



INITIATIVE ON
Diversification in East
and Southern Africa



CGIAR Initiative on Diversification in East and Southern Africa

ANNUAL TECHNICAL REPORT 2022

CGIAR Technical Reporting 2022

CGIAR Technical Reporting has been developed in alignment with the [CGIAR Technical Reporting Arrangement](#).

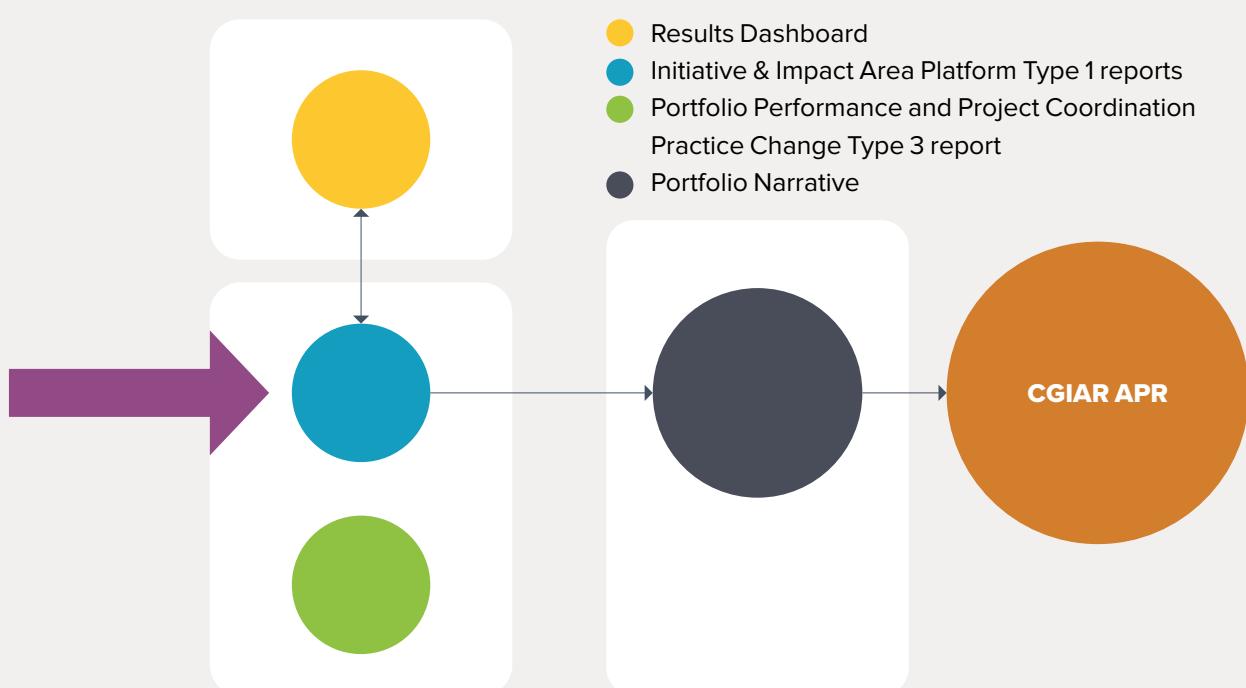
This Initiative report is a Type 1 report and constitutes part of the broader CGIAR Technical Report. Each CGIAR Initiative submits an annual Type 1 report, which provides assurance on Initiative-level progress towards End of Initiative outcomes.

The CGIAR Technical Report comprises:

- Type 1 Initiative and Impact Area Platform reports, with quality assured results reported by Initiatives and Platforms available on the CGIAR Results Dashboard.

- The Type 3 Portfolio Performance and Project Coordination Practice Change report, which focuses on internal practice change.
- The Portfolio Narrative, which draws on the Type 1 and Type 3 reports, and the CGIAR Results Dashboard, to provide a broader view on portfolio coherence, including results, partnerships, country and regional engagement, and synergies among the portfolio's constituent parts.

The CGIAR Technical Report constitutes a key component of the CGIAR Annual Performance Report (APR).



US\$	2022	2023	2024
Proposal Budget from initial submission	US\$11,573,625	US\$13,938,750	US\$14,487,625
Approved 2022 Budget	US\$5,045,459		

2022 Disbursement Target based on Approved FinPlan

Section 1 Fact sheet

Initiative name	Ukama Ustawi: Diversification for Resilient Agrifood Systems in East and Southern Africa
Initiative short name	Diversification in East and Southern Africa
Action Area	Resilient Agrifood Systems
Geographic scope	Regions targeted in the proposal: East and Southern Africa Countries targeted in the proposal: Eswatini; Ethiopia; Kenya; Madagascar; Malawi; Mozambique; Rwanda; South Africa; Tanzania, United Republic; Uganda; Zambia; Zimbabwe Regions with results reported in 2022: East and Southern Africa Countries with results reported in 2022: Ethiopia; Kenya; Malawi; Mozambique; Rwanda; South Africa; Tanzania, United Republic; Uganda; Zambia; Zimbabwe
Start date	Jan. 1, 2022
End date	Dec. 31, 2024
Initiative Lead	Inga Jacobs-Mata – i.jacobs-mata@cgiar.org
Initiative Deputy	Evan Girvetz – e.girvetz@cgiar.org
Measurable three-year End of Initiative outcomes (EOI-Os)	EOI-O 1: Fifty thousand farmers, value chain actors, and consumers (40% being women, 40% being youth) in maize-mixed systems are using climate-smart intensification and diversification practices with improved water and land management practices. EOI-O 2: One million farmers and other value chain actors (40% being women, 40% being youth) are accessing bundled digital agro-advisory and agricultural risk management (ARM) products and services that support their response to climate risks and help them manage land and water systems more sustainably for climate resilience. EOI-O 3: Up to 30 agribusinesses (40% run by women and 40% run by youth) are accessing scaled climate-smart solutions supporting diversification, intensification, and ARM of maize-mixed systems through at least US\$5 million of new finance in debt, equity, and grants. EOI-O 4: US\$100 million of investments are enabled and two strategies/policies developed/improved to support collaborative governance and management of multifunctional landscapes.
OECD DAC Climate marker adaptation score*	Score 2: Principle: The activity is principally about meeting any of the three CGIAR climate-related strategy objectives — namely, climate mitigation, climate adaptation, and climate policy, and would not have been undertaken without this objective.

OECD DAC Climate marker mitigation score*	Score 1: Significant: The activity contributes in a significant way to any of the three CGIAR climate-related strategy objectives — namely, climate mitigation, climate adaptation, and climate policy, even though it is not the principal focus of the activity.
OECD DAC Gender equity marker score*	Score 1B: Gender-responsive: On top of the minimum requirements for 1A, the Initiative/project includes at least one explicit gender equality outcome, and the Initiative/project team has resident gender expertise or capacity. The Initiative/project includes gender equality indicators and monitors participation of and differential benefits for diverse men and women.
Website link	https://www.cgiar.org/initiative/national-policies-and-strategies/

*The Organisation for Economic Co-operation and Development (OECD) Development Assistance Committee (DAC) markers refer to the OECD DAC [Rio Markers for Climate](#) and the [gender equality policy marker](#). For climate adaptation and mitigation, scores are: 0 = Not targeted; 1 = Significant; and 2 = Principal.
The CGIAR GENDER Impact Platform has adapted the OECD gender marker, splitting the 1 score into 1A and 1B. For gender equality, scores are: 0 = Not targeted; 1A = Gender accommodative/aware; 1B = Gender responsive; and 2 = Principal.
These scores are derived from [Initiative proposals](#), and refer to the score given to the Initiative overall based on their proposal.

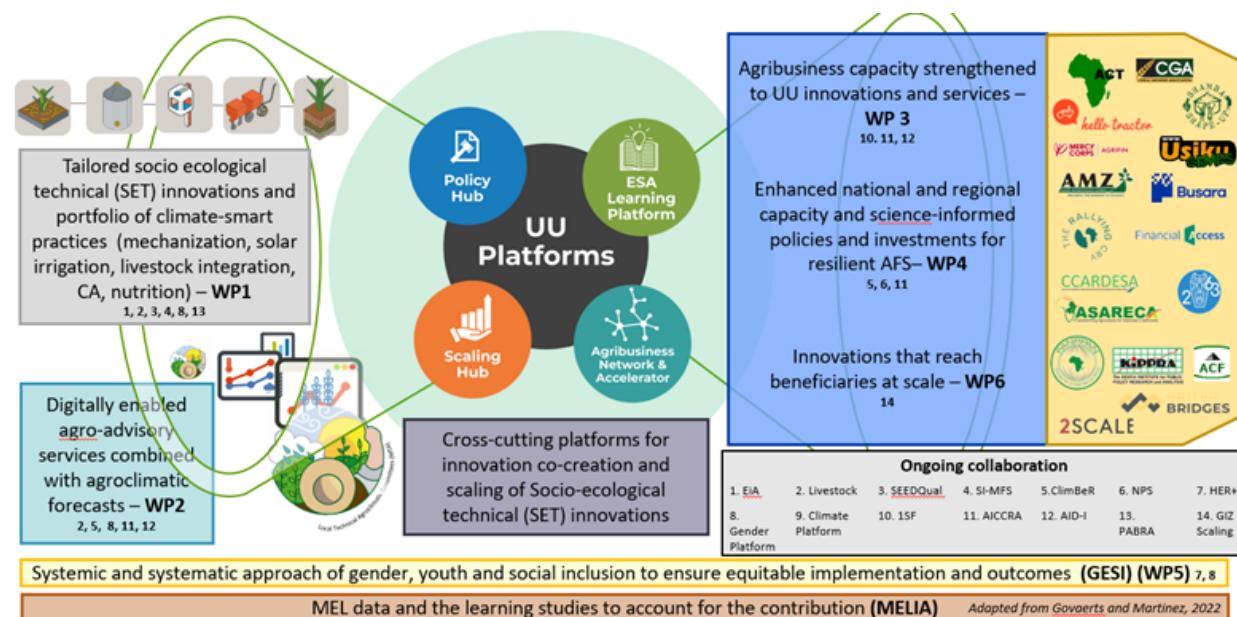
A list of abbreviations and acronyms used throughout the report can be found here:

