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sustain/pro

Productive landscapes for inclusive growth in Tanzania and Mozambique

SUSTAIN Pro 2024 Annual Report

Norway

About IUCN

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The Manica Provincial Agency for Economic Development (ADEM) was established in November 2000 as one of Mozambique's first institutions dedicated to implementing Local Economic Development (LED) strategies at the provincial level. Rooted in the LED approach introduced by the Local Human Development Programme (UNOPS, 1998–2003), ADEM focuses on unlocking local potential to improve livelihoods, promote inclusive growth, and reduce poverty. Often referred to as "The Door to the Development of Manica," ADEM supports a wide range of initiatives along the Beira Corridor—from microfinance and small-scale irrigation to agro-processing, promotion of good and sustainable agriculture practices, producer organisation, systemic output market and capacity building of public institutions for strategic planning. The agency plays a central role in coordinating actors and investments to drive sustainable, locally owned economic development across the province.

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SUSTAIN Pro 2024 Annual Report

May 2025

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Abbreviations

ADEM	Manica Agency for Economic Development
AECF	Africa Enterprise Challenge Fund
AMCOS	Agricultural Marketing Cooperative Society
ARA Centro	Water Regional Agency – High Punguè Division
AWF	African Wildlife Foundation
BCR	Benefit-Cost Ratio
CCRO	Certificates of Customary Right of Occupancy
CEOrt	CEO Roundtable of Tanzania
CSA	Climate-Smart Agriculture
DANIDA	Danish International Development Agency
DCG	District Coordination Group
DPAP	Provincial Directorate of Agriculture and Fishing
DPDTA	Provincial Directorate of Territorial Development and Environment
DUATs	Direito de Uso e Aproveitamento da Terra (Mozambique land-use rights)
ETG	Export Trading Group
FFPO	Forest and Farm Producer Organisations
FRR	Financial Rate of Return
GCF	Green Climate Fund
IGG	Inclusive Green Growth
IFCU	Iringa Farmers' Cooperative Union
IIAM CZC	Mozambique's Institute of Agricultural Research - Centro Zonal Centro
ILM	Integrated Landscape Management
IPA	Important Plant Areas
IPM	Integrated Pest Management
ISPM-Manica	Manica High Polytechnic Institute
IUCN	International Union for Conservation of Nature
IWRM	Integrated Water Resource Management
KBAs	Key Biodiversity Areas
KSC	Kilombero Sugar Company
LHMI	Land Health Monitoring Index
MRV	Measurement, Reporting, and Verification
MSP	Multi-Stakeholder Partnership
MVIWATA	Farmer Apex Institution
NbS	Nature based Solutions

NDCs	Nationally Determined Contributions
NIBIO	Norwegian Institute of Bioeconomy Research
NMB	National Microfinance Bank plc (NMB Bank Tanzania)
NORAD	Norwegian Agency for Development Cooperation
NRM	Natural Resources Management
NTFP	Non-Timber Forest Products
PASS	Private Agriculture Sector Support Foundation
PES	Payment for Ecosystem Services
PGS	Participatory Guarantee System
PO-RALG	President's Office Regional Administration and Local Government
RAS	Regional Administrative Secretariat
RBWB	Rufiji Basin Water Board
RDF	Result Demonstration Field
ReGeCom	Network for Community-based Natural Resources Management
ROI	Return on Investment
SAFs	Agroforestry Systems
SAGCOT	Southern Agriculture Growth Corridor of Tanzania
SAT	Sustainable Agriculture Tanzania (field-training NGO)
SDAE	District Services of Economic Activities
SIDO	Small Industries Development Organisation
SRI	System of Rice Intensification
SUA	Sokoine University of Agriculture
SUSTAIN-Africa	Sustainability and Inclusion Strategy for Growth Corridors in Africa
SUSTAIN Eco	SUSTAIN Ecosystem stewardship to balance sustainability and growth
SUSTAIN Pro	SUSTAIN Productive Landscapes for Inclusive Growth
SUSTENTA	National Agriculture Programme in Mozambique
TARI	Tanzania Agricultural Research Institute
TBA	Tanzania Bankers Association
TIRDO	Tanzania Industrial Research and Development Organization
TOAM	Tanzania Organic Agriculture Movement
TAWA	Tanzania Wildlife Management Authority
UCAMA	Manica Small Farmers Union
VBAs	Village-Based Advisors
VLUM	Village Land Use Management
VLUP	Village Land Use Plan
VPO	Vice President Office
WUA	Water Users Association



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About SUSTAIN Pro



SUSTAIN-Africa was an IUCN-led initiative implemented from 2014 to 2020 in SAGCOT and the Zambezi Valley in Mozambique. Conceived as a multi-year initiative, SUSTAIN-Africa focused on catalysing climate-resilient development that balances economic growth with ecosystem stewardship and social prosperity. The first phase established a solid foundation of partnerships among businesses, government agencies, local communities, farmer groups, and others in the landscape to deliver on this vision. Building on these networks and the achievements of the initial phase, IUCN initiated a second phase of SUSTAIN-Africa through two complementary programmes: SUSTAIN Eco and SUSTAIN Pro—both underpinned by equity and inclusion and both striving to accelerate a shift from business-as-usual to development paradigms that build resilience in economies, people, and nature. While SUSTAIN Eco emphasises the need to protect and restore ecosystems to secure the services needed for sustainable livelihoods, including agricultural production, SUSTAIN Pro focuses on making agriculture more sustainable.



SUSTAIN Pro aims to support sustainable food systems and healthy productive landscapes in Mozambique and Tanzania. The programme has been designed as a 10-year initiative with an operational plan for the four years from 2022 to 2025. The delivery strategy encompasses: (i) upscaling solutions for sustainable agricultural production; (ii) restoring land health through multi-stakeholder partnerships, and (iii) investing in sustainable and inclusive value chains to drive systemic change. The programme will be implemented in SAGCOT and the Beira Agricultural Growth Corridor in Mozambique.



SUSTAIN Eco a sister programme to SUSTAIN Pro, aims to enable healthy ecosystems and prosperous communities in Tanzania by improving governance and rights, strengthening sustainable management practices and catalysing investment in the protection and restoration of biodiversity and ecosystems. The programme has been designed as a 10-year initiative with an operational plan from 2022 to 2026. The delivery strategy encompasses: (i) strengthening coordination amongst governance structures for sustainable and inclusive management of natural resources; (ii) integrating landscape management to improve ecosystem health and generating inclusive business and livelihood opportunities and (iii) investing in the protection and restoration of ecosystems and their services to strengthen climate resilience for people and ecosystems. The programme is being implemented in two landscapes in Tanzania, Sumbawanga and Kilombero. Sumbawanga landscape covers Tanganyika District, Mpimbwe District, Sumbawanga District, Nkasi District, Mpanda district, and Kilombero landscape covers Kilosa District, Mlimba district, Ifakara and part of Kilolo district.

Together, SUSTAIN Eco and Pro form the continuation of SUSTAIN-Africa, building on its successes and learning from the challenges that were encountered during the first five years of the programme. The geographical footprint and partnerships established in the first phase of SUSTAIN make up the lion's share of interventions in these two complementary programmes, ensuring continuity and aiming at long-term sustainability.



© SUSTAIN, farmer helping clear the fields for planting, Vanduzi district

Executive summary

SUSTAIN Pro continues to advance its mission supporting sustainable food systems and healthy productive landscapes across Mozambique and Tanzania. Focusing on capacitating smallholder farmers, enhancing multi-stakeholder partnerships (MSPs), and continuing to scale Nature-based Solutions (NbS) and Climate-Smart Agriculture (CSA) approaches across landscapes, while paving the way for long-term investment and policy integration.

Under Outcome 1, the programme expanded sustainable agricultural practices through farmer field schools with demo sites, NRM committee development, and technical partnerships. In Mozambique, 38 new demonstration fields and 22 tons of compost were produced across Vanduzi and Báruè, contributing to improved soil health and productivity. Training of extension officers and integration with gender and land rights initiatives helped embed sustainability at community level. In Tanzania, innovations such as mobile farm clinics and the System of Rice Intensification (SRI) model reached over 2,900 farmers, while partnerships with research institutions and cooperatives strengthened governance and extension services delivery.

Under Outcome 2, SUSTAIN Pro reinforced landscape partnerships and strengthened evidence-based decision-making. In Mozambique, the establishment of the Báruè District Coordination Group on NbS and a 25-member natural resource management committee responsible for the Cagole water spring restoration marked a significant step forward in ecosystem stewardship. Landscape assessments covering over 164,000 hectares identified ecological restoration priorities, while water quality and biodiversity monitoring efforts guided integrated natural resource management. Tanzania saw the operationalisation of its Land Health Monitoring Index (LHMI), piloted in Kilombero and Ihemi and embedded into the Soil Health Compact—a landmark agreement endorsed by over 60 stakeholders. Restoration efforts were implemented across 1,783 hectares, with strong collaboration from the Ministry of Agriculture and SAGCOT.

Under Outcome 3, the programme sharpened its focus on investment mobilisation and value chain sustainability. In both countries, market-ready business cases were developed for key and emerging value chains—including rice, soybean, maize, and horticulture—emphasising circular economy approaches and blended finance. Tanzania's collaboration with CEOrt led to the development of a Green Finance Campaign, while Mozambique designed a mixed grant scheme requiring 60% female participation. Across both landscapes in Tanzania, cooperatives strengthened by the My.COOP training and governance interventions are now better positioned to access markets and finance, advancing a new generation of resilient and inclusive agribusiness.

Overall, SUSTAIN Pro in 2024 demonstrated the power of integrated approaches: linking practice to policy, empowering communities, and embedding sustainability across systems. Lessons learned have informed the development of scalable solutions and strategic frameworks that will shape the programme's final year. As SUSTAIN Pro prepares for 2025—the final implementation year—efforts will focus on consolidating achievements, operationalising investment opportunities, and ensuring lasting impact through national policy influence and locally owned models for sustainability.

Lessons learned in 2024

Lesson 1. Early support for Multi-Stakeholder Partnerships (MSPs) drives Integrated Landscape Management (ILM) implementation: Multi-Stakeholder Partnerships (MSPs), need revitalisation, stronger leadership, and more consistent engagement to function as effective channels for scaling up Integrated Landscape Management (ILM). Clearer articulation of ILM priorities and showcasing results will be crucial to gain higher-level support and influence policy.

Lesson 2. Securing land tenure supports gender equality and farmer's autonomy: structural barriers continue to limit wider empowerment and land security, highlighting the need to continue combining awareness raising, legal literacy, and support services to ensure that both women and men can exercise secure tenure rights.



Lesson 3. Demonstration fields accelerate adoption of sustainable agricultural practices and NbS: adoption increased through demonstration plots, extension training, and field-level technical support. However, scale and consistency remain key limitations, suggesting that future efforts must carefully balance depth with scale and ensure sustained support for farmer uptake



Lesson 4. Diversified value chains are key to access markets and finance solutions: value chain development remains a linchpin for farmer resilience. While sustainable practices are increasingly adopted across the landscapes, market access continues to be a bottleneck. underlining further effort is needed to align producer capacity with offtake potential and catalyse blended finance through apex institutions.

Lesson 5. Building adaptive water governance is essential to manage climate and drought risks: droughts and rainfall variability affecting SUSTAIN Pro's activities reinforced the urgency of integrating water-focused Nature-based Solutions (NbS) and adaptive practices like rainwater harvesting and spring restoration into agricultural landscapes.

Lesson 6. Capacity building requires repetition and local anchoring: impactful capacity building hinges not only on quality but also on repetition, trust, and local relevance. Training alone is not sufficient. Continuous mentoring, feedback loops, and consistent engagement with district-level partners are essential for embedding change.

Lesson 7. Restoration success hinges on multi-Level buy-in: Community engagement drove restoration success in areas like Cagole, but sustaining impact will require alignment with district and national plans, formal documentation, and budget integration. Cross-sector collaboration remains crucial for maintaining ecological gains.

Lesson 8. Integrating programmes and sharpening knowledge-management & communication are key for long-term impact: stronger internal learning mechanisms, clearer roles for the Knowledge Hubs, and more systematic documentation of what works well (and what doesn't) are needed to scale impact. Learning must be embedded not only in the MEL system, but also in day-to-day decision-making by partners and stakeholders.

2024 Progress Highlights

SUSTAIN Pro: Resilience in Practice

(1) Scaling Solutions for Sustainable Agriculture in Mozambique:

SUSTAIN Pro continued to build momentum across its core areas of intervention, despite a period of political unrest linked to the national elections which temporarily delayed field activities—this will be further addressed in the section *"workplan adjustments and implementation constraints"*. SUSTAIN Pro's efforts in 2024 centred on reinforcing the systems and partnerships essential to long-term landscape resilience. These efforts were underpinned by close collaboration between government authorities, farmers' organisations, implementing partners, and civil society across the Manica Province.

