), Kiambu county government