AAWS: Africa Agri-Food Development Programme, Water and Sanitation	IFDC: International Fertilizer Development Center
ACASA: Agriculture in Smallholder Farming Systems of Southern Africa	IFPRI: International Food Policy Research Institute
ACSA: Africa Conservation Tillage Network Scaling Agroecology	IITA: International Institute of Tropical Agriculture
AGRITEX: Agricultural Extension Services, Zimbabwe	ILRI: International Livestock Research Institute
AICCRA: Agricultural Innovations for Climate Change Resilience and Adaptation	IPM: Innovation Portfolio Management
AKADEMIYA2063: Pan-African Platform for the 21st Century	IPSR: Innovation Packages & Scaling Readiness
ARM: Agriculture Risk Management	IWMI: International Water Management Institute
ASARECA: Association for Strengthening Agricultural Research in Eastern and Central Africa	KALRO: Kenya Agricultural and Livestock Research Organization
CA: Conservation Agriculture	MEL: Monitoring, Evaluation, and Learning
CAADP: Comprehensive Africa Agriculture Development Programme	MMO: Munda Make Over
CCARDESA: Centre for Coordination of Agricultural Research and Development for Southern Africa	NARS: National agricultural research systems
CGIAR: Consultative Group on International Agricultural Research	NGO: Non-governmental organization
CIAT: International Center for Tropical Agriculture	Norad: Norwegian Agency for Development Cooperation
CIMMYT: International Maize and Wheat Improvement Center	PABRA: Pan-Africa Bean Research Alliance
CIP: International Potato Center	PBA: Picture-Based Advisories
CIS: Climate Information Services	RII: Regional Integrated Initiative
ClimBeR: Climate resilience	SDC: Swiss Development Cooperation
CSA: Climate-Smart Agriculture	SI: Sustainable Intensification
DR&SS: Department of Research and Specialist Services, Zimbabwe	SPs: Service Providers
EoI: End of Initiative Outcome	TOC: Theory of Change
ESA: Eastern and Southern Africa	UC Davis: University of California, Davis
ESO: Entrepreneur Support Organisation	USAID: United States Agency for International Development
FACS: Financial Access Consulting Services	UU: Ukarma Ustawi
FANRPAN: Food, Agriculture, and Natural Resources Policy Analysis Network	VC4A: Venture Capital for Africa
GESI: Gender and Social Inclusion	WorldFish: WorldFish Center
ICT: Information and Communication Technology	WP: Work Package
IDT: Initiative Design Team	ZARI: Zambia Agriculture Research Institute
	ZNBC: Zambia National Broadcast Corporation



Farmers using innovative
digital agro-advisories.
Photo credit: Initiative on
Diversification of East and
Southern Africa

Section 2 Initiative progress on science and towards End of Initiative outcomes



Overall summary of progress against the theory of change

Ukama Ustawi¹ (UU) is a CGIAR Regional Integrated Initiative (RII) that aims to support climate-resilient agriculture and livelihoods in 12 East and Southern African (ESA) countries by helping millions of smallholders intensify, diversify, and reduce the risks in maize-based farming through improved extension services, small and medium enterprise development, an enabling environment, robust governance frameworks, and increased investment with a gender equality and social inclusion (GESI) lens. To accomplish this, UU's theory of change (TOC) is operationalized through an agrifood systems approach with six Work Packages (WPs) working across three impact pathways: (i) assess; (ii) apply; and (iii) scale. The assess activities provide the landscape analyses and feasibility studies for prioritization of innovation use. A strong foundation of partnerships was developed and strengthened in the first year to *apply* and test high-potential innovation bundles and approaches for delivering innovations at scale in the ESA region. *Scaling* of

Ukama Ustawi Work Package Framework

implemented innovations was initiated with partners in the first year that included both the *science* and *practice* of scaling.

Progress on science

Similar to the other RIIs, UU adopted an agrifood systems approach, implementing activities from on-farm interventions, through value chains, to businesses, and at the policy, institutional, and investment levels.

Through our on-farm interventions directly contributing to EOI outcome 1, we have showed that the environmental impacts and the effects of climate change are drastically reduced when bundles of sustainable intensification practices are widely adopted. Through collaborative efforts with CGIAR global thematic Initiatives, such as **Excellence in Agronomy**, **Seed Equal**, and **Mixed Farming Systems**, we have further confirmed that selected diversification and sustainable intensification technologies result in more diversified and healthier diets.

¹ Ukama Ustawi is a bilingual word derived from Shona and Swahili. In Shona, Ukama refers to partnerships, and in Swahili, Ustawi means well-being and development. Together, they resemble the vision for the Initiative to achieve system-level development through innovative partnerships ("Together, we grow and develop").



UU completed:

- A pioneering **suitability study** of climate-smart agriculture (CSA), sustainable intensification, conservation agriculture (CA), irrigation, nutrition, and mechanization through the collation of geospatial data from focal countries.
- **Suitability mapping** assessments for irrigation.
- A novel adoption framework for mechanization using data from the **ACASA** project, a Norwegian Agency for Development Cooperation (Norad)-funded bilateral project focused on CA in Southern Africa by developing strategies for achieving adoption and impact at scale.
- Protocols for **implementation of sustainable intensification technologies**.
- Inspiring farmer and community awareness meetings and trained farmers in 28 target communities on sustainable intensification practices.
- On-farm mother, baby, and innovation trials and rangeland demonstration plots.
- **Forage-based feed formulation and livestock pen-fattening** demonstrations.
- Climate-smart gender-sensitive technology reviews in integrated crop–livestock production/marketing.
- The promotion of nutrient-dense and biofortified food consumption at the community and farm level.

In addition, UU built on previous bilateral projects like **AfricaRISING** and **SIMLESA** to reduce agricultural drudgery and benefit smallholders in ESA through appropriate-scale mechanization. Another eight demonstrations were established, and mechanization starter packs were given to four service providers (SPs) in Zimbabwe and two in Zambia. **Climate-smart seed and mechanization fairs were held in Zimbabwe**, which attracted around 1,000 farmers.

Integration of UU's assessments of digital agro-advisory and ARM opportunities made it possible for our digital technologies to deliver

advisories and risk management services. UU's partnerships with the **Mercy Corps AgriFin** led to assessments, models tested, and scale-ready business models. One UU review study in partnership with the **Busara Center for Behavioral Economics** was initiated to look at how bundling services and use of behavioral approaches, including gamification, can improve business models for digital and agriculture risk management SPs.

The successful scaling of various sustainable intensification and CSA innovations was accomplished through a partnership with the **Mediae**, to expand the Shamba Shape Up model to Zambia. This is a first of its kind in Zambia. The **Munda Makeover farm improvement television show was launched in Zambia** on ZNBC in partnership with the World Bank project **Accelerating the Impact of CGIAR Climate Research for Africa (AICCRA)** and further scaled out through the USAID-funded Accelerated Innovation Delivery Initiative (**AID-I**).

Novel digital advisory and risk management business models being tested with key partners for co-design and future scaling include:

- First time that conservation tillage tractor services models were promoted with Hello Tractor through the **Shamba Shape Up TV show**.
- **Shamba Showdown farm simulation game** developed in partnership with Africa's first social impact gaming studio, **Usiku Games**.

- Working with private financial sector partners through [Financial Access Consulting Services \(FACS\)](#) and [Agora Microfinance](#) to improve microfinance credit products for smallholder farmers by incorporating climate risks.

Agribusiness acceleration research and capacity-building is being delivered through a [partnership with 2SCALE, Venture Capital for Africa \(VC4A\)](#), and a network of accelerator partners, including [small and medium-sized enterprises \(SMEs\)](#), [investors](#), and [support organizations](#), to launch the [Food Systems Accelerator \(CFSA\)](#). This builds on the acceleration foundation developed under the World Bank-funded [AICCRA](#) project in Zambia and continues through the AID-I. Additional acceleration activities, underpinned by research and data-driven methodologies, included the following:

- A [market assessment](#) was conducted of the agribusiness ecosystem in ESA, highlighting landscape mapping of key ecosystem stakeholders, identifying gaps and opportunities for CGIAR in the agri-entrepreneurship system, and informing the demand-driven approach of innovation-bundling.
- The four priority themes selected for the first cohort of agribusiness acceleration included: mechanization and irrigation; CA; nutrition-sensitive CSA; and ARM.
- [CGIAR worked with IFDC-2SCALE](#), our implementing partner, [VC4A](#), and over 30 network partners in Kenya, Rwanda, Uganda, and Zambia to source agribusinesses for the first cohort call. It attracted 1,288 agri-entrepreneurs following the program on the VC4A platform and 288 strong applications were submitted. Of that list, [10 high-performing agri-SMEs were selected for the first cohort](#) from Kenya, Zambia, Uganda, and Rwanda.
- The technical assistance facility has kickstarted with a range of technical support provided to the first cohort in CSA/climate information services (CIS) advisory; GESI technical support; enabling

environment; innovation scaling; and investment readiness.

UU's work on the enabling environment has also become much more refined and targeted in four key areas, directly contributing to EOI outcome 4:

- Policy hub — Two dialogues were held in collaboration with the Food, Agriculture and Natural Resources Policy Analysis Network ([FANRPAN](#)): [Zambia](#) (August 2022 with ACF) and [Kenya](#) (November 2022 with the Kenya Institute of Public Policy Research and Analysis (KIPPRA)). Partnership agreements with the Association for Strengthening Agricultural Research in Eastern and Central Africa ([ASARECA](#)), the Centre for Coordination of Agricultural Research and Development for Southern Africa ([CCARDESA](#)), and [AKADEMIYA2063](#) were finalized for 2023.
- Economic and biophysical climate impact modeling — historical climate change analysis in ESA; analysis of CMIP6 model results on crop yields in ESA; analysis of agricultural commodity trade in ESA countries were conducted by the International Food Policy Research Institute (IFPRI) and fed into country profiles: [Kenya](#) and [Zambia](#) and priority areas for discussion in national dialogues.
- SDG national target-setting — WP4's key thematic focus has changed to a refined focus on the enabling environment for agribusiness acceleration. This activity has therefore been amended to target the enabling environment technical assistance module in the CFSA program.
- A Learning Alliance was initiated with [CCARDESA](#), [ASARECA](#), FARA, and [AKADEMIYA2063](#) to engage UU with national agricultural research systems (NARS) and regional bodies, and builds on the knowledge management framework co-developed with these and other partners.

The cross-cutting area of our work on empowerment of women and youth in agribusiness contributing across all four EOI outcomes completed the following:



- An analysis of GESI in the agribusiness ecosystem in ESA.
- A GESI framework to guide innovation scaling, entry points, partners, and capacity-strengthening activities across all Work Packages.

Finally, UU has been an early adopter of CGIAR's novel approach to innovation portfolio management. UU submitted 25 innovations in 2022, and 20 of those were submitted early enough to compile them into an overview report. These 20 innovations were co-developed by 17 innovation teams collaborating with 12 other Initiatives, 102 partnerships in 11 countries, at an average scaling readiness level of 7.8. More information can be found in the [Ukama Ustawi Innovation Portfolio Management Report — 2022](#).