The second meeting of the SUSTAIN Pro Steering Committee and Board were held early in the year to reflect on the progress of 2023 and to validate the direction of work for 2024. Members of the steering committee took this opportunity to state their commitments to contribute to SUSTAIN Pro goals, including the Manica Small Farmers Union (UCAMA), a long-standing actor in the region, reaffirming its commitment to sustainable agriculture and responsibility to support these practices within its membership and; Forum Terra confirming their role to help farmers secure land titles—recognising that land ownership provides not only legal protection but also the autonomy and confidence farmers need to invest in their land and adopt more sustainable practices.

A recommendation emerging from the Board was the need to strengthen the integration between agriculture and environmental sectors by involving members of Natural Resource Management Committees (NRMCs) in farmer training programmes.

The year also marked the launch of the District Coordination Group (DCG) for NbS in Báruè. The event brought together 45 diverse stakeholders, including traders, agrodealers, financial institutions, and representatives from other development initiatives, showing a growing appetite among local actors to shape investment-ready value chains rooted in sustainable production. AU Técnica, a national certification agency, expressed interest in supporting the formal recognition of local producers—an important step in improving market access and accountability.



> "The training has strengthened our approach to land management. By promoting organic inputs over chemicals, we're improving soil health and protecting the environment."
> *– Salva Alizandra, Extension Officer, SDAE Vanduzi*

To improve coherence and alignment in CSA practices across the landscape, SUSTAIN Pro led a training aimed at harmonising extension service offerings in the region. The training brought together 56 participants—18 public sector technicians (11 men and 7 women) and 38 producer leaders (26 men and 13 women)—many of whom are also engaged in programmes run by partners such as the World Food Programme, Buyer, SOS Children's Village, NCBA CLUSA, and others active in the Beira Corridor. Recognising that these officers often serve overlapping communities, the session helped to establish shared parameters, streamline messaging, and enhance the consistency of support provided to farmers. By encouraging a unified approach across multiple initiatives, the training strengthened local capacity to deliver more coordinated and effective change at the landscape level.

SUSTAIN Pro invested in targeted capacity-building to strengthen gender inclusion and land governance. A gender training session was delivered to 12 participants—comprising 4 officers from implementing partners and 8 district extension officers from Vanduzi and Báruè (3 women and 9 men). The session used real-world case studies and group work to build understanding and confidence in applying gender-sensitive approaches. Participants noted improved ability to recognise and address gender-related challenges in their day-to-day work, with several expressing a commitment to applying the lessons in community engagement. Suggestions for improvement included more time to unpack complex topics such as Gender-Based Violence and early marriage, as well as a request for regular refresher training opportunities. In parallel, 392 smallholder farmers (131 women and 261 men) were trained on gender equality and women's active role in agriculture and natural resource management.

A Training of Trainers (ToT) session on land tenure and legal procedures, was delivered to the same 12 officers attending the gender training. It focused on strengthening knowledge of legal frameworks and participatory governance processes, aiming to prepare participants to support community-level efforts on land rights beyond the lifetime of the programme.



> "The gender training opened our eyes to practical ways we can create more inclusive spaces, both at work and in our daily lives. The discussions were insightful, and we are ready to apply what we have learned to strengthen equality in our communities." – *Salva Lizandra M. Nhalungo, Focal Point, Vanduzi SDAE*



IUCN Mozambique, Barué district

Insights from the Field: Resilient Farming in the Face of Climate Stress

The 2023—2024 agricultural season presented tough conditions, with El Niño-induced drought, pest outbreaks, and heat stress severely impacting yields across Mozambique.

However, SUSTAIN Pro-supported farmers who adopted climate-smart agricultural practices consistently outperformed non-adopters across multiple crops. Soybeans and pigeon peas, in particular, proved resilient under stress, benefiting from soil fertility and moisture retention practices introduced through the programme.

Crop Yield Performance in the 2023–2024 Agricultural Season
(Impact Indicator G2(a) - Mozambique)

Crop	Baseline	Adopters (SUSTAIN Pro) Fields	Non-Adopters	Variance	Justification
Maize	3.0 t/ha	2.38 t/ha	2.1 t/ha	-0.62 t/ha	El Niño-induced drought
Soybeans	1.2 t/ha	1.68 t/ha	0.8 t/ha	+0.48 t/ha	Use of drought-resilient crop with uptake of conservation practices
Pigeon Peas	0.8 t/ha	2.07 t/ha	0.6 t/ha	+1.27 t/ha	
Green Beans	2.0 t/ha	1.99 t/ha	1.4 t/ha	-0.01 t/ha	Minimal drop due to Use of drought-resilient crop with uptake of climate-smart agricultural practices
Cabbage	60.0 t/ha	48.3 t/ha	37.2 t/ha	-11.7 t/ha	Highly water-dependent crop; vulnerable to heat and water scarcity

Beyond yields, farmers benefited from broader improvements in soil health and land management. The year saw the establishment of 38 Result Demonstration Fields (RDFs) and agroforestry plots. These fields supported over 1,200 farmers, of whom 254 (approximately 21%) were confirmed to have adopted soil erosion control and fertility practices into their regular routines. This adoption rate was verified through geo-referenced monitoring, photographic documentation, and feedback from farmer groups. In tandem, organic compost production—initiated in 2023—became operational in 2024. Units in Vanduzi and Báruè produced a total of 22 tons of compost (12t and 10t respectively), strengthening the agroecological input chain and supporting sustainable production.



IUCN Mozambique, farmer making organic pesticide, Vanduzi district

Scientific partnerships underpinned these efforts through the delivery of key analytical studies. The Biodiversity and Restoration Opportunity Assessment, conducted between March and October 2024, identified 164,645 hectares of high-priority restoration zones across the two districts, with tailored recommendations for mountainous forest mosaics, ecological corridors, and degraded farmlands. Based on these recommendations, targeted restoration activities were initiated.

At the community level, a new Natural Resource Management Committee was established to oversee restoration efforts at the Cagole water spring. Although not yet formally registered, the 25-member group (8 women and 17 men) will be responsible for seedling monitoring and site conservation. The programme is also exploring a payment–for–ecosystem services (PES) scheme and private sector partnerships to ensure long-term sustainability.

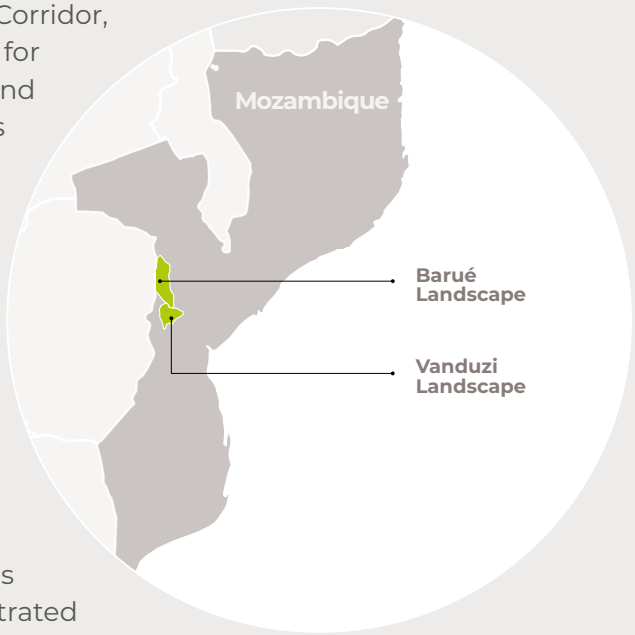
Peer learning was a core feature of the year: Eighteen lead farmers (5 women and 13 men) took part in an exchange visit to Institute of Agricultural Research of Mozambique - Centro Zonal Centro (IIAM CZC) demonstration plots, where they committed to promoting agroforestry practices on their own land and within their communities. IIAM will continue to support follow-up training and monitoring.



> "Tree planting is a vital step towards a better future. It improves air quality, regulates climate, protects soil, and offers economic opportunities. To restore our ecosystems and secure livelihoods, all stakeholders must work together in shared responsibility." – *Davide Franque, District Administrator of Báruè, during the Cagole water spring restoration ceremony.*

Vanduzi and Báruè Districts Summary

Vanduzi and Báruè districts, located within the Beira Corridor, have been selected as primary implementation areas for SUSTAIN Pro due to their high agricultural potential and strategic importance for investment in Mozambique's agricultural sector. Challenges in these districts include limited use of improved seeds, inadequate coverage of agricultural extension services, and a rapidly growing population. Key crops in the region include maize, which is a staple for most farmers; soy, essential for the poultry industry due to its high protein content and potential for oil production; and horticulture, which offers the highest financial returns but faces significant challenges related to processing and market access. The selection of these districts was reinforced by findings from a baseline assessment and observations made during a field trip, where cooperatives demonstrated these dynamics.





IUCN Mozambique, a farmer walking along a SUSTAIN Pro adopter field

Mozambique in numbers

Organic Compost Produced	**22 tons**
Demonstration Fields & Agroforestry plots established	**38**
Farmers Trained	**1,200 trained** **21% adopted practices**
Extension Officers & Leaders Trained	**56 (20 women, 37 men)**
Gender Equality Training	**12 project officers (3 women, 9 men) and 392 smallholder farmers (131 women, 261 men)**
(ToT) session on land tenure	**12 extension officers** **(3 women, 9 men)**
Newly formed NRMC	**25 members** **(8 women, 17 men)**
Land marked for restoration	**1.2 ha targeted for restoration (almost the size of two football fields)**
Exchange Visits	**1 visit** **18 lead farmers engaged** **(5 women and 13 men)**

(2) Advancing Land Health and Inclusive Landscape Governance in Tanzania:

In its third year of implementation, SUSTAIN Pro in Tanzania focused on scaling priority interventions and expanding multi-stakeholder partnerships to strengthen land health, agroecosystem productivity, and smallholder farmer resilience. Through targeted partnerships at both landscape and national levels, the programme made notable advances in farmer outreach, improved delivery of extension services, and enhanced landscape governance in Kilombero and Ihemi.

A key achievement in 2024 was the operationalisation of the Land Health Monitoring Index (LHMI), which had been introduced in 2023. The LHMI provides an evidence-based approach for assessing land health across three interconnected pillars—soil, water, and resilience—based on 19 priority indicators. These indicators were prioritised using a strength-based methodology that considered feasibility, scalability, and relevance to SUSTAIN's integrated landscape approach.

In 2024, the LHMI was piloted in both **Ihemi** and **Kilombero** landscapes. While data collection revealed gaps that will need to be addressed through follow-up analysis, the framework has already begun to shape local and national dialogue. Importantly, the approach assesses each indicator independently to allow for targeted analysis and action across the diverse ecological and agricultural systems.



> "This agreement is a crucial step toward achieving sustainable development goals, we need collective efforts to safeguard land health for the benefit of future generations." – *Anthony Mhagama, SUSTAIN Pro Project Manager*



IUCN Tanzania, water in a rice paddy, Kilombero landscape

The LMHI work culminated in the Soil Health Compact, launched during a national workshop in Iringa co-convened with SAGCOT. The workshop brought together over 60 representatives from public, private, and civil society sectors to align on a shared vision for land health. The compact formalised joint commitments to policy harmonisation, coordinated investment, and enhanced capacity-building. Crucially, it also endorsed the integration of the LHMI into national planning, enforcement, and monitoring systems—emphasising the tool's relevance beyond the lifetime of the programme.

At the institutional level, SUSTAIN also advanced its collaboration with the Ministry of Agriculture, working towards the finalisation of a five-year Memorandum of Understanding (MoU). Once concluded, the MoU will provide a formal platform to embed NbS, ILM, and land health principles into the Ministry's strategies and service delivery models. This step is critical to ensuring national ownership of SUSTAIN Pro's tested solutions and unlocking pathways for scale across Tanzania's agricultural corridors.



> "The Mkula Irrigation Scheme, established in 1978 and now supporting over 700 smallholder farmers, is a powerful reminder that lasting impact comes from strengthening what already exists. That's why SUSTAIN Pro is committed to working with local structures and supporting them to thrive" – *Maria Ana Borges, SUSTAIN Task Manager*

SUSTAIN Pro supported grassroots mobilisation to improve inclusive governance in agricultural cooperatives. Ahead of the sugarcane AMCOS elections in Kilombero, the programme joined forces with the Ifakara Town Council, Kilombero Sugar Company, and local cooperative officers to raise awareness around electoral procedures, inclusion, and leadership. Awareness sessions were conducted in seven villages, reaching 786 participants (152 women, 634 men). Information was shared through radio broadcasts, public noticeboards, and mobile amplifiers, ensuring visibility even among hard-to-reach groups.

The outcome: the proportion of women on AMCOS boards rose from below **25%** to **42.9%**, while **22%** of elected leaders were youth. These gains reflect the power of targeted engagement in shifting long-standing participation gaps in community leadership.