Working closely with the CGIAR Innovation Packages and Scaling Readiness (IPSR) team, this

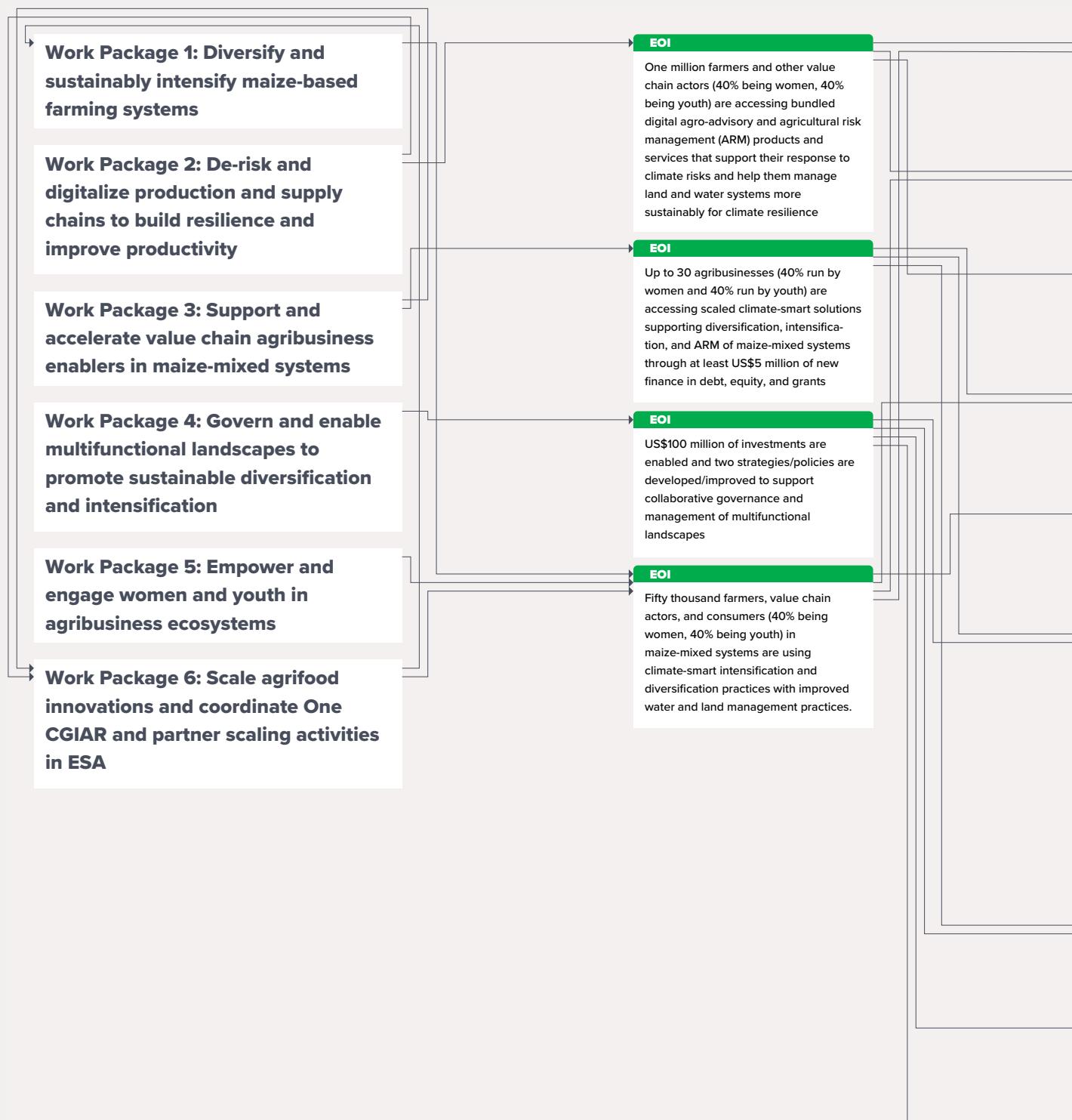
work focuses on embedding and coordinating the UU Work Packages, other One CGIAR Initiatives, and non-CGIAR partners, to facilitate scaling of agricultural innovations in ESA. A summary of related results in 2022 included:

- Completed 25 innovation profiles.
- Conducted the first innovation package design workshop with [Munda Makeover in Zambia](#).
- Positioning the Scaling Hub within the [ESA Agribusiness Support Landscape Report](#).
- Organized a [Week of Scaling in Nairobi](#) in partnership with the GIZ Scaling Task Force.
- Compiled a report on [UU innovation portfolio management](#).
- Completed a scoping study report on the [science of scaling research agenda for ESA](#).

OECD marker	Score
OECD DAC Climate adaptation marker	2
OECD DAC Climate mitigation	1
OECD DAC Gender equity	1B

Initiative-level theory of change diagram

This is a simple, linear, and static representation of a complex, non-linear, and dynamic reality. Feedback loops and connections between this Initiative and other Initiatives' theories of change are excluded for clarity.



EOI — End of Initiative outcome

AA — Action Area

IA — Impact Area

SDG — Sustainable Development Goal

 Nutrition, Health, and Food Security

 Poverty Reduction, Livelihoods, and Jobs

 Gender Equality, Youth, and Social Inclusion

 Climate Adaptation and Mitigation

 Environmental Health and Biodiversity

Teams from CGIAR's three Action Areas — System Transformation, Resilient Agrifood Systems, and Genetic Innovation — worked to develop an improved set of Action Area outcomes in October 2022. Since this was near the end of the reporting cycle for 2022, it was decided not to update the theories of change based on these new Action Area outcomes.

The exception to this is Genetic Innovation — for this Action Area, as the new outcomes had already been widely discussed among the relevant Initiatives, and with its advisory group of funders and other stakeholders, the decision was made to update their outcomes in time for the 2022 reporting cycle.

AA — Systems Transformation

NGO, extension, and other implementation partners actively engage with farmers and other actors in implementing transformative innovations in food, land, and water systems

AA — Systems Transformation

CGIAR partners develop and scale innovations that contribute to the empowerment of women, youth, and other social groups in food, land, and water systems

AA — Resilient Agrifood Systems

NARES and regional agricultural research institutes develop farming system innovations with the potential to increase the food security of smallholders in targeted areas

AA — Resilient Agrifood Systems

INGOs and national farmers/trade associations scale agrifood system innovations with the potential to increase the net farm income of smallholders and pastoralists in targeted areas

AA — Resilient Agrifood Systems

Government ministries and international networks/programs invest financial resources to support scaling of climate-smart innovations to improve the resilience of smallholders and pastoralists

AA — Resilient Agrifood Systems

National and local multi-stakeholder platforms are strengthened to become functional and sustainable in addressing development tradeoffs and generating strategies for effective food, land, and water transformation

AA — Resilient Agrifood Systems

Global funding agencies and national governments use research evidence in the development of strategies, policies, and investments to drive sustainable transformation of food, land, and water systems to meet multiple CGIAR Impact Area targets

AA — Resilient Agrifood Systems

CGIAR partners develop and scale innovations that contribute to the empowerment of women, youth, and other social groups in food, land, and water systems

AA — Genetic Innovation

CGIAR partners develop and scale innovations that contribute to the empowerment of women, youth, and other social groups in food, land, and water systems

AA — Genetic Innovation

Government ministries, public and non-governmental organizations, small/medium-sized enterprises, and civil society entities provide support to enable larger-scale benefits across CGIAR's five Impact Areas to reach farmers

IA

 End hunger for all and enable affordable healthy diets for the 3 billion people who do not currently have access to safe and nutritious food. Reduce cases of foodborne illness (600 million annually) and zoonotic disease (1 billion annually) by one third.

IA

 Lift at least 500 million people living in rural areas above the extreme poverty line of US\$1.90 per day (2011 PPP). Reduce by at least half the proportion of men, women, and children of all ages living in poverty in all its dimensions according to national definitions.

IA

 Offer rewardable opportunities to 267 million young people who are not in employment, education, or training. Close the gender gap in rights to economic resources on, access to ownership of, and control over land and natural resources, for more than 500 million women who work in food, land, and water systems.

IA

 Implement all national adaptation plans (NAPs) and nationally determined contributions (NDCs) to the Paris Agreement. Equip 500 million small-scale producers to be more resilient to climate shocks, with climate adaptation solutions available through national innovation systems.

IA

 Stay within planetary and regional environmental boundaries: consumptive water use in food production of less than 2,500 km³ per year (with a focus on the most stressed basins), zero net deforestation, nitrogen application of 90 Tg per year (with a redistribution toward low-input farming system) and increased use efficiency, and phosphorus application of 10 Tg per year.

SDG

 1 NO POVERTY

SDG

 2 ZERO HUNGER

SDG

 5 GENDER EQUALITY

SDG

 6 CLEAN WATER AND SANITATION

SDG

 8 DECENT WORK AND ECONOMIC GROWTH

SDG

 13 CLIMATE ACTION

SDG

 15 LIFE ON LAND

Progress by End of Initiative outcome

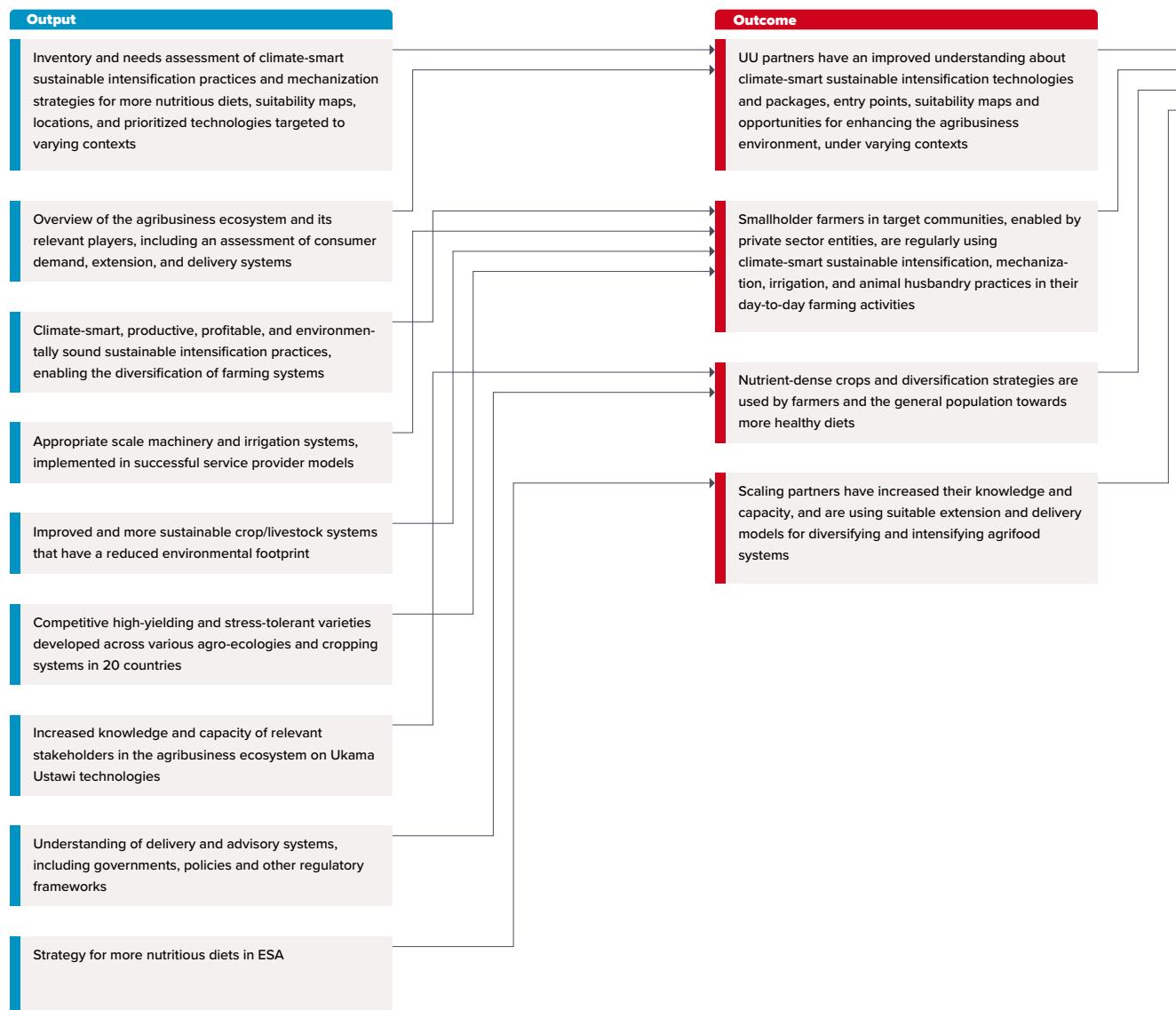
EOI-O 1	US assesses, applies, and scales improved extension/delivery systems for sustained uptake of sustainable intensification, mechanization, livestock integration, improved nutrition, and irrigation practices at the farm level with NARS, ministries, non-governmental organizations (NGOs)/community-based organizations, and the private sector in 11 countries, reaching 30,000 farmers to date through the PABRA partnership in school feeding and other nutritional activities, made possible through additional support from the Swiss Development Cooperation (SDC). Several of these practices are showcased in 198 mother trials, 4,722 baby trials, and 21 innovation trials in four countries reaching 5,055 farmers. Similarly, six mechanization SPs and livestock rangeland demonstrations were established in Zambia and Zimbabwe. More farmers, value chain actors, and consumers are expected to learn and start practicing in the subsequent seasons toward reaching the End of Initiative impact.
EOI-O 2	Digital ARM innovations were assessed for opportunities to bundles, and partnerships were built for testing and scaling these bundles with private sector partners. For the first time in the sector, a television production company was identified as scaling ready, and UU delivered this model of targeted digital agroadvisory services profiling CGIAR innovations through Munda Makeover , which UU supported (in partnership with AICCRA and AID-I), broadcast nationally in Zambia on ZNBC with an estimated weekly viewership of 3 million.
EOI-O 3	Building on a market assessment of SME support needs in ESA, UU's CFSA selected the first cohort of 10 African SMEs (70% women-led) and onboarded them into the accelerator program to scale various innovations in small-scale mechanization, irrigation, nutrition-sensitive CSA, CA, and ARM. The first CFSA call attracted 1,288 agri-entrepreneurs following the program on the VC4A platform, and 288 strong proposals were submitted. An additional 20 companies are in the pipeline for subsequent cohorts to reach a total of 30 SMEs supported by 2024, a reduced EOI outcome target from what was originally indicated in the proposal (of 50 SMEs) due to budgetary reductions.