> "As a sugarcane farmer and newly elected secretary of Mkula AMCOS, I finally have a seat at the table. Forming women and youth councils gave us a voice, and now we're shaping our future, not just following it." – *Christina Mabila, secretary Mkula AMCOS.*

Scaling What Works: Demonstration, Delivery, and Innovation

On the ground, SUSTAIN Pro continued to scale practical, climate-resilient solutions tailored to the needs of smallholder farmers in Kilombero and Ihemi:

- In collaboration with TARI, AMCOS groups, and local government authorities, the programme promoted the System of Rice Intensification (SRI) in Njage (Mlimba DC), Itete (Malinyi DC), and Mkula (Ifakara TC). A total of 256 farmers (106 women)

were trained, with 15 demonstration sites established to encourage adoption and field-based learning.

- An innovative mobile farm clinic model—the first of its kind in Tanzania—was piloted in Kilombero to enhance farmer access to extension services. Preceded by the training of 40 extension officers (12 women) in agronomy, soil management, and integrated pest management, the clinics reached 275 farmers (62 women) with one-on-one support. Farmers brought samples of soil, pests, and crops to be diagnosed and received tailored agronomic advice from both national experts (TARI) and trained village extension agents.

- To build more responsive and market-ready cooperatives, SUSTAIN Pro partnered with AGRITERRA to deliver the My.COOP (Managing your agricultural cooperative) capacity-building package to 24 lead farmers from four cooperatives representing over 2,000 members. The six-month process included financial and governance "health checks", classroom-based training, on-site coaching, and targeted modules on input access and cooperative marketing.

Crop Yield Performance in the 2023–2024 Agricultural Season

(Impact Indicator G2(a) - Tanzania)

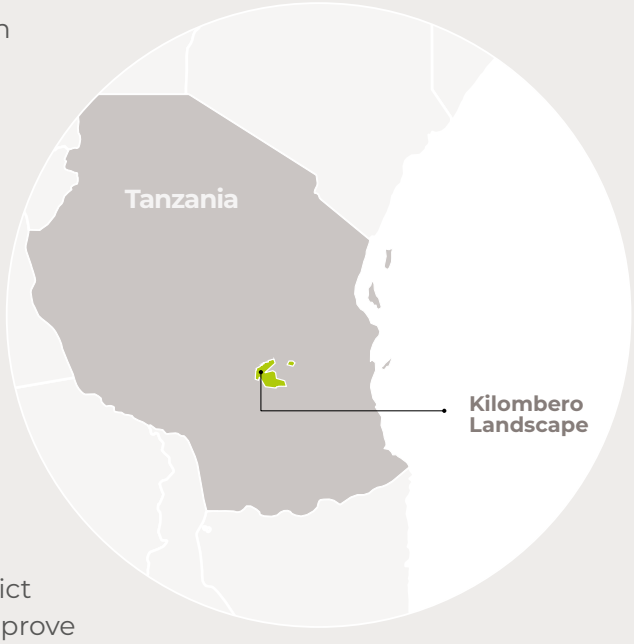
Crop	2022/2023 cropping season (the baseline)	Adopters (SUSTAIN Pro) Fields	Non-Adopters	Variance	Justification
Rice	3.287 t/ha	3.58 t/ha	3.454 t/ha	+0.23 t/ha	All three value chains presented a positive variance for adopters of SUSTAIN approaches, farmers that engaged in crop rotation, mixed farming, mulching had positive results.
Sunflower	0.968 t/ha	1.316 t/ha	0.956 t/ha	+0.35 t/ha	
Soybean	0.606 t/ha	1.202 t/ha	0.938 t/ha	+0.59 t/ha	

Collaboration with SUSTAIN Eco

A major milestone in 2024 was the finalisation of a Landscape NbS Strategy for the Kilombero Valley, developed through a joint process with SUSTAIN Eco. The strategy was co-created by stakeholders from agriculture, forestry, water, and conservation sectors and reflects a shared vision for locally adapted, scalable solutions to land degradation and climate risk. Developed through multi-sectoral consultations, the strategy identifies priority interventions across key systems—food, water, forests, and protected areas—and aligns these with broader development and biodiversity goals. The document now serves as a locally owned roadmap for landscape restoration, investment, and collaborative governance going forward.

Kilombero Landscape Summary

The Kilombero Valley, enclosed by major conservation areas including the Selous Game Reserve and Udzungwa Mountains, is a fertile region known for its agricultural productivity and biodiversity. The landscape supports a range of ecosystems and wildlife, including a significant portion of the world's Puku antelope population. The Kilombero Valley Floodplain is one of the largest wetlands in Africa and a designated Ramsar Site due to its importance as a freshwater ecosystem. However, Kilombero faces challenges from agricultural expansion and land use changes, leading to habitat degradation and water management issues. Efforts are underway to implement climate-smart agricultural practices (mainly in the Morogoro Region, encompassing the district of Kilosa, the District Council of Mlimba, and Ifakara Town Council), and improve governance and resource management to enhance local and downstream ecosystem health.

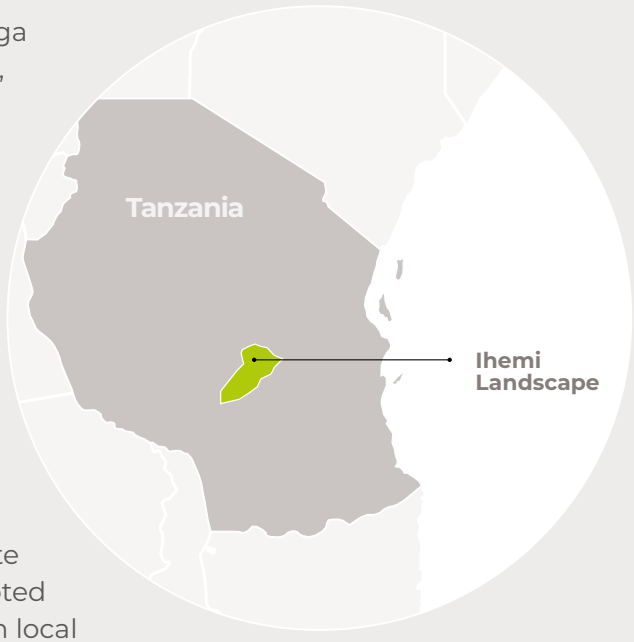




IUCN Tanzania, farmer walking in a rice field, Kilombero landscape

Ihemi Landscape Summary

The Ihemi landscape spans six districts including Iringa Municipality, and the District Councils of Iringa, Kilolo, Mufindi, Wanging'ombe, and Njombe, featuring diverse land uses such as agriculture, forestry, urbanization, and industrialization. The region is experiencing a surge in land demand for agricultural expansion, notably in tree planting for timber and avocado cultivation—known as the "avocado rush." Soybean, identified as a strategic crop in Ihemi, supports large-scale off-takers like Silverlands, which, along with other aggregators, are developing outgrower schemes that enhance sustainable and inclusive agricultural practices. These schemes capitalize on the benefits of soy for enhancing livelihoods and bolstering climate resilience. Additionally, sunflower is also being promoted for its drought resistance and the growing demand in local and regional markets, positioning it as a crop beneficial for economically disadvantaged farmers.





IUCN Tanzania, Kilombero landscape

Tanzania in numbers

Total smallholder farmers reached in 2024	**2,900 individuals (30% women) in Ihemi and Kilombero**
System of Rice Intensification (SRI)	**256 farmers trained (106 women, 150 men); 15 demo plots established**
Mobile Farm Clinic	**275 farmers reached (62 women, 213 men); 40 extension officers trained (12 women, 28 men)**
My.COOP Training	**24 lead farmers from 4 cooperatives (serving >2,000 farmers)**
AMCOS Awareness Campaign Reach	**786 participants (152 women, 634 men) across 7 cooperatives**
Change in Cooperative Leadership Composition	**Percentage of women in leadership positions increased from 25% to 43% and 22% of elected leadership were youth**
Land Health Monitoring Index (LHMI)	**Piloted in 2 landscapes (Ihemi and Kilombero); 19 indicators tested**
Landscape NbS Strategy	**1 developed in Kilombero through multistakeholder consultations – jointly with SUSTAIN Eco**
Land Health Compacts	**1 compact signed 60+ stakeholders across public, private & civil society sectors**
Land marked for restoration under VLUPs	**~1,783 hectares including degraded areas in Iringa, Kilolo, Mlimba, Malinyi, and Kilombero.**

(3) Building the Business Case for Sustainable Agriculture

Across Tanzania and Mozambique, farmers, cooperatives, and agribusinesses face shared structural challenges: limited access to finance, insufficient investment readiness, and market volatility remain key barriers to scaling sustainable agriculture. Recognising these gaps, SUSTAIN Pro focused its 2024 efforts on advancing pathways to unlock investment, build financial literacy, and strengthen market linkages.

Working across both Tanzania and Mozambique, SUSTAIN Pro initiated work focused on building bankable business cases and policy pathways to unlock finance for climate-smart agriculture (CSA), Nature-based Solutions (NbS), and integrated landscape management (ILM). The analysis focused on existing and emerging value chains across both countries: in Mozambique, maize, soybeans, horticulture, and Afforestation, Reforestation, and Revegetation (ARR) projects were assessed for commercial viability and environmental resilience in the Báruè and Vanduzi districts. In Tanzania, the work addressed rice, sugarcane, maize and beekeeping. The goal was to identify where productivity and sustainability come together, and to understand where and how smallholder farmers, cooperatives, and agro-enterprises can attract and manage sustainable finance. This work identified a number of investable opportunities that blend economic potential with positive social and environmental returns. These will be further explored and mobilised during 2025 and beyond this phase of the programme.

In parallel, SUSTAIN Pro and the CEO Roundtable of Tanzania (CEOrt) jointly prepared the launch of the Green Finance Campaign—an initiative designed to engage the private sector in aligning business practices with climate and sustainability goals. The campaign will officially kick off in 2025 and continue to the end of the year. A series of practical Green Finance guides will be published as part of this effort, introducing businesses to key concepts, benefits, and aiming to build momentum for the low-carbon transition.

In Mozambique, SUSTAIN Pro designed a blended financing scheme to support sustainable agriculture and inclusive business



IUCN Tanzania, farmer uploading rice into a van, Kilombero landscape

models, with the launch planned for 2025. The mechanism combines grants, credit, and community funds to support cooperatives with proven capacity in technical assistance, production, and commercialisation. Eligibility criteria require a 20% co-investment and at least 60% female membership. The scheme has been designed to align with international environmental and financial safeguards, including IFC Performance Standards, Green Loan Principles, and Agrifund criteria. Once operational, it is expected to strengthen local biodiversity, improve ecosystem resilience, and create new economic opportunities for farmers.

Together, these efforts reflect a strategic evolution in the programme as SUSTAIN Pro enters the final year of this current phase, the foundations are now in place to explore blended finance models, support grant schemes, and test market-based incentives across all landscapes. What emerges is a clearer vision—shared by partners across sectors—that investing in nature and people is not only viable, but vital to securing enhanced resilience in nature, people, and economies.



© SUSTAIN, yarn to set the field boundary, Kilombero landscape

Setting the scene: Progress in year 1 and 2 (2022–2023)

Before diving into the achievements of 2024, this section summarises the progress made during the first two years of SUSTAIN Pro implementation. The period between 2022 and 2023 focused on establishing the programme's operational framework, advancing multi-stakeholder engagement, and initiating field-level interventions in both Tanzania and Mozambique.

Year 1: Laying the Groundwork

The inception phase in 2022 was marked by the selection of programme landscapes in both countries, guided by a baseline assessment and validated through national and local stakeholder consultations. The selected landscapes—Kilombero and Ihemi in Tanzania, and Vanduzi—Báruè in Mozambique—represent areas with significant environmental and socio-economic pressures, but also of transformative opportunity for Nature-based Solutions (NbS), inclusive green growth, and integrated landscape management (ILM).

In Tanzania, the first year focused on engaging key stakeholders across government (e.g., SAGCOT, VPO, and district councils), academia (e.g., SUA, TARI Ifakara Centre), and the private sector (e.g., KSC, CEOrt). Collaborative events such as the National Farmers' Exhibitions (Nanenane) and Sugarcane Farmers' Day served as key opportunities to engage directly with beneficiaries. In parallel, early activities focused on strengthening governance institutions and processes at the local level. This included initiating partnerships with and delivering training to VLUM Committees, AMCOS, and FFPOs, to enable inclusive and effective resource governance. Field-level interventions were also initiated, focusing on priority value chains such as sunflower, soy, rice, and sugarcane. These early actions helped establish an enabling environment for the programme's integrated landscape management approach.

In Mozambique, efforts during the first year centred on onboarding the Manica Agency for Economic Development (ADEM) as a key implementing partner under Outcome 1. ADEM facilitated engagements with farmers, SDAE, and community leaders to build awareness and trust around CSA approaches. Exploratory work in 2022 included initial trainings and site visits to identify early adopters of CSA practices. In tandem, the Knowledge Hub model was introduced as a central platform for coordination and learning. These physical hubs are now positioned to support the future dissemination of NbS, practical demonstrations, and stakeholder dialogue.

More detailed context on landscape selection and their characteristics is available in the SUSTAIN Pro Inception Report and Baseline Assessment documents for Tanzania and Mozambique.