EOI-O 4

Through the various policy assessments and policy dialogues hosted in partnership with **FANRPAN**, ACF, and KIPPRA, new policy opportunities have been identified for further development in Kenya and Zambia with spillover effects and new opportunities open in other ESA countries, and with the ability to leverage up to US\$100 million. Budgetary reductions have, however, meant that this EOI outcome has been reduced from four policies to two. National policy dialogues were held in **Zambia** and **Kenya**, bringing together 160 policy stakeholders to help understand the underlying gaps in climate-resilient agricultural transformations that guided in-depth policy and climate impact analyses to draw tailored policy recommendations that are being tabled through various follow-up ministerial interactions. Three partnerships have been developed with **CCARDESA**, **ASARECA**, and **FANRPAN** to scale policy support from the national to the regional level. The Learning Alliance is being launched in 2023 as an innovative model to promote knowledge transfer and exchange between UU and national research bodies.

Section 3 Work Package-specific progress

Work Package 1: Diversify and sustainably intensify maize-based farming systems



EOI
Fifty thousand farmers, value chain actors, and consumers (40% being women, 40% being youth) in maize-mixed systems are using climate-smart intensification and diversification practices with improved water and land management practices

Work Package 1 progress against the theory of change

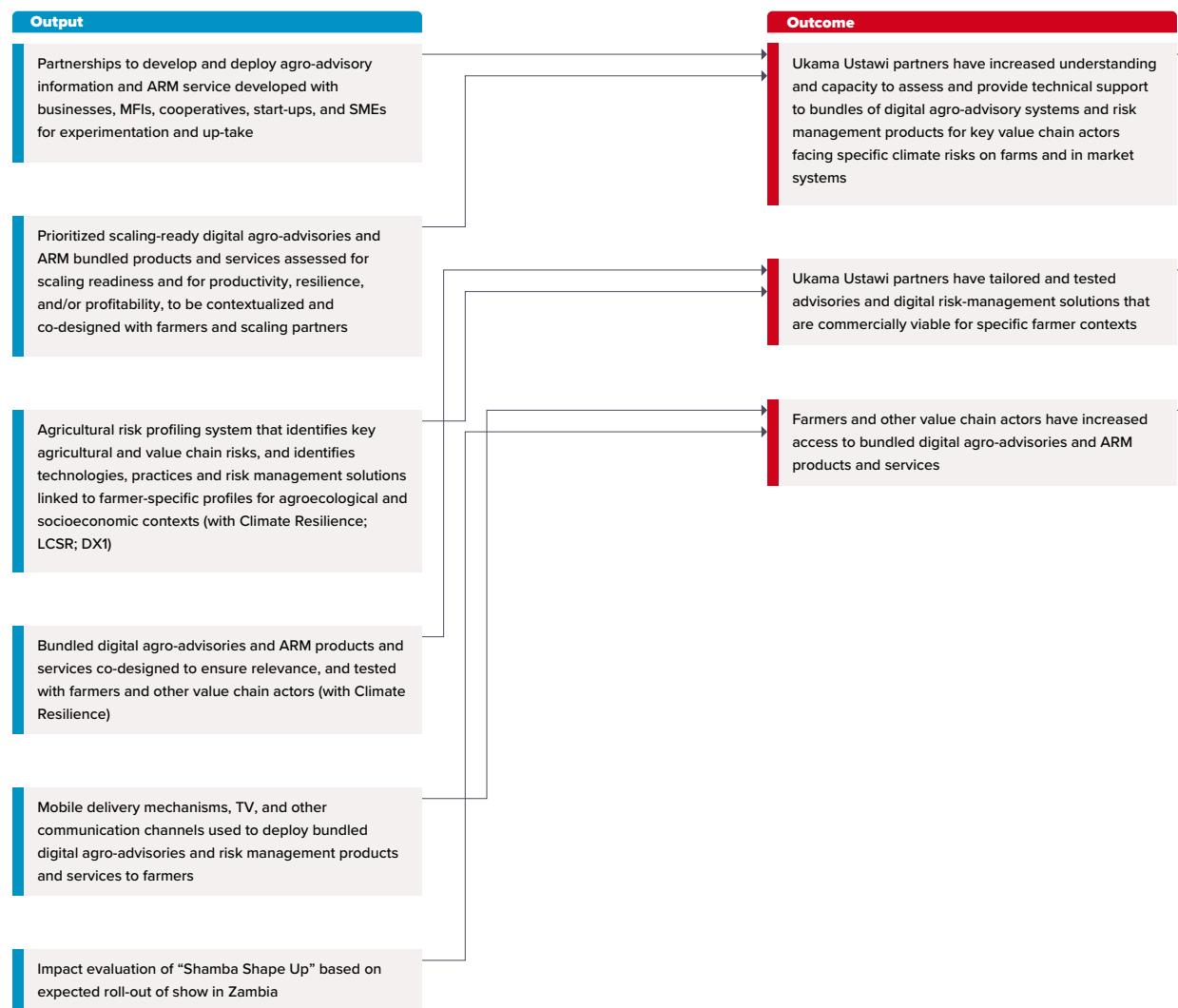
Assess: WP1 has conducted various studies and tests to determine the suitability of different sustainable intensification practices, such as CSA, CA, irrigation, nutrition, and mechanization. Moreover, WP1 tested an adoption framework to encourage the widespread adoption of these practices. As a result of their research, WP1 submitted two manuscripts on the challenges and opportunities of mechanization and a [report](#) and manuscript on irrigation suitability.

Apply: WP1 has been working toward [sustainable intensification technologies](#) by co-developing protocols for the implementation of these technologies. WP1 conducted awareness meetings and trained farmers in 28 target communities on sustainable intensification practices, set up on-farm mother, baby, and innovation trials, and established rangeland demonstration plots. Additionally, WP1 conducted [forage-based feed formulation](#) and [livestock pen-fattening](#) demonstrations to improve livestock productivity. WP1 also reviewed climate-smart and gender-sensitive technologies in integrated crop-livestock production and marketing. Finally, WP1 promoted the consumption of nutrient-dense and biofortified foods to improve overall nutrition.

Scale: To achieve the adoption of appropriate-scale mechanization, WP1 conducted several initiatives: awareness meetings, [machinery demonstrations](#) to select SPs, and technical and business training. Three operators and two extension officers SPs (four in Zimbabwe and two in Zambia) received [mechanization starter packs](#) and established eight demonstrations. Moreover, WP1 conducted a mechanization potential survey in Kenya to inform the design of mechanization SP models. WP1 mapped scaling partners and developed six innovation bundles.

Work Package 2:

De-risk and—digitalize production and supply chains to build resilience and improve productivity



Work Package 2 progress against the theory of change

EOI
One million farmers and other value chain actors (40% being women, 40% being youth) are accessing bundled digital agro-advisory and agricultural risk management (ARM) products and services that support their response to climate risks and help them manage land and water systems more sustainably for climate resilience

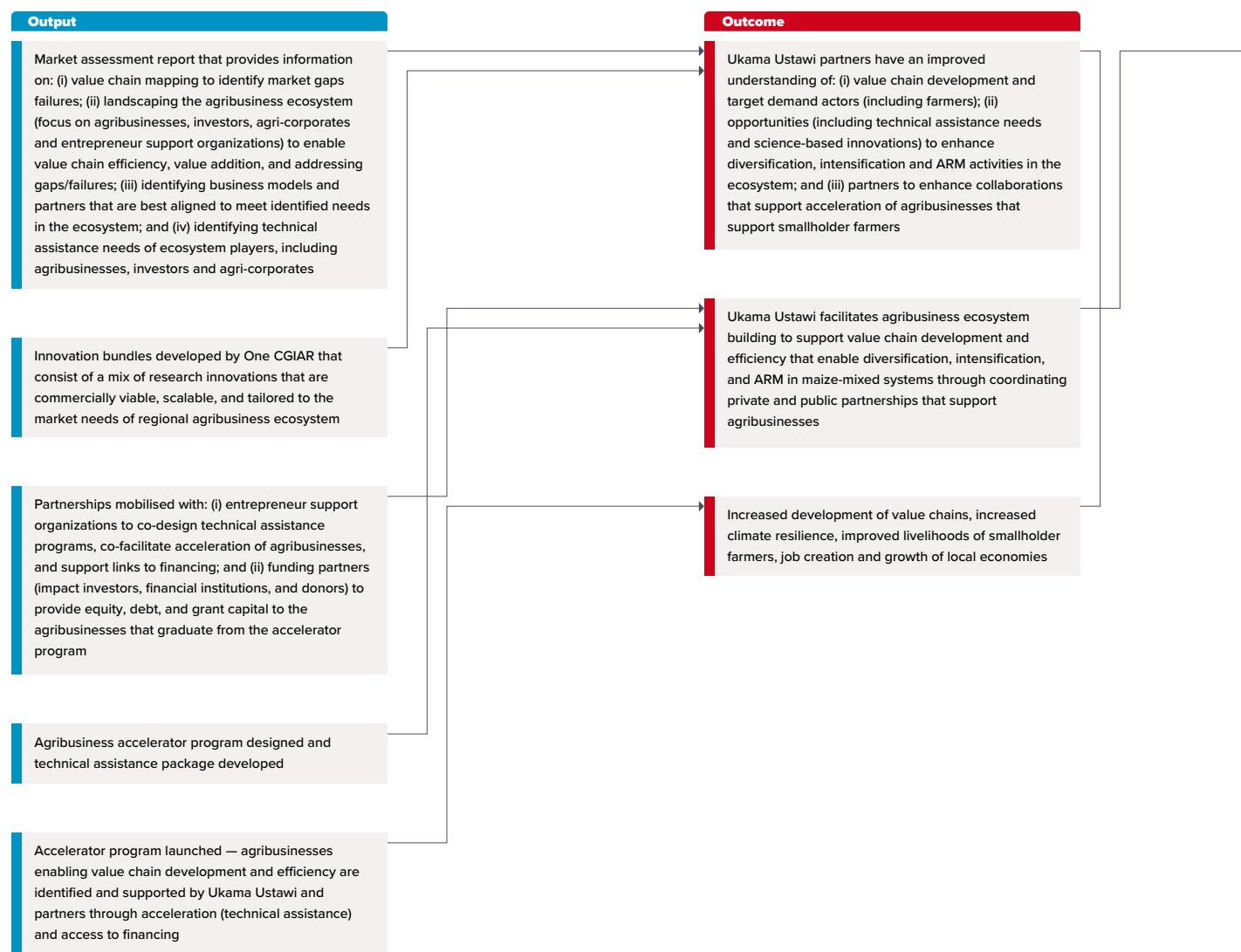
Assess: WP2 worked with partners in assessing and developing digital agro-advisories and ARM products. [Mercy Corps AgriFin](#) and the [Busara Center for Behavioral Economics](#) are assessing and prioritizing business models and private sector partnerships for co-design and deployment of these services. [FACS](#) identifies and facilitates the use of CGIAR science to improve the design of climate-smart lending and credit scoring tools, supporting farmers with managing risk.