Year 2: Scaling Up and Strengthening Integration

In 2023, SUSTAIN Pro transitioned to structured implementation across its priority landscapes. Field-level interventions were scaled up, and progress was made in aligning programme activities with national priorities in both Tanzania and Mozambique. The focus was on strengthening landscape governance, piloting sustainable agricultural practices, enhancing land tenure security, and putting in place the structures for long-term land health monitoring and ecosystem restoration.

In Tanzania, restoration efforts gained momentum, with sites earmarked for rehabilitation through public and private sector collaboration. Demonstration plots were established to showcase climate-smart agriculture and agroecological practices, while technical

support and training reached farmers and landscape actors across multiple districts. Governance mechanisms were strengthened through the development of Village Land Use Plans (VLUPs) and the issuing of Certificates of Customary Rights of Occupancy (CCROs), particularly benefiting women and youth. In parallel, the land health monitoring framework was initiated through baseline assessments and the design of a tailored methodology to track soil, water, and resilience indicators—offering a structured path to link landscape-level action with national environmental commitments.

Institutional partnerships remained central to SUSTAIN's approach. A new Memorandum of Understanding with the CEOrt was signed, aiming to embed sustainable financial principles and biodiversity within private sector operations. Meanwhile, continued support to FFPOs strengthened organisational capacity, competitiveness, and inclusion.

In Mozambique, the programme progressed into full-scale implementation. Result Demonstration Fields (RDFs) were established across the Vanduzi and Báruè districts, engaging farmers in CSA practices such as composting and intercropping. These efforts were supported by district-level engagement with SDAE and community leaders, and by partnerships with national institutions including IIAM, BIOAGRI, and Solidaridad. The development of compost production units and targeted training events further encouraged adoption of sustainable practices. Moreover, knowledge Hubs played an increasingly central role, facilitating training, information exchange, and the introduction of NbS tailored to local agro-ecological conditions. Biodiversity and restoration assessments were initiated, positioning the programme to expand and deepen its ecosystem-based interventions in the coming year.

More detailed context on year 2 activities in Tanzania and Mozambique is available in SUSTAIN Pro 2023 Annual Report.



IUCN Mozambique, farmers working in a field in Vanduzi district

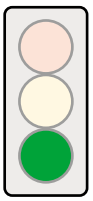
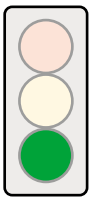


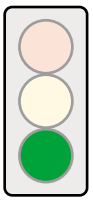
IUCN Mozambique, farmers walking back home, Vanduzi district

Progress towards outcome implementation

Outcome 1 – Solutions for sustainable agricultural production are scaled up

Outcome 1 summary: This outcome focuses on empowering stakeholders to embark on a change journey that strikes an optimal balance between economic, environmental, and social trade-offs. Emphasis within Outcome 1 is on building coherence between farm-level interventions and governance structures for land and water, i.e., disseminating successful on-farm solutions that have the potential for replication and scale-up and addressing the institutional barriers preventing this from happening.

Output		Summary deliverables	Progress
1.1	Sustainable and productive agricultural solutions are disseminated	• In Mozambique, SUSTAIN Pro established 8 new crop demonstration plots for cabbage and pigeon pea, setup 38 demonstration fields & agroforestry plots, and increased compost production to 22 tons (12t in Vanduzi, 10t in Báruè). Also, maintained engagement with KOZMOZ to explore technical collaboration and capacity support on agroforestry methods. • In Tanzania, SUSTAIN Pro disseminated sustainable agriculture solutions via national events and district-level engagements, reaching over 2,900 farmers (30% women) across Ihemi and Kilombero landscapes. Through continued engagement with TARI, NIBIO, and KSC delivered training on sustainable crop production benefitting 275 farmers of which 62 are women.	
1.2	Governance institutions and processes are strengthened to build an enabling environment	• In Mozambique, advanced institutional capacity on land rights and gender in the landscapes through targeted training for 12 project officers (3 women, 9 men) and 392 smallholder farmers (131 women, 261 men) covering legal frameworks, participatory governance, and gender-sensitive planning promoting inclusion in decision-making at community level. • In Tanzania, strengthened governance and leadership in 7 sugarcane AMCOS through a comprehensive awareness campaign and elections, resulting in a more inclusive board composition. In parallel, three additional FFPO governing boards were strengthened bringing the total to seven across both landscapes.	

1.3	Market-based approaches and incentives help transition to sustainable agricultural systems	• In Mozambique, developed business plans for two compost production units and linked producers to 11 potential maize buyers (4 in Vanduzi, 7 in Báruè) with an expressed interest in purchasing up to 200 tons. Also, SUSTAIN Pro advanced market access through supporting producer registration on the Kugulissa digital platform, aimed at improving visibility and competitiveness of smallholder products. • In Tanzania, strengthened four farmer cooperatives (serving over 2,000 smallholders) through the My.COOP capacity-building programme, implemented in collaboration with AGRITERRA, with training focused on governance, financial health, and service delivery in input supply and marketing.	

Mozambique

In 2024, SUSTAIN Pro made progress in scaling up sustainable agricultural practices, strengthening local governance, and improving market access for smallholder farmers in Vanduzi and Báruè districts. The programme focused on embedding Nature-based Solutions (NbS) and Climate-Smart Agriculture (CSA) approaches into the landscape, while also reinforcing the systems that enable inclusive and resilient agricultural growth.

To enhance productivity and promote CSA, SUSTAIN Pro supported the establishment of 8 new crop demonstration plots for cabbage and pigeon pea during the second agrarian season, alongside 38 demonstration fields & agroforestry plots across the two districts. Together, these fields and plots — covering a total of 3.8 hectares and involving 2,500 seedlings — were managed by 38 lead farmers (26 men, 13 women; 12 in Vanduzi, 26 in Báruè) who integrated a diverse range of fruit trees and indigenous species—such as avocado, moringa, mango, panga panga, and chanfuta. Organic compost production also increased from 16 to 22 tons, demonstrating growing farmer interest and investment in soil health *(see Box 1 documenting farmer experience)*.

These interventions were complemented by a training opportunity that brought together 56 participants—18 public sector technicians (11 men, 7 women) and 38 producer leaders (26 men, 13 women)—to ensure unified messaging and monitoring across multiple programmes led by international development organisations in the Beira corridor (e.g., WFP, Buyer, SOS Children's Village, and NCBA CLUSA).

The adoption of sustainable land management practices continued to grow, with 38 demonstration fields and agroforestry plots supporting the transfer of knowledge and inputs. Out of the 1200 trained farmers, approximately 21% (254 farmers) are actively integrating erosion control and fertility techniques into their regular farming routines. Success was monitored through geo-referenced plots, photographic evidence, and participatory farmer feedback, emphasising the importance of ongoing technical assistance and community-based learning networks.

In parallel, targeted training efforts focused on governance, gender, and legal empowerment. A total of 12 officers from implementing partners and local government (3 women, 9 men) were trained on gender-responsive planning, monitoring, and reporting, while also participating in a Training of Trainers (ToT) session on land tenure rights and legal procedures. These trainings laid the groundwork for broader farmer outreach, with 392 smallholders participating in gender equality sessions focused on the benefits of inclusion and women's leadership in agriculture and natural resource management *(See Box 9 for more details on the training)*.

The programme also supported smallholder market integration through business plan development for compost units, registration of producers on the Kugulissa market access platform, and initial linkages with 11 potential maize buyers across Vanduzi and Báruè. This work aims to improve the visibility and

competitiveness of sustainably produced goods and set the stage for more inclusive local value chains *(see Box 2 for more information on the Kugulissa platform)*.

Looking ahead, Mozambique's interventions under Outcome 1 will increasingly combine sustainable agriculture, institutional strengthening, and improved service delivery. These efforts will continue to build momentum through local coordination structures such as SDAE and strategic partnerships, including with technical experts like KOZMOZ, ensuring long-term resilience of agroecosystems and farming communities.

Box 1. How climate-smart agriculture is changing the way to farm in Manica Province

As part of SUSTAIN Pro's work to promote Climate-Smart Agriculture (CSA), organic compost production has emerged as both a practical technique and a symbol of transformation at the farmer level. In 2024, compost output rose from 16 to 22 tons, with units in Vanduzi and Báruè increasingly managed by the farmers themselves. Beyond its agronomic benefits—such as improved soil structure, nutrient retention, and moisture regulation—composting has become an entry point for community dialogue on ecosystem stewardship and self-reliance.

To document this shift, a series of short videos were produced in partnership with farmers, showcasing their day-to-day experience and what the practice means to them. In their own words, farmers explain how composting has improved their productivity, reduced input costs, and increased resilience to climate variability.

Watch:

- **Benefits of Environmentally Sustainable Production**
- **Benefits of Using Techniques from the SUSTAIN Pro Project**
- **Pesticide Manufacturing Process**
- **Role of the Extension Agents in the SUSTAIN Pro Project**

These audiovisual materials not only amplify local voices but also serve as powerful tools for replication, helping other farmers, policymakers, and partners to better understand the tangible impacts of CSA. The videos are being used in field training sessions, shared with institutional partners, and disseminated through digital platforms to enhance learning and visibility.



IUCN Mozambique, farmer making organic pesticide, Vanduzi district

"Chemical fertilisers make crops grow quickly but degrade the soil. In contrast, organic fertilisers release nutrients slowly but improve soil health." – Manuel Joáo, Production Supervisor at 7 de Abril 2 Association.

Box 2. Spotlight on the Kugulissa Platform: Enabling market access through digital innovation

To enhance smallholder competitiveness and strengthen local value chains, SUSTAIN Pro is supporting the uptake of *Kugulissa*—a web-based, SMS-enabled platform that shares market and extension information in rural Mozambique. Developed as a response to the information asymmetry faced by producers, the platform connects farmers, Village-Based Advisors (VBAs), input providers, and buyers by providing real-time data on product demand, pricing, and availability straight to any mobile line.

In 2024, SUSTAIN Pro facilitated the registration of producers from Vanduzi and Báruè on the platform and supported linkages with 11 potential maize buyers interested in sourcing from project-supported communities. As a complement to business planning and compost unit development, Kugulissa has the potential to amplify visibility for sustainably produced goods and contribute to more inclusive and transparent local value chains.

However, the platform still faces practical challenges: Not all VBAs and farmers have smartphones, and those trained sometimes lost access when phones were damaged or stolen. VBAs also reported difficulty registering large numbers of farmers, which limited platform uptake. Despite these barriers, early users—including input providers and off-takers—acknowledged the platform's potential to streamline transactions and improve price transparency. Going forward, efforts will focus on scaling farmer registrations and exploring mechanisms to reduce dependency on intermediaries so that farmers themselves become direct users of the tool.

By supporting platforms like Kugulissa, SUSTAIN Pro aims to close the information gap in rural markets, boost farmer bargaining power, and drive greater inclusion in sustainable value chains.



Ala Al Dwairi_Farmer standing next to an organic compost unit in Báruè

> "Kugulissa sends bulk SMS to every registered farmer, off-taker or aggregator, telling them *who* is buying *what* crop, at *which* price and *where*. With that information in hand, farmers decide when and where to sell—or even post their own offers for buyers to see. It cuts price speculation and makes the whole market more transparent." — *Manuel Queiroz, ADEM Executive Director.*

Source: AGRA (2024) VBA Phase 3 evaluation report: assessing digital and market linkage platforms in Mozambique. Nairobi: Alliance for a Green Revolution in Africa (AGRA).

Tanzania

SUSTAIN Pro in Tanzania advanced its work across the Ihemi and Kilombero landscapes by scaling climate-smart agriculture (CSA), strengthening farmer institutions, and deepening partnerships for inclusive and sustainable food systems. With an outreach of 2,900 farmers (30% women), the programme combined community-level interventions with national engagement, offering a practical model to inform future policy.

Farmer training and demonstration efforts continued to drive the uptake of CSA practices. In collaboration with TARI, NIBIO, and local authorities, the programme promoted System for Rice Intensification (SRI) methods, reaching 256 farmers (106 women) across Njage, Itete, and Mkula villages. Fifteen demonstration plots were established in Itete to support peer learning and field application. Alongside rice, sugarcane value chains received technical support through a partnership with Kilombero Sugar Company (KSC), the National Sugar Institute (NSI), and local extension officers. Farmers were introduced to sustainable production techniques, including treated seed use, pest control, weed management, and soil health practices. These efforts were sustained by participation in national events such as Nanenane and Kilombero exhibitions, which served as platforms for dissemination and engagement.

A key initiative in 2024 was the pilot of Tanzania's first mobile "Farm Clinic" extension model. Developed with TARI, the clinics served 275 farmers (62 women) in Kilombero with tailored guidance on crop health, soil fertility, and pest management. The clinics followed a structured model—training extension officers (40 total, 12 of which are women), diagnosing on-site issues, and creating follow-up mechanisms for ongoing support *(see Box 3 for more information on the Farm Clinic model)*.