Apply: WP2 tailored and tested commercially viable advisories and ARM solutions, digital agro-advisories, and ARM products in Kenya and Zambia: (i) [Shamba Shape Up](#) and [Munda Makeover](#) TV shows; (ii) [Shamba Showdown](#) farm simulation game developed in partnership with Africa's first social impact gaming studio, [Usiku Games](#), to test an approach for educating farmers and university students on CA approaches and benefits; (iii) the development and piloting of a [picture-based advisory system](#) that provides farmers with access to important information; (iv) co-design with [FACS](#) and [Agora Microfinance Zambia Limited](#) to improve microfinance credit products for smallholder farmers by incorporating climate risks.

Scale: To reach scale, WP2 prioritized scaling up the Kenyan TV show [Shamba Shape Up](#) to Zambia as [Munda Makeover](#). Additional scaling is occurring through linkages with [AICCRA](#) and [AID-I](#). The current partnerships and solutions have resulted in good progress toward achieving the target of 1 million farmers accessing agro-advisories and ARM products and services by 2024.

Work Package 3:

Support and accelerate value chain agribusiness enablers in maize-mixed systems



EOI

Up to 30 agribusinesses (40% run by women and 40% run by youth) are accessing scaled climate-smart solutions supporting diversification, intensification, and ARM of maize-mixed systems through at least US\$5 million of new finance in debt, equity, and grants

Work Package 3 progress against the theory of change

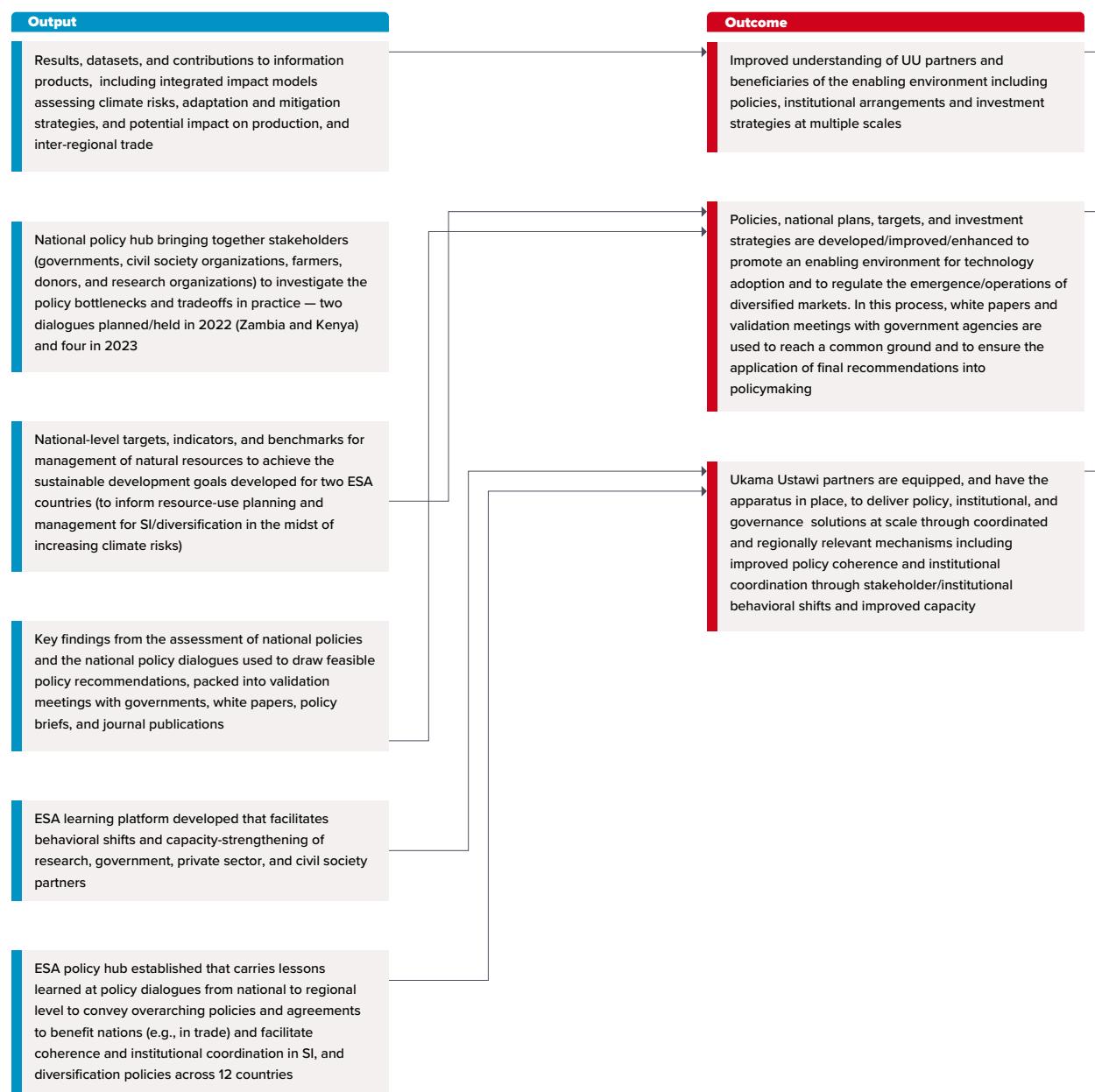
Assess: WP3 partnered with Briter Bridges to conduct a **market assessment on the agribusiness ecosystem**. The market assessment informed the design of the science-based accelerator program. WP3 developed a methodology for executing the **innovation bundling process** within the science-based accelerator program.

Apply: WP3 partnered with various partners to design and **launch the science-based accelerator program** (“CGIAR Food Systems Accelerator Program”). WP3 co-designed the **technical design** of the accelerator program with IFDC-2SCALE. In addition, WP3 partnered with Briter Bridges to develop the market assessment report and VC4A to launch the **call for applications**.

Scale: WP3 successfully launched, for the first time, the science-based accelerator, to support agribusinesses to scale CSA innovations through technical assistance and support in fundraising from the private sector. The CFSAs worked with over 30 network partners to share the call for applications in Kenya, Rwanda, Uganda, and Zambia, and received a total of 849 applicants, out of which 288 met the high-quality standards for prequalification.

Work Package 4:

Govern and enable multifunctional landscapes to promote sustainable diversification and intensification



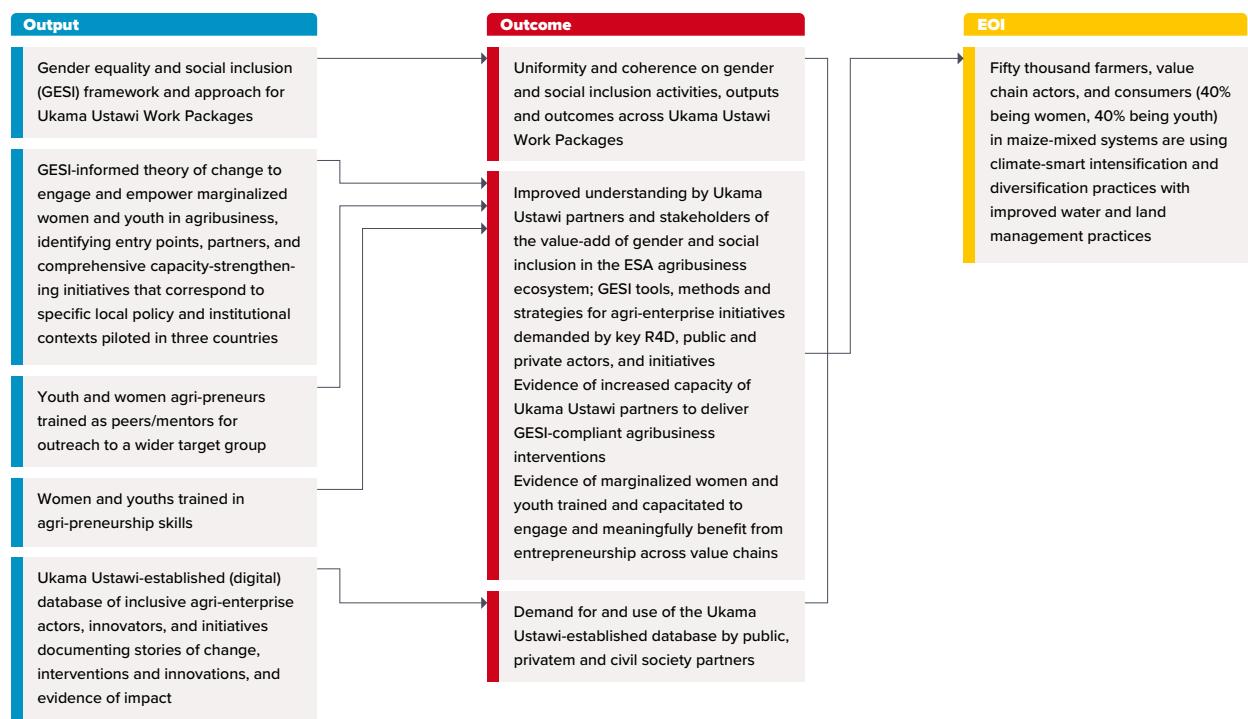
Work Package 4 progress against the theory of change

EOI
US\$100 million of investments are enabled and two strategies/policies are developed/improved to support collaborative governance and management of multifunctional landscapes

To **assess** the bottlenecks in the enabling environment and help governments and **apply** feasible adjustments, WP4 facilitated policy dialogues and constituted the **ESA Policy Hub** (network of policy advocacy and evidence-based policy support organizations). The Hub coordinated workplans to work more synergistically on policy bottlenecks. National dialogues with policy stakeholders contribute to understanding bottlenecks and open opportunities for collaboration. Two dialogues were held in **Kenya** and **Zambia**. WP4 produced two summary reports and blogs [here](#) and [here](#). Two white papers are under way, merging modeling results regarding climate impact and diversification options with cross-cutting policy analysis, which government bodies will validate. Three partnerships were established with **ASARECA**, **CCARDESA**, and **AKADEMIYA2063** to **scale** the lessons learned to the regional level and support policymaking to benefit ESA countries.

To help **scale** innovations, through the **Agribusiness Enabling Environment technical advisory**, WP4 works with innovators selected for the CFSA program. The innovators receive three products: (i) direct technical advisory; (ii) policy, market, and partnership mapping; and (iii) advocacy through work with relevant government bodies.

Work Package 5: Empower and engage women and youth in agribusiness ecosystems

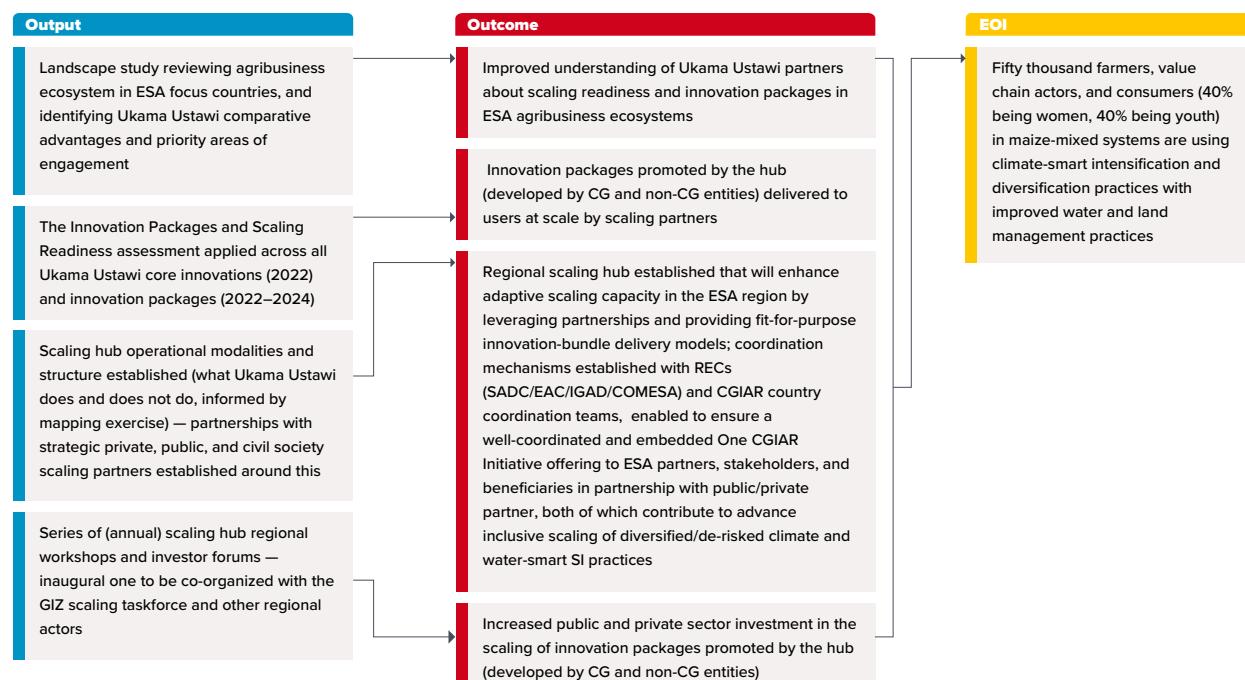


Work Package 5 progress against the theory of change

WP5 developed a GESI framework and approach toward improving partners' understanding of the value-add of GESI, as well as methods within UU to provide uniformity and coherence. The GESI framework was produced by reviewing relevant literature and engaging with agribusiness stakeholders in four countries: Ethiopia (one workshop), Kenya (two workshops), Zambia (two workshops), and Zimbabwe (one workshop). The evidence gained from these interactions provide a new and targeted rationale for a suite of gender-responsive agribusiness interventions and innovations that can reach, benefit, and empower women and youth:

- **Reach:** agribusiness entry points that specifically target women and youth, particularly from marginalized groups.
- **Benefit:** design and implement a portfolio of capacity-strengthening initiatives to build skills, provide targeted knowledge, financing, and new opportunities that can allow women to transition from backend, unpaid agriculture roles, and strengthen agency and recognition for youth in agriculture.
- **Empower:** inform and scale up interventions that reduce gender tensions and social exclusions by addressing rights, equity, agency, and recognition for women and youth as key actors in the future of agribusiness.

Work Package 6: Scale agrifood innovations and coordinate One CGIAR and partner scaling activities in ESA



Work Package 6 progress against the theory of change

WP6 is a cross-cutting effort to scale agrifood innovations and coordinate One CGIAR and partner scaling activities in ESA. Key results include:

- Supported all UU Work Packages to complete **25 innovation profiles** (the target was 7).
- Munda Makeover Zambia innovation package (planned in 2022, held on Jan. 30, 2023).
- Scaling landscape assessment for ESA.**
- Week of science and practice of scaling in Nairobi.**
- An innovation portfolio management overview of UU's 2022 submissions.
- Scoping study report on the **science of scaling research agenda for ESA.**
- Submitted literature review on innovation portfolio management in the public sector.
- Two new e-learning courses: **GenderUp** and **IPSR**.

WP6 research questions have been pursued and remain valid for future efforts.

- Assess:** In completion of the scaling landscape assessment, and partnering with WP3 CFSA, connections to public and private sector partners have been explored.
- Apply:** Our consultant, Briter Bridges, identified ESA networks and partners in a good position to support scaling. We also launched two online courses (Scaling Readiness and GenderUp) and partnered with the University of California-Davis to incorporate gender-responsive scaling readiness.
- Scale:** Research and publications completed in 2022 around **innovation portfolio management** will help guide the Scaling Hub to develop a platform and objectives that connect to other One CGIAR thematic and regional Initiatives, and draw in their innovation profiles for application in ESA. WP6 assumptions also remain valid, with no updates or additions at this time.

Work Package progress rating

WORK PACKAGE	TRAFFIC LIGHT / RATIONALE
1	 <p>All WP1 field activities are on track.</p>
2	 <p>All activities and progress toward outcomes on track for 2022. To reach farmers through additional channels, farmer roadshows and radio versions of <i>Munda Makeover</i> are being planned for 2023 to test their effectiveness and potential for scaling.</p>
3	 <p>Planned activities are on track.</p>
4	 <p>Planned activities are mostly on track. Following the rescoping of WP4 due to initial budgetary constraints that did not allow for the full implementation of the SDG indicator development work, this activity has been deprioritized but has been replaced with the enabling environment technical assistance work supporting the CFSAs.</p> <p>A Learning Alliance will help UU to evaluate its progress and impact continuously and optimize its assess, apply, and scale pathways to strengthen capacity building collaborative efforts with NARS.</p>
5	 <p>WP5 conducted three workshops in Ethiopia, Kenya, Zambia, and Zimbabwe. The GESI framework is currently in draft format and will be validated and finalized in 2023.</p>
6	 <p>WP6 met or exceeded the 2022 Plan of Results in most areas. The first innovation package is the only slight delay, but was conducted in January 2023 and already published by the time this report was written.</p>

KEY

On track		<ul style="list-style-type: none"> Annual progress largely aligns with Plan of Results and Budget and Work Package theory of change Can include small deviations/issues/ delays/risks that do not jeopardise success of Work Package
Delayed		<ul style="list-style-type: none"> Annual progress slightly falls behind Plan of Results and Budget and Work Package theory of change in key areas Deviations/issues/delays/risks could jeopardise success of Work Package if not managed appropriately
Off track		<ul style="list-style-type: none"> Annual progress clearly falls behind Plan of Results and Budget and Work Package theory of change in most/all areas Deviations/issues/delays/risks do jeopardise success of Work Package

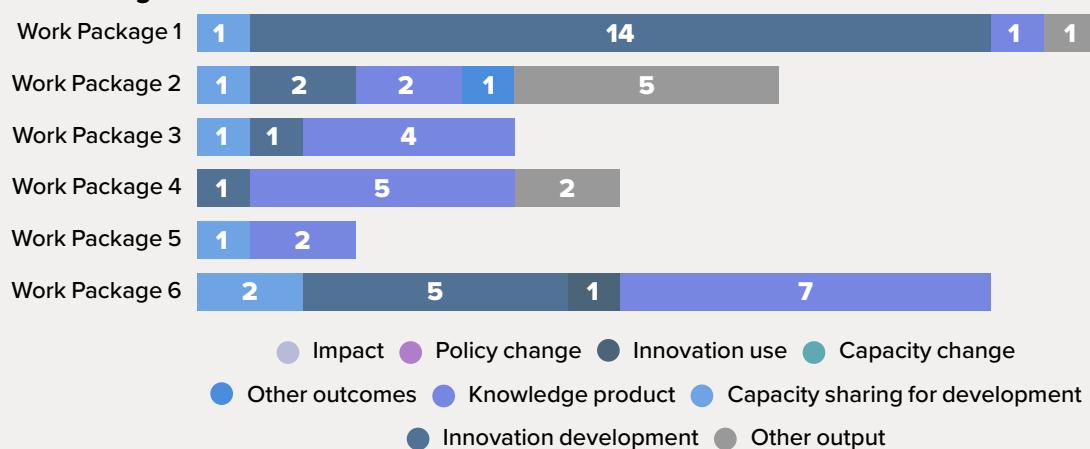
Section 4 Initiative key results

This section provides an overview of 2022 results reported by Diversification in East and Southern Africa. These results align with the CGIAR Results Framework and Diversification in East and Southern Africa's theory of change. Further information on these results is available through the [CGIAR Results Dashboard](#).