IUCN Tanzania, rice field, Kilombero landscape

Box 3. Mobile Farm Clinics: AgriCare at your doorstep

SUSTAIN Pro, in collaboration with the Tanzania Agricultural Research Institute (TARI), introduced Tanzania's first mobile "Farm Clinic" extension model in the Kilombero landscape. This innovative approach aimed to enhance smallholder farmers' resilience to climate-related production challenges and improve access to extension services.

Key Components of the Farm Clinic Model:

1. Training of Extension Officers: A total of 40 extension officers (12 women) received training in agronomic practices, soil management, and integrated pest management (IPM).
2. Mobile Clinics: The trained officers operated mobile clinics, reaching remote farming communities.
3. Farmer Engagement: Approximately 275 farmers (62 women) participated in the clinics, receiving tailored advice on climate-smart agricultural practices, crop disease management, and soil health.
4. Follow-up Support: Extension officers conducted farm visits for issues requiring additional assistance, ensuring continuous support beyond the initial clinic sessions.

This model not only provided immediate technical assistance but also empowered local extension officers with updated knowledge and tools to support farmers sustainably.

Read More:

Kilombero's extension officers equipped with agronomy skills
Kilombero extension workers trained to scale good management practices for sugarcane through farm clinic



IUCN Tanzania, farmers learning about SRI in Kilombero landscape

Institutional capacity-building remained central to the programme's approach. Three additional FFPO governing boards were strengthened in 2024—Magulilwa, Lupembe-Lwasenga, and Katurukila—bringing the total to seven. The "My.COOP" training programme, implemented with AGRITERRA, supported 24 lead farmers (13 men, 11 women) from four cooperatives representing over 2,000 members. This six-month capacity development package focused on governance, service delivery, and marketing, and included financial and organisational health checks *(see Box 4 for more on My.COOP and market-based incentives)*.

At the landscape and policy levels, SUSTAIN Pro moved closer to finalising a formal five-year Memorandum of Understanding (MoU) with the Ministry of Agriculture. This framework is expected to integrate tested NbS and sustainable agriculture practices into national systems, institutionalising the work done under SUSTAIN around land health. Engagement with existing partners such as SAGCOT, NLUPC, Rufiji Basin Water Board, and the New Forest Company continued. Partnerships also expanded through joint events, —highlighting the importance of cross-sector collaboration on land use, water resource management, and biodiversity conservation.

A major milestone in governance was the AMCOS election campaign conducted with KSC and Ifakara Town Council. Awareness sessions reached 786 community members across seven sugarcane cooperatives, resulting in a significant shift toward inclusive leadership: women now hold 42% of elected board seats (up from under 25%), and youth represent 22% of elected leaders (more information is provided in the Gender and Youth Action section).

As Tanzania enters the final year of the current phase of SUSTAIN Pro implementation, the programme's core pillars under Outcome 1—knowledge exchange, institutional strengthening, and inclusive growth—are well aligned to continue delivering transformative outcomes. Partnerships, both formal and grassroots, remain at the heart of the approach, driving integration of CSA and market-readiness into agricultural sector.



© SUSTAIN, farmer clearing the field for planting, Kilombero landscape

Box 4. Beyond training: How My.COOP builds market-driven cooperatives

Under output 1.3, SUSTAIN Pro partnered with AGRITERRA to deliver the My.COOP training and cooperative strengthening package to farmer organisations across Ihemi and Kilombero. This was more than just capacity building—it was about transforming cooperatives into reliable service providers and value chain actors capable of supporting their members through input access, marketing, and collective bargaining.

A total of 24 cooperative leaders (13 men, 11 women) representing four AMCOS participated in a tailored training programme focused on:

- Governance and cooperative leadership
- Financial health and internal capital formation
- Needs assessment and service provision to members
- Input supply, procurement, and collective marketing

Prior to the training, each cooperative underwent a "Financial and Governance Health Check", identifying gaps and tailoring content to context. Modules covered not only cooperative principles and service design but also market engagement, pricing strategies, and value chain analysis.

Importantly, each cooperative emerged with a SMART Action Plan—detailing next steps such as expanding member bases, launching group farms, investing in farm input shops, and securing new markets for inputs and produce. This intervention has helped position the selected AMCOS as active facilitators of market access, giving smallholders better chances of participating in competitive, sustainable, and inclusive value chains.

Follow-up engagements conducted after the completion of the My.COOP training revealed several tangible outcomes. Mainly, members have successfully secured access to more lucrative markets for their produce, reflecting early signs of improved bargaining power and stronger market positioning as a result of the training and cooperative strengthening efforts.

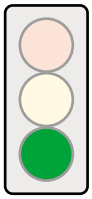
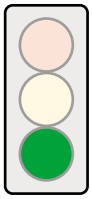




© SUSTAIN, farmers working in a field, Báruè district

Outcome 2 – Land health restored using landscape partnerships

Outcome 2 summary: SUSTAIN Pro will focus on strengthening the linkages between dialogue and action, through the formation or strengthening of inclusive multi-stakeholder landscape partnerships to apply a wide range of solutions, including Nature-based Solutions (NbS), as well as strengthening the governance and mechanisms needed to mobilise NbS. These partnerships will seek to improve land health to implement solutions that maximise benefits for local people and future generations.

Output		Summary deliverables	Progress
2.1	Landscape partnership agreements in place for action and investment in nature-based solutions	• In Mozambique, SUSTAIN Pro established the Báruè District Coordination Group (DCG) on NbS, bringing together 45 stakeholders from government, private sector, civil society, and research institutions. • Collaborated with local actors to form a community-based natural resource committee to restore the Cagole water spring in Báruè. • In Tanzania, formalised a tripartite compact agreement in collaboration with SAGCOT, bringing together government, non-state actors, and private sector stakeholders to promote coordinated implementation of soil health priorities in the SAGCOT corridor. • Supported restoration initiatives across 1,783 hectares in Iringa, Kilolo, Mlimba, Malinyi and Kilombero districts. • Finalised a multi-stakeholder Landscape NbS Strategy for Kilombero in collaboration with AWF under SUSTAIN Eco, prioritising interventions for water, forest, agriculture, and protected areas.	
2.2	Land health monitoring influences permanent governance mechanisms for land and water	• In Mozambique, completed a Biodiversity and Restoration Assessment identifying a total of 164,645 ha of high-priority restoration zones across Báruè and Vandúzi, with recommendations on spring restoration, forest corridor development, and agroforestry systems. • Conducted a water quality assessment with ARA Centro across Belas and Samora Machel cooperatives. Results informed recommendations for source protection, water treatment, and integration of sustainable agricultural practices. • In Tanzania, piloted and validated the Land Health Monitoring Index (LHMI) in Ihemi and Kilombero landscapes, establishing landscape-specific baselines and targets for improved planning, enforcement, and restoration decision-making.	

Mozambique

In 2024, SUSTAIN Pro continued its integrated landscape management and restoration efforts in the districts of Báruè and Vandúzi, focusing on strengthening multi-stakeholder partnerships, building community stewardship, and expanding the evidence base for Nature-based Solutions (NbS). Activities under Outcome 2 were shaped by growing demand from local actors to align agricultural development with ecological restoration goals, as well as efforts to strengthen data-informed decision-making at district and provincial levels.

A main milestone was the establishment of the Báruè District Coordination Group (DCG)

for NbS (similar to the Vanduzi NbS DCG group established in 2023), which convened 45 representatives from local government, NGOs, the private sector, research institutions, and financial actors. The DCG's first meeting facilitated knowledge exchange on NbS in agriculture and affirmed cross-sectoral interest in joint restoration efforts. Notably, participants included traders, agrodealers, and AU Técnica—a certification agency interested in aligning local production with sustainable certification standards—emphasising the potential to mobilise private sector investment in sustainable value chains.

The programme also engaged communities in hands-on restoration initiatives. A community-based Natural Resource Committee was formed to restore the Cagole water spring, involving 25 members (8 women and 17 men) from the surrounding villages. This committee will oversee the reforestation and protection of 1.2 hectares of degraded land, supported by planned payments for ecosystem services and linkages with private actors for long-term maintenance. Meanwhile, 18 lead farmers (5 women, 13 men) participated in an exchange visit to IIAM CZC's demonstration fields, committing to promote Agroforestry Systems and peer training in their respective communities.

Scientific partnerships underpinned these efforts through the delivery of key analytical studies. The Biodiversity and Restoration Opportunity Assessment, conducted between March and October 2024, identified 164,645 hectares of high-priority restoration zones across the two districts, with tailored recommendations for mountainous forest mosaics, ecological corridors, and degraded farmlands. Specific attention was given to safeguarding important biodiversity areas (IBAs and KBAs), cultural forests, and water sources—highlighting the need for interventions such as nursery establishment, spring rehabilitation, and species selection adapted to local agroecological conditions *(see Box 5 for more details)*. The results were validated by district stakeholders in October and are now guiding restoration planning across the landscape.

Complementing this, a water quality assessment was completed in partnership with ARA Centro at the Belas Associations and Samora Machel Cooperative. While most physico-chemical parameters were within safe limits, elevated nitrate levels and microbiological contamination were observed in some sites. The findings emphasised the need for source protection, basic treatment solutions, and alignment with sustainable agricultural practices to ensure both public health and long-term water security. These studies now serve as a baseline for future monitoring and reinforce the link between ecological agriculture and integrated water resource management. Some of the immediate actions included the kick off of restoration work around the Cagole Spring in Báruè. A more comprehensive plan will be developed based on these recommendations to be addressed in a follow up phase for SUSTAIN Pro.

Strategic collaborations with IIAM, ISPM, ARA Centro, and FENAGRI enhanced local ownership and cross-sector integration of NbS. These partnerships also form the backbone of a growing technical ecosystem committed to agroecology, farmer-driven restoration, and evidence-based planning—ensuring that conservation and agricultural goals are pursued in tandem at the landscape level.

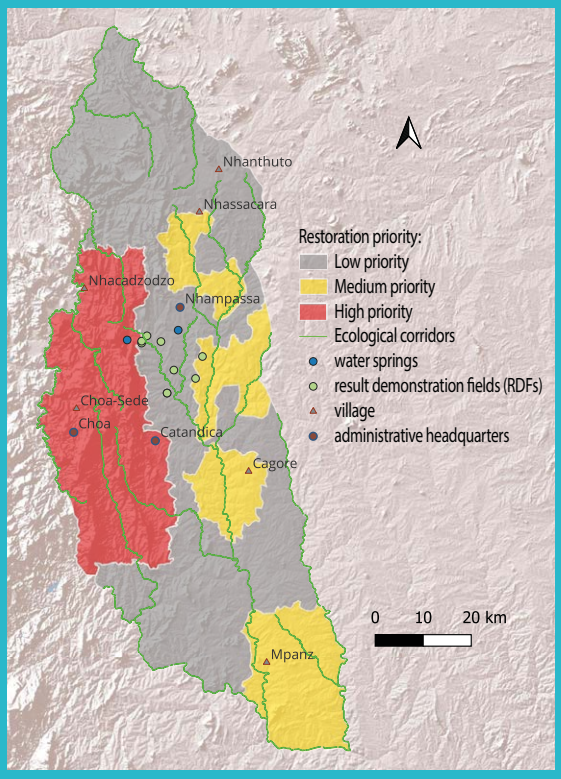
Box 5. From data to decisions: Restoring ecosystems and springs in Báruè and Vanduzi

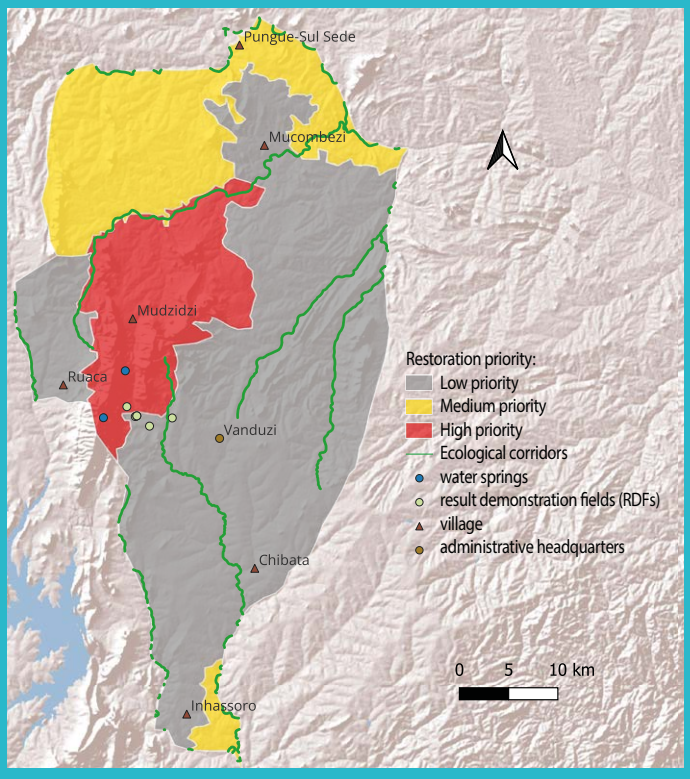
As part of its commitment to promote Nature-based Solutions (NbS) and ecological resilience in agricultural landscapes, SUSTAIN Pro commissioned a comprehensive Biodiversity and Restoration Opportunity Assessment in the districts of Báruè and Vandúzi. Conducted between March and October 2024 by CEAGRI, the study identified 164,645 hectares of high-priority restoration areas across both districts—134,874 ha in Báruè and 29,771 ha in Vanduzi.

These high-priority areas include ecologically significant sites such as the Serra Choa (a Key Biodiversity Area) and the Serra Garuzo (an Important Plant Area), which host endemic and threatened species but are increasingly under pressure from invasive species and unsustainable land use. In Vandúzi, the aggressive spread of an invasive shrub was found to be a major threat to native vegetation and regeneration. Recommendations include mapping and coordinated removal, supported by local brigades and technical training.

One tangible outcome from the study is the restoration initiative of the Cagole water spring in Báruè. Following the assessment's recommendation, SUSTAIN Pro supported the establishment of a 25-member Community Natural Resource Committee, including 8 women, to lead the restoration of 1.2 hectares of spring catchment area. This committee is tasked with seedling monitoring, community engagement, and the long-term conservation of the site, supported by planned payment-for-ecosystem-services schemes and private sector engagement.

Read the article on the Cagole River Spring restoration





Tanzania

SUSTAIN Pro advanced integrated landscape management through a coordinated set of activities designed to embed Nature-based Solutions (NbS) and Climate-Smart Agriculture (CSA) across policy, planning, and practice. Central to this work was the development, testing, and validation of a Land Health Monitoring Index (LHMI)—an innovative, evidence-based framework that marks a significant step forward to assessing and restoring land health in the SAGCOTand beyond. The LHMI, which is anchored in the broader concept of land health, was co-developed through multi-stakeholder collaboration and validated in both Kilombero and Ihemi clusters. This work was an important milestone in linking evidence to policy and culminated in the signing of a national Soil Health Compact in late 2024— elevating land health as a national priority and reinforcing the significance of linking field-level restoration to national policy ambitions *(see the next section for a Spotlight on Land Health)*.

In parallel, SUSTAIN Pro supported capacity building across landscapes and institutions. In Kilolo, partnerships with the New Forest Company and the Rufiji Basin Water Board (RBWB) led to the implementation of a river sub-catchment restoration strategy along the Lukosi River – a critical water source for 18 villages and a major tributary to the Great Ruaha River. This work included technical workshops, community trainings, and stakeholder dialogue to co-develop bylaws and management actions addressing water quality, biodiversity loss, and agricultural pressure. These interventions have laid the groundwork for formal MoUs around water and natural resource governance and strengthened understanding of NbS at community and institutional levels.

SUSTAIN Pro also supported the multistakeholder process that led to the development of the Kilombero Landscape NbS Strategy, which identifies priority interventions across forests, water, agriculture, and protected areas. While this process was co-led with AWF under SUSTAIN Eco, Pro contributed to shaping discussions and promoting synergies with ongoing work in the shared landscape. Furthermore, restoration initiatives covered approximately 1,783 hectares (under VLUPs), including degraded areas in Iringa, Kilolo, Mlimba, Malinyi, and Kilombero. Finally, SUSTAIN Pro engaged in awareness-raising events, including World Environment Day celebrations and regional farmer training sessions. These platforms were used to disseminate climate-smart practices and promote a broader understanding of land health and restoration strategies.



© SUSTAIN, a stand selling fruits, Kilombero landscape

Spotlight on Land Health: From monitoring to national commitment

Land degradation is both a symptom and a driver of unsustainable development. SUSTAIN Pro took the bold step to redefine how we understand, monitor, and govern land health through the creation of a Land Health Monitoring Index (LHMI), applying it to Tanzania as a first instance. Unlike conventional "soil health" frameworks that narrowly focus on nutrient content or biodiversity activity, the LHMI recognises that land health spans across three interlinked pillars—soil, water, and resilience—operating at three spatial scales: site, landscape, and national.

"Land health is the capacity of land, relative to its potential, to sustain delivery of essential ecosystem services."[1]

SUSTAIN's framing challenges the typical bias towards soil biodiversity as a proxy for land condition and instead embraces the complexity of ecological interactions that take place at site and landscape levels. It reflects SUSTAIN's Theory of Change, where better land health management and monitoring is both a result of and a catalyst for inclusive green growth and investment in NbS and CSA.

How the LHMI Works: A Multi-Pillar, Multi-Scale Approach

At its core, the LHMI brings together multiple indicators to monitor not just degradation, but also the potential for recovery, the equity of resource access, and the resilience of ecosystems and livelihoods. It serves as a dynamic tool to support integrated landscape management (ILM), policy alignment, and adaptive decision-making. To provide clarity, the LHMI is structured around three pillars and three spatial scales, each defined below:



IUCN Tanzania, birds flying off a field in the Kilombero landscape

1 Shepherd et al., 2015

Pillars:



Water: The water pillar encompasses water quality, availability, and delivery systems, and their dynamic interaction with soil across site, landscape, and national levels. This includes monitoring of water infrastructure that supports soil moisture, water access for household and agricultural use, and broader catchment health. Water is understood as both an input to land health and an outcome of sustainable land use—essential for ensuring resilience in agro-ecosystems and long-term water security.



Soil: Soil health is assessed at the farm and soil levels, capturing both above- and below-ground biodiversity, carbon content, and soil properties that influence productivity and ecosystem functions. This pillar draws from IUCN's LHMF indicators and incorporates parameters such as invertebrate diversity, earthworm abundance, total carbon stock, soil pH, C:N ratio, and erosion. It goes beyond biophysical analysis to consider how soil health is shaped by and contributes to broader landscape dynamics.



Resilience: Resilience focuses on the ability of ecological and human systems to absorb and recover from shocks—such as floods, droughts, and market volatility—while maintaining functionality. It includes social and economic dimensions of resilience, like household poverty, adoption of sustainable practices, and biodiversity status, aiming to ensure that land health translates into human wellbeing and livelihood security. Resilience is assessed primarily at the landscape and national levels.

Spatial Scales:



Site Level (Soil and Farm): At this level, LHMI indicators monitor biotic structures of the soil (e.g., biodiversity of microbes, invertebrates, roots) and farm systems (e.g., crop and habitat diversity), as well as water-soil interactions (e.g., infiltration, moisture levels, irrigation systems). It represents the most granular level of assessment and provides data to inform farm-level interventions and extension services. Site-level monitoring often requires field data collection and laboratory analysis.



Landscape Level: This scale captures ecological and hydrological processes that cut across farms and administrative boundaries. It includes indicators like water access and quality across catchments, connectivity of natural ecosystems, adoption of sustainable land management practices, and vulnerability to extreme weather. The landscape level helps connect the dots between individual actions and collective outcomes—crucial for integrated landscape management, restoration planning, and building climate resilience.



National Level: At the national scale, the LHMI links grassroots monitoring efforts to policy frameworks, national targets, and global commitments (e.g., SDGs, AFR100, Bonn Challenge, Freshwater Challenge). It provides a means for tracking progress on restoration, sustainable agriculture, and biodiversity protection goals. While attribution can be complex, qualitative analysis and data triangulation help bridge local insights with national reporting systems.

Indicators:

From an initial longlist of 110, a final suite of 19 land health indicators was co-developed with stakeholders and validated through technical workshops and field testing in the Ihemi and Kilombero landscapes. These indicators—7 for soil, 5 for water, and 7 for resilience—were selected for their relevance, scalability, and ability to guide future intervention (see figure no. 1 below for the comprehensive list of indicators).



Figure 1: Land Health Monitoring Index of SUSTAIN Initiative

What the LHMI tells us and where we act:

The results of the Tanzania LMHI pilot paint a nuanced picture of land health in both landscapes, helping to clarify where SUSTAIN interventions are best positioned to make a difference and where governments, local authorities, or farmers may need to take the lead. Importantly, it also sheds light on the level of complexity and capacity required to act on these findings—some responses, like constructing water harvesting structures, are more immediately actionable, while others, like balancing organic matter, may require systemic shifts and long-term support.

Site Level – Soil Pillar: Moderate, with pockets of concern

Soil health was generally classified as moderate, but clear red flags emerged. Earthworm abundance was poor across all land use types, suggesting serious degradation of soil biotic structure. This points to the need for practices that increase organic matter, such as mulching, manure application, or conservation tillage. These practices are currently implemented in SUSTAIN Pro fields.

Site and Landscape Level – Water Pillar: Under stress

Infiltration rates were poor in both clay and sandy soils, indicating compacted soils and reduced water retention—a critical issue for crop performance. Solutions include soil structure improvement via organic matter enrichment, which could simultaneously enhance infiltration, water-holding capacity, and nutrient cycling. At the landscape level, adoption of sustainable water practices—like rainwater harvesting, water pits, or cover cropping—remains low. These findings signal a clear opportunity for scaling water-smart interventions through SUSTAIN-supported farmer training and demonstration sites.

Landscape Level – Resilience Pillar: Mixed results

Resilience indicators revealed a mixed landscape. There was an abundant presence of threatened species due to the rich biodiversity of the Eastern Arc Mountains, and indicators like natural ecosystem connectivity and household poverty levels rated as good which indicates that measure are in place to protect species under threat. However, farmers across both landscapes reported frequent shocks—including flooding, drought, and crop pests—that disrupted productivity and livelihoods. These insights reinforce the need to scale up NbS and CSA practices that not only restore ecological function but also buffer communities against environmental and economic stressors. This granular understanding of land health offers both a short- and long-term strategic lens for action (see Figure 2 below).

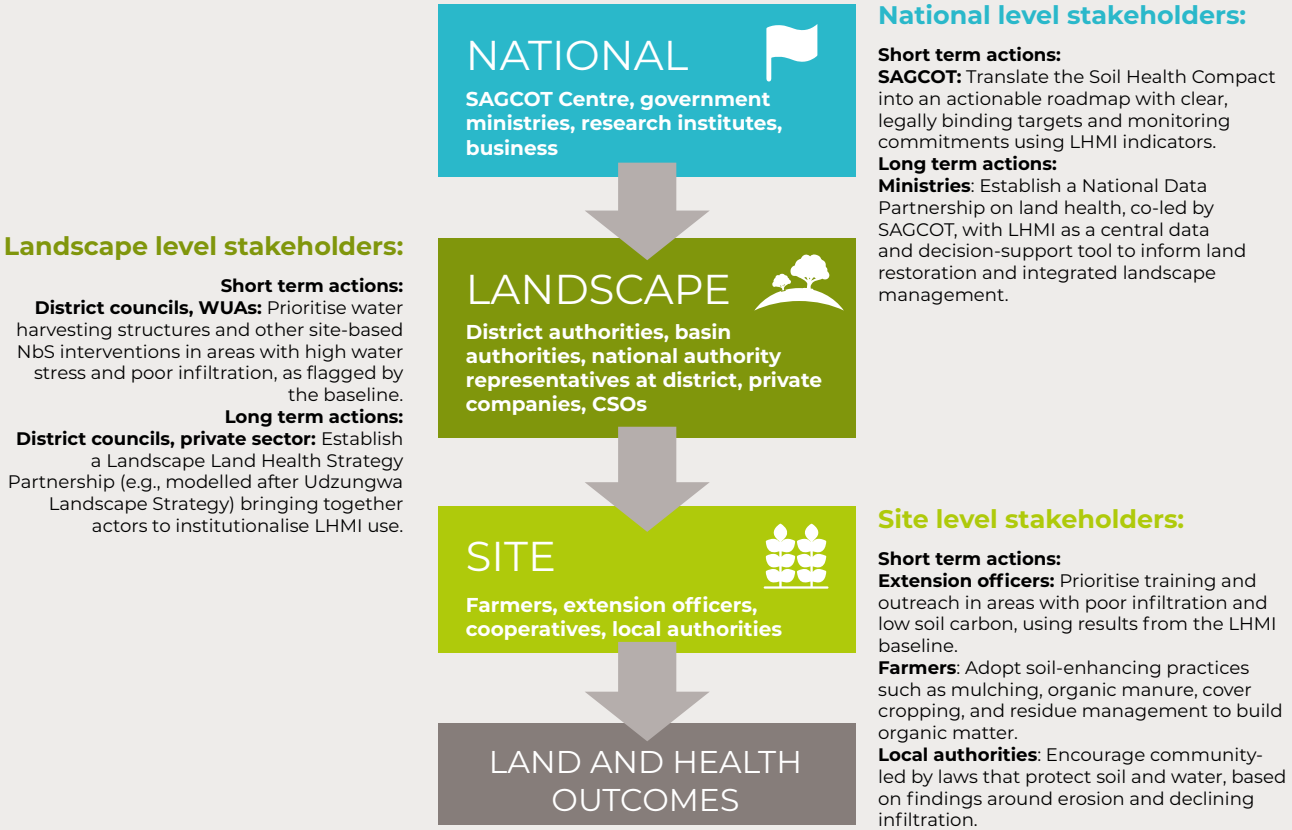


Figure 2: A conceptualisation of stakeholders in the clusters at the different scales and the different actions they can take to enhance land health based on the LHMI

A National Turning Point: The Soil Health Compact

The LHMI is more than a technical tool— it has become a vehicle for systemic change, translating complex land dynamics into concrete, layered interventions across scales and stakeholders. Momentum on this was demonstrated through the signing of Tanzania's first Soil Health Compact in late 2024, a formal commitment by public, private, and civil society organisations (CSO) to embed the principles of land health into governance, investment, and restoration efforts.