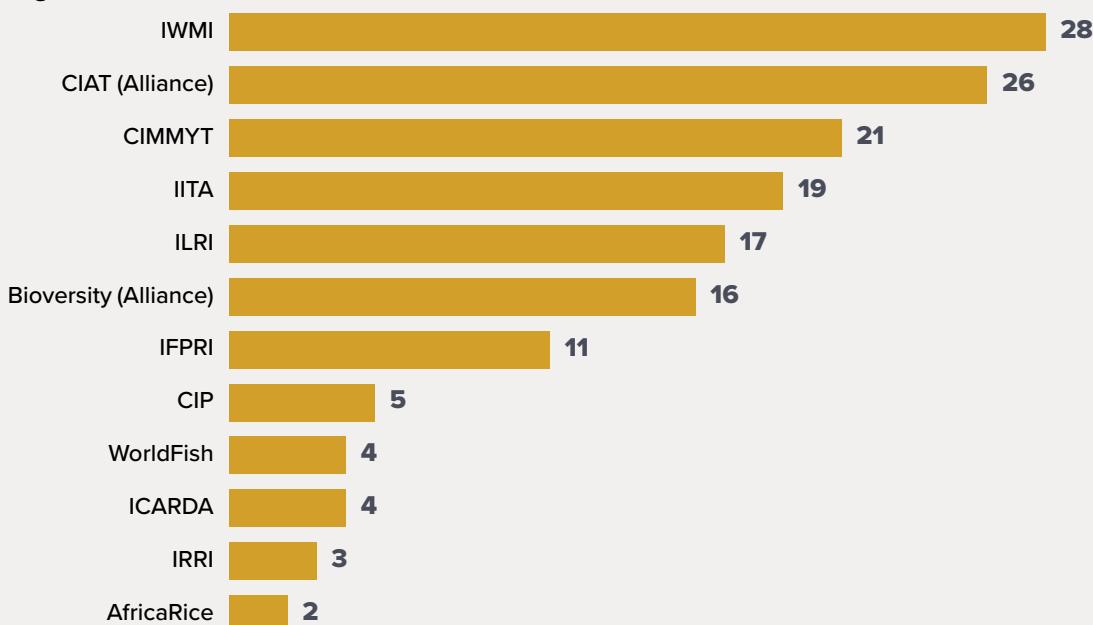
Overview



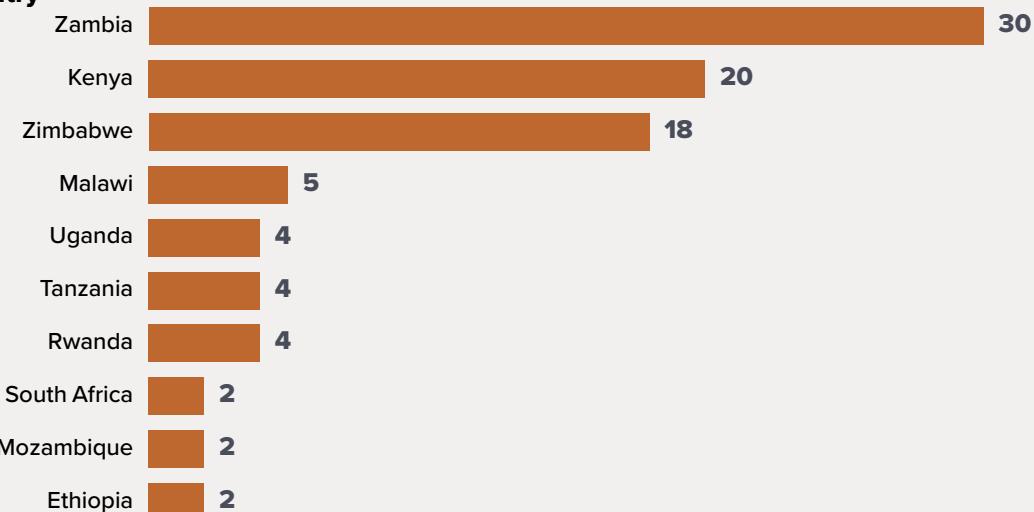
Results by Work Package



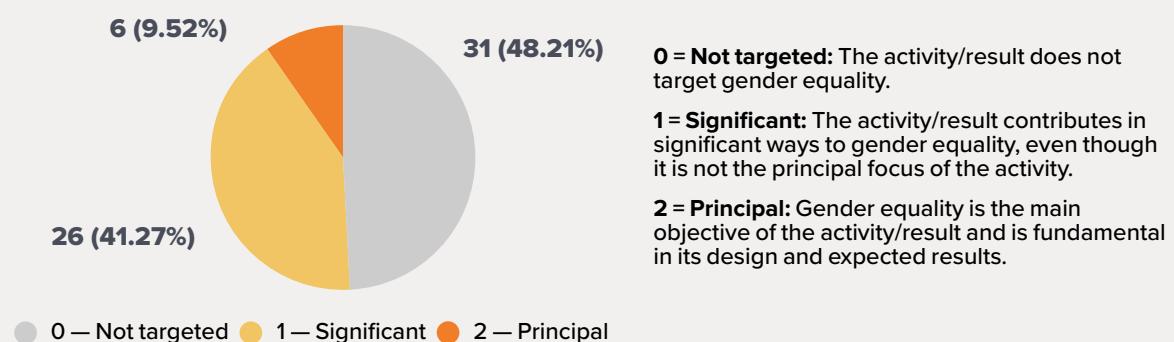
Contributing CGIAR Centers



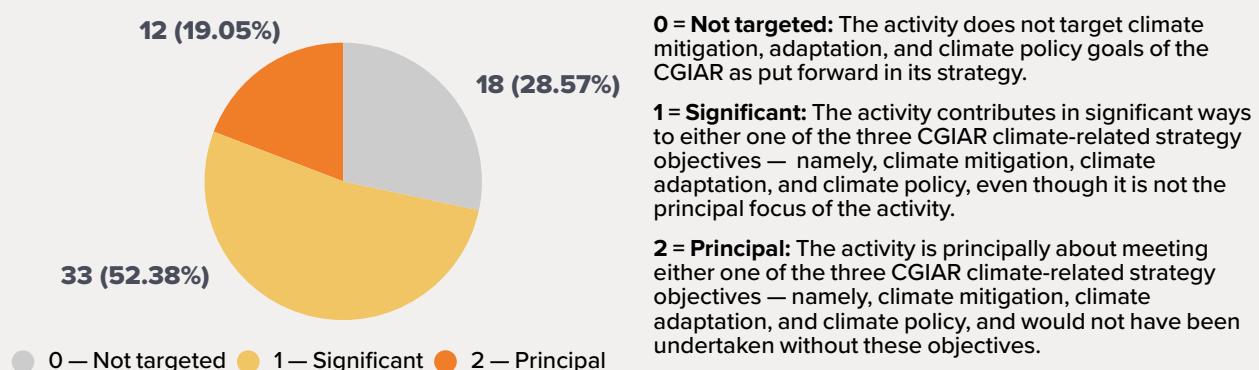
Results by country



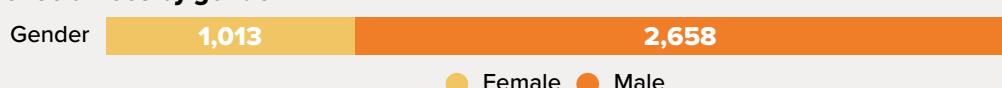
Results by gender tag



Results by climate change tag



Capacity development trainees by gender



Innovations by readiness level

Pipeline overview
Number of innovations



Section 5 Impact pathway integration – External partners



Partnerships and Diversification in East and Southern Africa's impact pathways

UU collaborates with 54 demand, innovation, and scaling partners in eight ESA countries. UU's 2022 partners were chosen based on their expertise, alignment, and passion to achieve climate-resilient agriculture and livelihoods. In many cases, the partners' existing ties to CGIAR and understanding of scaling allowed them to deliver results quickly.

All 150+ partners and stakeholders form the UU "community of spirit" (COS). Several workshops, surveys, and polls were conducted to agree on operating principles (e.g., relational, interactive, and collaborative; motivational; informative and transparent; intentional and focused on a shared vision; inclusive, etc.) and how we ensure that these

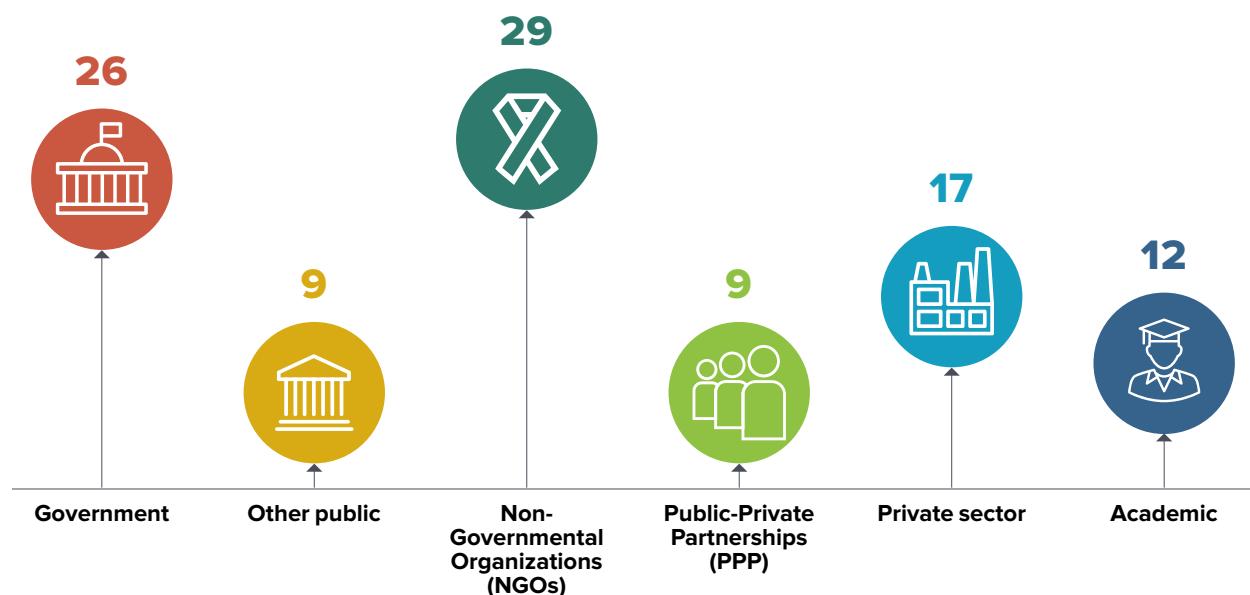
experiences are lived in practice/operationalized by the COS. As a result, a UU COS engagement plan was developed.

Out of the 63 UU results produced, 25 (40%) are classified as innovations. Of these, 20 were analyzed in the UU Innovation Portfolio Report and were co-developed by 17 innovation teams collaborating with 12 Initiatives, and 102 partnerships in 12 countries (10 of which are ESA countries) at an average scaling readiness level of 7.8. All innovations were scaled through partnerships. The largest partnership category in innovation development was public sector partnerships (government and NGOs, including NARS and other public research organizations).

The figure below provides an aggregate overview of the current 102 partnerships in the portfolio of 20 innovations.

WP1 collaborated mostly with research (NARS), government (ministries of agriculture and livestock), and private sector partners to demonstrate sustainable intensification technologies, conduct awareness and business training for farmers, provide technical extension support, and develop innovation bundles. In particular, WP1 partnered with NARS and ministries/affiliated institutions for agriculture and livestock: [Zambia Agriculture Research Institute \(ZARI\)](#), Agricultural Extension Services, Zimbabwe (AGRITEX), [Kenya Agricultural and Livestock Research Organization \(KALRO\)](#), [Department of Research and Specialist Services, Zimbabwe \(DR&SS\)](#), and Machinga District Local Government, Malawi. WP2 partners comprised mostly financial institutions and digital

communications partners, such as [Mediae](#) and [FACS](#), to disseminate agro-advisories in CA, climate, and financial literacy, and to develop risk management solutions. WP3 collaborated with accelerator, SME network, and investment readiness support partners to conduct a market assessment study, launch a science-based accelerator program, and support promotion and learning. WP4 partners included mostly government and policy partners at the regional and national levels, such as the [FANRPAN](#), to organize policy dialogues, conduct climate change analyses, and produce policy reports. WP5 worked mostly with NGOs, such as [Solidaridad](#), to develop the GESI framework through stakeholder dialogues and training. WP6 collaborated with science of scaling partners, such as Wageningen University and Briter Bridges, to create the GenderUp e-learning course and conduct a scaling landscape assessment.



Section 6 Impact pathway integration – CGIAR portfolio linkages

Portfolio linkages and Diversification in East and Southern Africa's impact pathways

UU has forged strong collaborations with numerous CGIAR Research Initiatives, including Market Intelligence, Seed Equal, Mixed Farming Systems, Climate Resilience, Excellence in Agronomy, National Policies and Strategies, and Livestock and Climate.