This milestone marks a shift from fragmented soil health dialogues to a coherent, cross-sectoral agenda that recognises land health as a foundation for a resilient nature, people and economy. Crucially, the Compact was guided directly by the evidence and framing provided by the LHMI under SUSTAIN Pro, which offered a clear, science-based, and scaleable structure that helped challenge the dominant narrative around soil health as the sole proxy for land health.

Under the Soil Compact, the public sector committed to standardising land health definitions, harmonising data using LHMI indicators, and aligning environmental regulation and extension services with regenerative agriculture and Nature-based Solutions. The private sector pledged to scale up soil-friendly practices, comply with sustainable input regulations, and use ILM and NbS as their go-to approaches. Service providers, from CSOs to research bodies, committed to strengthening water governance, targeting capacity building toward women and youth, and bridging the gap between scientific evidence and field-level implementation.

At its heart, the Soil Health Compact represents a new model for inclusive green

growth—one that is not only grounded in science but also co-owned by institutions at all levels. It translates the data and dialaogues nurtured under SUSTAIN Pro into multi-stakeholder partnerships, creating real potential for long-term impact far beyond the project's lifespan.

Read the news on prioritising soil health
Access the Soil Health Compact

Next steps: Turning insights into impact

With LHMI now operational and the Soil Health Compact in place, the focus shifts to consolidating and expanding progress. Three immediate next steps will guide the continued evolution of land health work under SUSTAIN Pro:

1. The assessment revealed key data gaps particularly around water quality, soil erosion, and biodiversity indicators that must be filled to enhance the precision and responsiveness of the LHMI.

2. Building on the success in Tanzania, the LHMI will be piloted in Sumbawanga (under SUSTAIN Eco) and Mozambique landscapes (Vanduzi and Báruè districts).

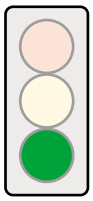
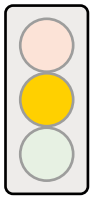
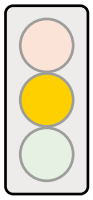
3. The short-term actions outlined above (see figure 2) will move from planning to practice. These targeted interventions will not only improve land health directly but also test how well the LHMI can serve as a coordination and prioritisation tool for diverse actors.



IUCN Tanzania, Rice fields in Kilombero landscape

Outcome 3 – Investments in sustainable value chains accelerate the transition to sustainable food systems

Outcome summary: This outcome focuses on vertical integration of on-farm and broader landscape solutions, through establishing linkages to value chains, agribusiness, and apex and business associations as well as financial institutions to mainstream change. It includes a component focused on mainstreaming sustainable and inclusive policies and practices and another on channelling investment to sustainable agricultural development alternatives that also enhance productivity, sustain land health, and deliver economic returns.

Output		Summary deliverables	Progress
3.1	Business cases for sustainable commodities	• Development of market ready investment factsheets is underway for key and emerging value chains in SUSTAIN landscapes in Tanzania and Mozambique.	
3.2	Public/private investment projects to scale up sustainability and inclusion in value chains	• The SUSTAIN mixed grant scheme is being designed to catalyse investment in CSA, NbS, and inclusive value chains, by combining grants, credit, and community funds in Tanzania and Mozambique. • In Mozambique, PES feasibility is being assessed with potential engagement from the private sector to support the restoration of the Cagole water spring. • In Tanzania, engagement continued with four farmer cooperatives (600+ members) in Ihemi and Kilombero, to strengthen governance, establish women/youth councils, and enhance value chain linkages.	
3.3	Growth corridor secretariats, apex institutions and industry associations adopt targets and roll out sustainability with agribusiness and investors	• In Mozambique, strategic partnership established with FENAGRI and BIODEV2030 to promote sustainable agricultural practices, expand engagement, and align trade and investment initiatives in the Manica Province. • Strategic engagement took place with CEO Roundtable of Tanzania (CEOrt) to raise sustainability awareness among 10% of its members and train 30% of managers on sustainable business practices. Also, a Green Finance Campaign will be launched in 2025 to further embed sustainability in business operations.	

By the end of 2024, SUSTAIN Pro initiated a dual-country analysis in Tanzania and Mozambique to identify and refine value chains with the potential to generate long-term economic, social, and ecological benefits. The outcome was a set of market-ready investment factsheets, rooted in local data, value chain viability assessments, and innovative finance mechanisms — including carbon credits, PES schemes, and blended finance models. This effort marked a significant shift from high-level planning to bankable, grounded opportunities that can attract public and private finance, align with climate goals, and support local livelihoods. Whether in the rice fields of Kilombero or the horticulture hubs of Báruè, the factsheets provide both a snapshot of potential and a roadmap for transition to climate-smart, inclusive business models.

Box 7. Catalysing investment in resilient and inclusive value chains in Mozambique and Tanzania landscapes

Under SUSTAIN Pro, business cases are under development and will be validated to support sustainable investment in key landscapes across Mozambique and Tanzania. Informed by participatory consultations and fieldwork, these cases will help promote Nature-based Solutions (NbS), Climate-Smart Agriculture (CSA), and circular economy approaches. Targeting priority value chains in Báruè and Vanduzi (Mozambique) and Ihemi and Kilombero (Tanzania), the cases will showcase investable opportunities with strong financial viability, environmental benefits, and social inclusion—especially for women and youth. Each case includes metrics like Return on Investment (ROI), Financial Rate of Return (FRR), and Benefit-Cost Ratio (BCR), and explores models such as blended finance, carbon credits, and PES.

Mozambique: Báruè & Vanduzi

Crop	Why it matters	Key vulnerabilities	Business case (2024-25)	Investment opportunities for SUSTAIN & partners	Expected impact (beyond 2025)
Value chains opportunities					
Maize	• Corner-stone of food security and culture. • Strong year-round demand for grain & feed.	• Yield losses from drought & soil depletion; • 35 % post-harvest loss; • Price volatility.	• Drought-resistant seeds enhance yields; • Solar-pump irrigation and rain-water harvesting cuts climate risk; • Link to formal buyers (MOZAGRI, ETG) secures price premiums.	• Pilot solar-pump/ water harvesting; • Support building co-op silos & drying platforms; • Training on CSA & quality grading; • Facilitate contract farming with feed manufacturers.	Enhanced yield gain, drop in losses, and farm-gate price stability (targets to be set in the full business case).
Soy	• High-protein feed crop that reduces costly imports and supports livestock sector growth; • Fits CSA rotation with maize, enriching soil nitrogen and diversifying incomes.	• Near-monopoly buyer keeps prices low; • Weak policy support; • Low access to inoculants/ inputs; • Rain-fed production vulnerable to drought.	• Soy-maize rotation using certified soy seed and inoculants enhances soy yield and nitrogen to the soil; • Solar-pump irrigation & rain-water harvesting cuts climate risk; • Co-op brokered multi-buyer contracts delivers competitive pricing for farmers.	• Demo plots & seasonal training on CSA soy-maize rotation techniques; • Pilot solar-pump/ water harvesting; • Support community drying/storage facilities; • Support co-op group sales and basic pressing for oil/ meal to capture higher margins.	Improved soil fertility and higher yields; more stable prices through diversified buyers; new revenue stream from value-added soy *(targets to be set in the full business case).*

Emerging value chain:					
Horticulture	• Reliable cash & nutrition crop near urban markets; • Strong participation and leadership by women & youth.	• Rain-fed production, prone to water stress & yield loss; • High post-harvest waste, weak storage & transport; • Insecure land tenure for women limits scale-up.	• Solar-powered drip / sprinkler irrigation unlocks year-round output; • Cold storage hubs and refrigerated transport cut losses and open premium urban markets; • Gender-responsive land titles & co-op contracts increase bargaining power and prices.	• Demo plots & training hubs on IPM, composting, rotation; • Pilot solar irrigation & community-led water user groups responsible for maintenance; • Support building pack-houses / storage & link producers to farmers via e-platforms; • Facilitate DUATs & collective titles for women's groups; bundle credit for quality seed & inputs.	Increased cut in post-harvest loss and a steady year-round supply; Increased income for women growers; Secure land rights & co-op market access (targets to be set in the full business case).
ARR (Afforestation, Reforestation, Revegetation)	• Unlocks long-term carbon-credit revenue; • Strong national policy backing (Forestry & Wildlife Law, Carbon Market Plan); • Restores soils, water & biodiversity while creating jobs and NTFP income for women & youth.	• High up-front costs, 7-10 yr payback, local skills & MRV capacity still limited; • Land-tenure gaps and wildfire risk can stall projects.	• Blended finance & carbon pre-purchases cover start-up costs and de-risk investment. • Group DUATs & benefit-sharing pacts secure land and social licence. • Low-cost MRV (drones, Open Forest Protocol) cuts certification expense.	• Finalise geospatial screening & ground-truth 3 pilot blocks (~200 ha total). • Train two village nurseries and 30 fire-brigade members; • Draft a pre-purchase MoU with a voluntary-market buyer and outline a results-based payment plan. • Support DUAT paperwork and a simple revenue-sharing charter, ready for expansion as new capital arrives.	Increased carbon sequestration; Watershed & soil restored on degraded land; Steady carbon & NTFP income for households; Wildfire incidence reduced; Stronger community forest governance *(targets to be set in the full business case)*.

Tanzania: Kilombero & Ihemi

Crop	Why it matters	Key vulnerabilities	Business case (2024-25)	Investment opportunities for SUSTAIN & partners	Expected impact (beyond 2025)
Value chains opportunities					
Rice	• Staple food and cash crop, critical to poverty reduction; • 90% sold raw resulting in little value added; • Rice straw seen as waste.	• Low yields from flood irrigation & input costs; • Straw burning emissions & health risks; • Currently no market for residues.	• Combined System of Rice Intensification (SRI) with other CSA practices increases yields and cuts on cutting water use; • Straw-to-briquette turns waste into clean bio-coal, generates new income & avoids open burning.	• Train 300 farmers in SRI / CSA on 5 demo plots; • Pilot one 5 t/day straw-briquette unit, aggregating feedstock via farmer groups. • Broker financing with NMB & pre-purchase MoU with local fuel distributors; • Partner with TIRDO & Mazingira for tech and outreach.	Higher yields & water efficiency; rice-straw diverted from burning; new briquette income stream for farmer groups; carbon-emission reduction and circular-economy model ready for scale-up *(targets to be finalised in the full business case).*
Soy & Sunflower	• Together supply Tanzania's edible-oil and livestock-feed sectors, cutting import bills and lifting smallholder incomes; • By-products (press-cake, husks) can become feed, compost, or bio-energy, closing nutrient and carbon loops.	• Low on-farm productivity, extraction efficiency. • Residues often burned or dumped – lost value & CO_2 emissions. • Smallholders lack finance, quality inputs and market power; • Certification is rare.	• CSA approaches including drought-tolerant seed, inoculants, zero-till, legume intercropping increases yields. • village cold-press & expeller converts seed to oil/flour; • Residues can be pelletised or composted, generating extra income & soil fertility gains. • Co-op brokered multi-buyer contracts deliver competitive pricing for farmers.	• Train 500 farmers on CSA and residue utilisation, with established demo plots; • Support the installation of one modular press, expeller, and a compost/pellet unit; • Explore the launch a PGS cycle with TOAM & SAT; • Bundle micro-loans via VICOBAs and structure a blended-finance package with PASS & AECF.	Yield gain and oil recovery; Press-cake/flour adds a new revenue stream; Agro-waste diverted to compost or biomass energy reduces CO_2 and improves soils; Certified, higher-value oil-seed products increase and stabilise household incomes *(targets to be finalised in the full business case).*

Emerging value chain:					
 **Agroforestry**	• Avocado, cashew & cocoa trees diversify income and provide shade for food crops; • Terracing, hedgerows and mixed cropping curb erosion, enhance soil moisture and cut forest encroachment.	• High up-front cost and 3 to 4 year waits to first harvest; • Limited know-how in nursery management, terrace layout and tree–crop spacing.	• Pilot of contour-terrace agroforestry strips on slopes, enhancing yields for farmers; • Solar-pump micro-irrigation secures dry-season seedling growth; • Trees lock carbon with a future route to verified credits once biomass data mature.	• Train 200 farmers in four villages on seedling production, terrace building and intercropping; • Establish 2 community nurseries (20 000 seedlings) and link COCOBA savings groups to seed/ irrigation micro-loans; • Draft benefit-sharing & carbon-readiness plan with village forest committees to position for scale finance.	A drop in soil-erosion runoff; Increased water retention on pilot plots; New fruit/ nut revenue stream from year 4; Reduced charcoal reliance & forest clearing; Proven template ready to extend across 2 000 ha as additional funding becomes available. *(targets to be finalised in the full business case).*

Next steps to realise value chain investments (Box 7 cont'd)

The business cases under development provide a series of investable opportunities for improving the sustainability and profitability of existing value chains, outlining how SUSTAIN and partners can target their interventions for impact and scale. Further to this, some emerging value chains have been identified which will require longer-term investments but have significant potential generate positive impact for livelihoods and ecosystem health. In 2025, once the business cases are finalised, SUSTAIN Pro will initiate targeted engagement with green finance actors to determine investment appetite in the opportunities with the highest potential and develop a derisking plan for those that require further work to become viable.