To achieve diversification and sustainable intensification (EOI outcome 1), UU partnered with Excellence in Agronomy and Mixed Farming Systems, building on the successes of previous large-scale, multi-CG center research projects, such as the Sustainable Intensification of Smallholder Systems in Zambia (SIFAZ; EU funded) and Africa Research in Sustainable Intensification for the Next Generation (Africa RISING; USAID funded). These projects have tested sustainable intensification interventions, including intercropping maize systems, green manure/cover crops for improved livestock feeding, and small-scale mechanization.

In collaboration with the Climate Resilience and Livestock and Climate initiatives, UU has delivered innovative digital services and financial products, such as risk-contingent credit, to smallholder farmers facing the challenges of climate change (EOI outcome 2). Through partnerships with private sector organizations like [FACS and microfinance](#)

[institutions](#), UU has coordinated and synergized research efforts to maximize impact. Additionally, UU has leveraged activities in the Climate Resilient Initiative to scale out agro-advisories through Shamba Shape Up in Kenya, and in the World Bank-funded AICCRA-Zambia project through the [Munda Makeover TV show in Zambia](#).

These TV shows, along with UU's digital services, agribusiness acceleration (EOI outcome 3), and PABRA bean diversification innovations, have been further scaled out through two innovation delivery projects: (i) [AICCRA in Ethiopia, Kenya, and Zambia](#); and the USAID-funded [AID-I in Malawi, Tanzania, and Zambia](#).

The National Policies and Strategies Initiative has joined forces with UU to facilitate [Policy Dialogues](#) and to create an enabling environment for sustainable crop diversification and trade in ESA (EOI outcome 4). Numerous CGIAR Research Initiatives have collaborated with UU across various results, linking through the CGIAR-German Development Cooperation (GIZ) [scaling networking and learning event](#), the Ukama Ustawi Scaling Hub: a platform for enabling the scaling of agricultural innovations, and scaling readiness.

By showcasing the achievements of these collaborations, UU demonstrates the importance of interlinked initiatives in realizing the broader goals of the CGIAR 2030 Research and Innovation Strategy.

Section 7 Adaptive management

RECOMMENDATION	SUPPORTING RATIONALE
Amend Initiative TOC to match available funding	UU drafted updates to the TOC to match the reduction in funding (2022 funding was 44% of the proposal Budget; 2023 expected funding is 36% of the proposal Budget). As the Budget reduction took place during the planning phase, we were able to adjust accordingly. Specific adjustments include reducing the targets for EOI outcomes 3 and 4, and activities across Work Packages in Ethiopia (as a phase 1 focus country).
Inclusion of the International Potato Centre (CIP)	The CIP plays a crucial role in the diversification of food value chains. They have a stronghold in the region and their geographic focus overlaps with UU. Under the assumption that additional funds were available via the SDC, the Initiative design team recommends allocating CIP US\$200,000 to bring in CIP expertise to UU, initially focusing on scaling of orange-fleshed sweetpotato in Malawi with activities in WP1 and WP6.
Greater convening and integration role for UU as a Regional Integrative Initiative (RII)	As part of our role as an RII in ESA, UU is planning to invite all CGIAR Initiatives active in ESA to South Africa, to brainstorm how UU can create greater regional integration and scaling. WP6 has reallocated US\$40,000 seed funding to convene the discussions and follow-up work on conceptualization. In future years, we foresee it may require additional funding and even a dedicated Work Package, since integration and coordination is a considerable undertaking.
Scaling Hub adjustments	Briter Bridges was an effective partner to UU in 2022 and led delivery of two key reports for the Scaling Hub: (i) the agribusiness ecosystems within ESA for WP3; and (ii) the scaling landscape within ESA for WP6. Their contributions have been invaluable, and they have the capacity to contribute to the CFSA and Scaling Hub, both of which are key results for the respective Work Packages in 2023. We are proposing to add US\$50,000 from WP6 to Briter Bridges to build on this work in 2023 to develop a framework for mapping and assessing scaling partners, then applying it in at least one country in ESA.
Integration of Understanding and Enhancing Adoption of Conservation Agriculture in Smallholder Farming Systems of Southern Africa (ACASA)	ACASA applies social and scaling science to understand the biophysical, socioeconomic, institutional, and policy drivers and barriers to the adoption of CA technologies and practices in the same countries as UU and is led by the International Maize and Wheat Improvement Center (CIMMYT), the lead on UU's largest Work Package. As the RII, the integration of ACASA and Norad funding will lead to greater impact and EOI alignment. This is additional funding on top of the original allocation, amounting to an additional US\$748,916.73 for the International Institute of Tropical Agriculture (IITA) and US\$564,972.27 for CIMMYT.

RECOMMENDATION	SUPPORTING RATIONALE
Joint workplan with the Pan-Africa Bean Research Alliance (PABRA)	To increase Initiative alignment and CGIAR integration, UU is working toward more coherent and EOI-guided workplans. While PABRA was part of UU in 2022, the alignment of workplans and Budget will be improved in 2023. While PABRA was included in the 2023 Budget, the funding allocation severely affects the International Center for Tropical Agriculture (CIAT) and UU has applied for additional funds from the systems office.
Center accountability	The performance, involvement, capacity, and overspending of a few CGIAR Centers has been questionable, and this was raised during the pause and reflect process. It was resolved that very clear deliverables and timelines must be set by the Work Package leads for 2023, and Budgets will be amended in 2023 to reflect outstanding deliverables.
Changes to Center funding from October 2022 submission	Outlined below are the budgetary changes for 2023 based on the pause and reflect process, as well as donor inputs (additional funding from Norad, ACASA, and from the systems office for PABRA and CIP).

Section 8 Key result story



Munda Makeover — Zambia's first farming reality TV show by the national broadcaster — teaches climate-smart agriculture on ZNBC that 3 million people watch each week

Leveraging live TV as a powerful medium, *Munda Makeover* addresses the challenges faced by Zambian smallholder farmers, in terms of climate change, food security, and limited resources by disseminating knowledge, promoting climate resilience, and fostering collaboration among farmers, market networks, and agribusinesses to ensure sustainable food security.

The first reality TV show of its kind in Zambia, *Munda Makeover* premiered on the Zambia National Broadcast Corporation (ZNBC) in November 2022 to take on the Impact Areas of **Climate Adaptation and Mitigation**, and **Nutrition, Health, and Food Security**. The ground-breaking show offers solutions that are tailor-made for the

Farm improvement television show, *Munda Makeover*, breaks through the Zambian market, on the National ZNBC TV station with an estimated weekly viewership of 3 million. Photo credit: Agricomm

people of Zambia and their unrehearsed, real-life challenges across Zambia, which are then presented in each 26-minute-long episode.

The program is facilitated by **CGIAR Initiatives** and **AICCRA** and brings together the development, research, and commercial sectors to entertain and inform smallholders on CIS and CSA solutions and practices available to them. The first season was co-funded by the **International Water Management Institute (IWMI)** and the **Alliance of Bioversity International and CIAT** through the **CGIAR Initiatives on Climate Resilience (ClimBeR)** and **Ukama Ustawi**, among other partners, and produced by **Mediae**.

What further sets this “farm improvement show” apart is that it is largely unscripted. Smallholder farmers across Zambia share their problems, which exemplify the challenges of many.

The show is set in the fields of smallholder farmers to help scale out CIS and CSA. During each episode, the presenters and experts visit a family plot to demonstrate solutions to improve farming practices and make meaningful changes on the farm, as viewers watch on.

The broadcast runs parallel to the main growing season, beginning with issues around soil testing, seed selection, and planting, then moving to pest and disease management, crop management, all the way to harvesting, reducing post-harvest losses, storage, and markets. Issues around livestock management, financial inclusion, nutrition, and modern cooking solutions run throughout the entire

season. To improve farmer knowledge exchange and learning, group approaches and cooperatives are also featured.

Munda Makeover is modeled on *Shamba Shape Up*, East Africa's leading farm makeover program, which was first launched in Kenya over a decade ago. *Shamba Shape Up*, which is delivered in English and Swahili, presently draws over 8 million viewers weekly. The show's phenomenal growth demonstrates the vast appeal among its target audience. *Munda Makeover*'s expectation is to replicate *Shamba Shape Up* and draw wide appeal from farmers in Zambia, and target approximately 50% female audience members.

“The show is educational. Even without enough finances, you can still farm by following the shows' examples, such as manure-making process. We have learned a lot of good things.”

Grace Mwinga, Farmer – Chibombo, Zambia

References

1. Watch *Munda Makeover Series 1* on YouTube (ongoing).
2. *Munda Makeover* episodes, aired from Nov. 27, 2022, to Jan. 15, 2023. <https://hdl.handle.net/10568/129267>
3. Chilambe, P., Gichinga, P. and Girvetz, E. 2022. *Shamba Shape Up. Innovation Packages and Scaling Readiness (IPSR) Innovation Profile*. CGIAR, December 2022. <https://hdl.handle.net/10568/126423>

COVER PHOTO: A farmer inspecting her field of 4-row strip cropping while carrying her baby on her back. Photo credit: C. Thierfelder/CIMMYT



We would like to thank all funders who supported this research through their contributions to the **CGIAR Trust Fund**.

LINKS TO IMPACT AREAS

Primary Impact Area: Climate Adaptation and Mitigation



Other relevant Impact Area(s): Environmental Health and Biodiversity; Gender Equality, Youth, and Social Inclusion; Nutrition, Health, and Food Security; Poverty Reduction, Livelihoods, and Jobs



Which collective global targets for the relevant Impact Area(s) from the CGIAR 2030 Research and Innovation Strategy does the key result contribute to?

- Close the gender gap in rights to economic resources on, access to ownership of, and control over land and natural resources for more than 500 million women who work in food, land, and water systems.
- Equip 500 million small-scale producers to be more resilient to climate shocks, with climate adaptation solutions available through national innovation systems.
- End hunger for all and enable affordable healthy diets for the 3 billion people who do not currently have access to safe and nutritious food.
- Implement all national adaptation plans (NAPs) and nationally determined contributions (NDCs) to the Paris Agreement.
- Lift at least 500 million people living in rural areas above the extreme poverty line of US\$1.90 per day (2011 PPP).
- Maintain the genetic diversity of seeds, cultivated plants, and farmed and domesticated animals, and their related wild species, including through soundly managed genebanks at the national, regional, and international levels.
- Offer rewardable opportunities to 267 million young people who are not in employment, education, or training.

- Reduce by at least half the proportion of men, women, and children of all ages living in poverty in all its dimensions according to national definitions.
- Reduce cases of foodborne illness (600 million annually) and zoonotic disease (1 billion annually) by one third.
- Stay within planetary and regional environmental boundaries: consumptive water use in food production of less than 2,500 km³ per year (with a focus on the most stressed basins), zero net deforestation, nitrogen application of 90 Tg per year (with a redistribution toward low-input farming system) and increased use efficiency, and phosphorus application of 10 Tg per year.
- Turn agriculture and forest systems into a net sink for carbon by 2050, with emissions from agriculture decreasing by 1 Gt per year by 2030 and reaching a floor of 5 Gt per year by 2050.

GEOGRAPHIC SCOPE

Region: East and Southern Africa

Country: Zambia

KEY CONTRIBUTORS

Contributing Initiative(s): CGIAR Initiative on Climate Resilience

Contributing Center(s): IWMI

Contributing external partner(s): MEDIAE - Media for education and development; Bilateral initiatives – AICCRA

LINK TO CGIAR RESEARCH PROGRAMS

CGIAR Research Program on Climate Change, Agriculture and Food Security