> "Since using compost and organic pesticides, my crops are growing better—and I'm saving money. I encourage others to switch to organic methods for better yields and healthier soils."
> *– Sofia Nhamunda, Farmer, Associação 07 de Abril, Vanduzi*

Mozambique

In 2024, SUSTAIN Pro worked toward unlocking sustainable investment opportunities across the Báruè and Vanduzi landscapes. Development of market-ready investment factsheets is underway for priority value chains—maize, soybean, and horticulture—anchored in climate-smart agriculture (CSA), Nature-based Solutions (NbS), and inclusive growth models *(see box 7)*. The engagement with stakeholders that took place linked to this work has sparked reflections on value chain risk, reward, and readiness.

One of the most promising interventions underway is the restoration of the Cagole water spring, where the feasibility of a Payment for Ecosystem Services (PES) scheme is being tested. A 25-member Community Natural Resource Committee—comprising 8 women and 17 men—has been formed to act as stewards to the spring. SUSTAIN Pro has provided the upfront investment to establish the scheme as well as facilitating outreach to secure long-term investors that operate in the landscape and benefit from the river's resources.

To accelerate investment into sustainable agriculture, SUSTAIN Pro has also designed a mixed grant scheme that blends grants, credit, and community funds. The scheme will launch in 2025 and prioritises cooperatives with demonstrated experience in technical assistance, production, and commercialisation—requiring at least 20% co-investment and 60% female inclusion. Selection criteria are aligned with international sustainability standards (e.g. IFC, Green Loans, Agrifunds) and aim to ensure both financial and ecological returns.

SUSTAIN Pro's efforts to scale up sustainable agricultural practices are strengthened through research partnerships and alignment with certification bodies. AU Técnica, a national certification agency, expressed interest in supporting the formal recognition of local producers—an important step in improving market access and accountability. Strategic partnerships will play a critical role in embedding sustainability across the landscape. Furthermore, a collaboration with FENAGRI (the Federation of Agrarian Associations of Mozambique) was formalised to deliver training, convene workshops, and co-organise trade fairs aimed at aligning

agrarian actors around sustainable practices. Similarly, engagement with BIODEV2030 will continue under a multi-year partnership to further integrate ecosystem and biodiversity priorities into value chain development.

Tanzania

Similar to Mozambique, market-ready business cases were co-developed with stakeholders and are being synthesised into investment factsheets targeting key and emerging value chains—namely soybean, sunflower, and rice—showcasing opportunities that can yield viable financial returns, inclusive governance models, and circular economy solutions. These cases form the foundation for blended finance strategies, including certification pathways and carbon-based payment models. Moreover, a forward-looking partnership with the CEO Roundtable of Tanzania (CEOrt) also gained momentum, with the development and upcoming launch of a Green Finance Campaign expected in early 2025. The year-long initiative will introduce businesses to green finance concepts, demonstrate relevance to their sustainability goals, and ultimately embed climate resilience and low-carbon practices within corporate decision-making across sectors. As the programme enters the final year of the current phase, 2025 will be pivotal in operationalising investment opportunities, piloting sustainable financing models, and embedding sustainability in agricultural systems.



IUCN Tanzania, bags of rice ready for market sale, Kilombero landscape



© SUSTAIN, farmer preparing rice to be planted, Kilombero landscape

Gender and Youth Action

SUSTAIN Pro has prioritised gender equality and youth empowerment since its inception, building on a comprehensive gender and youth assessment finalised in 2023. This assessment, grounded in stakeholder consultation and literature review, laid bare gender disparities and structural inequalities in natural resource governance and agricultural productivity. In response, a dedicated gender and youth action plan was adopted to guide the implementation of inclusive programming across all project landscapes. More information can be found in the 2023 SUSTAIN Pro annual report.


IUCN Mozambique

In Mozambique, SUSTAIN Pro focused on strengthening gender inclusion by capacitating both institutional stakeholders and communities. A gender training session was delivered to 12 officers (3 women, 9 men) from ADEM and SDAE in Vanduzi and Báruè. Participants reported stronger awareness and practical knowledge on integrating gender equality into local agriculture planning. While the interactive and hands-on nature of the training was well received, feedback suggested a need for deeper focus on issues like gender-based violence and early marriage, and more frequent follow-up support. To extend this momentum to the community level, 392 small-scale farmers were also trained on gender equality, leadership, and the role of women in sustainable agriculture *(see box 8 for more information)*.

In Tanzania, 2024 was marked by targeted gender mainstreaming activities designed to empower women and youth at both community and institutional levels. Building on previous workshops and a refresher training on the Gender and Youth Action Plan, the team implemented a strategic awareness campaign ahead of AMCOS elections in Kilombero. The campaign was crafted to tackle long-standing barriers to women and youth leadership—particularly cultural norms that limit their participation in governance. Meetings were held in seven sugarcane-growing communities, and messages were amplified through a one-week radio campaign on Pambazuko FM. The results were significant: female representation on AMCOS boards jumped from below 25% to 42%, and youth representation reached 22%, a breakthrough in traditionally male-dominated cooperative governance *(see box 9 for more information)*.

Box 8. Building capacity for gender equality in rural governance

To reinforce gender equality within agricultural landscapes, SUSTAIN Pro organised a dedicated gender capacity-building workshop in August 2024, targeting technicians from the Economic Development Agency of Manica Province (ADEM) and the District Services of Economic Activities (SDAE) in Vanduzi and Báruè. The two-day training brought together 12 officers (3 women, 9 men) and focused on building foundational and applied gender competencies aligned with IUCN and NORAD policies.

Participants explored a range of themes—from key gender concepts and legal frameworks related to climate change, to mainstreaming approaches across planning, monitoring, and evaluation. Interactive sessions included a dynamic quiz on gender gaps in Mozambique, group activities to map gender definitions and practical application exercises. Feedback from participants emphasised how the training increased their awareness, built confidence in applying gender-sensitive tools, and inspired them to integrate inclusive approaches into their daily work. The workshop also introduced the Outcome Harvesting methodology as a tool to capture gender-related changes in programming. Although technical issues prevented real-time exercises on the platform, participants were later guided through the process to ensure accurate documentation of progress.

Importantly, the event marked a step toward institutionalising gender equality in rural governance and agricultural development. Participants committed to cascading knowledge within their teams, updating Gender Action Plans, and ensuring ongoing use of monitoring tools.



IUCN Tanzania, Farmers and the IUCN landscape officer at a demonstration field

The momentum from 2024 sets the stage for deeper and more transformative gender outcomes in 2025. These initiatives aim to continue to tackle inequalities and ensure balanced participation in all programme events, striving towards a 50:50 gender representation in leadership roles within natural resources management committees and farmer organisations. A new round of gender and youth training is planned for June 2025, with an emphasis on peer mentoring, inclusive leadership development, and outcome monitoring. With an increase in gender and youth representation in cooperative governance, land restoration, and climate resilience, SUSTAIN Pro continues its mission to create equitable opportunities and build empowered, resilient communities across both countries.



IUCN Mozambique, farmers working in a Cabbage field in Vanduzi district.

Box 9. Voices of change: Youth and women stepping into leadership

In 2024, SUSTAIN Pro launched a focused awareness campaign to promote greater youth and female participation in sugarcane cooperative elections in Kilombero. Partnering with Ifakara Town Council, Kilombero Sugar Company (KSC), and local gender officers, the campaign aimed to clarify election procedures, build confidence, and encourage inclusive representation across seven AMCOS: Miwangani, Mangula, Mkula, Kidatu, Msolwa Station, Msolwa Ujamaa, and Sanje.

Over 786 cooperative members engaged in community meetings and radio broadcasts via Pambazuko FM. With facilitators addressing the electoral process, empowerment messages, and the importance of inclusion, the campaign achieved a breakthrough shift: 42% of those elected were women, up from less than 25% in previous years, and 22% were youth.

To complement the campaign's success, SUSTAIN Pro produced a short series of interview videos featuring newly elected board members. These videos capture the perspectives of women and youth leaders as they reflect on what motivated them to run, the barriers they overcame, and their aspirations for more responsive and inclusive cooperatives.

> "Women's involvement is finally being prioritised. In the past we hesitated to step forward, but today—through this campaign—we're running for, and winning, leadership roles." — *Mrashi Jumbe Mwishehe, newly elected board member, Mkula AMCOS*

The campaign not only raised awareness but catalysed long-term shifts in cooperative governance. The interviews illustrate how representation is beginning to reshape leadership dynamics and decision-making from within, offering powerful peer examples for future generations of women and youth leaders.

Click here to watch the interviews.



IUCN Mozambique. Farmers in the field, Vanduzi district

Lessons Learned

Early support for Multi-Stakeholder Partnerships (MSPs) drives Integrated Landscape Management (ILM) implementation:
SUSTAIN Pro has made meaningful progress in aligning local action with national priorities, including the signing of the Soil Health Compact and contributions to Tanzania's agriculture-related NDCs. In Mozambique, landscape-level NbS coordination groups helped amplify rural voices, while national steering committees began recognising the programme's relevance to broader strategies. However, a considerable gap remains between grassroots progress and national policy traction. Governance structures, particularly Multi-Stakeholder Partnerships (MSPs), need revitalisation, stronger leadership, and more consistent engagement to function as effective channels for scaling up Integrated Landscape Management (ILM). Clearer articulation of ILM priorities and showcasing results—such as from LHMI and NbS monitoring—will be crucial to gain higher-level support and influence policy.

Securing land tenure supports gender equality and farmer's autonomy:
Efforts to mainstream gender across programme activities have yielded visible gains, especially in women's participation in AMCOS elections in Kilombero, where female representation on boards increased from under 25% to 42%. Training sessions and awareness campaigns helped shift local perceptions, although gender norms and structural barriers still limit broader empowerment. On land tenure, significant progress was made in issuing CCROs in Tanzania; however, challenges persist, particularly where basic documentation (e.g. ID cards) is missing. This underlines the need to continue combining awareness, legal literacy, and support services to ensure that both women and men can exercise secure tenure rights.

Demonstration fields accelerate adoption of sustainable agricultural practices and NbS:
Demonstration plots, extension training, and field-level technical support contributed to increased uptake of sustainable practices and improved yields in key value chains. The diversity of applied techniques—from modified SRI to mulching and crop rotation—illustrated that when practices are effectively demonstrated, farmers are eager to adopt them. However, scale and consistency remain key limitations: In Mozambique, focused efforts in fewer sites led to more in-depth and standardised adoption, wheras Tanzania's broader geographical scope and rollout yielded fewer uniform results. This suggests that future efforts must carefully balance depth with scale and ensure sustained support for farmer uptake.

Diversified value chains are key to access markets and finance solutions:
Value chain development remains a linchpin for farmer resilience. While sustainable practices like bio-composting, agrochemical waste management, and intercropping are increasingly adopted, market access continues to be a bottleneck. In both countries, farmers cite high input costs and limited access to credit. Investment factsheets are being finalised, and mixed grant schemes have been designed, but further effort is needed to align producer capacity with off-take potential and catalyse blended finance through apex institutions.

Building adaptive water governance is essential to manage climate and drought risks:
Droughts and rainfall variability significantly affected demonstration plots and cropping cycles across both countries in 2024, emphasising the vulnerability of current agricultural systems. SUSTAIN is prioritising water-focused NbS and enhancing visibility of its water governance work—especially in Mozambique where restoration of the Cagole water spring is being linked to a community-led PES scheme. Furthermore, future designs must better incorporate climate risk information and adaptive solutions such as rainwater harvesting, spring restoration, and irrigation efficiency.

Capacity building requires repetition and local anchoring:
While training sessions have led to greater awareness and adoption of best practices, inconsistencies in institutional presence—particularly at the local level—have weakened follow-through. Feedback from missions to Mozambique and Tanzania revealed that impactful capacity building hinges not only on quality but also on repetition, trust, and local relevance. Training alone is not sufficient. Continuous mentoring, feedback loops, and consistent engagement with district-level partners are essential for embedding change.

Restoration success hinges on multi-Level buy-in:
Landscape restoration efforts were successful due to strong community involvement and support from village-level committees. However, their long-term viability depends on buy-in from district and national authorities. Ensuring that restoration efforts are documented, aligned with local development plans, and embedded within broader policy frameworks will be essential for scaling impact and sustaining results.

Integrating programmes and sharpening knowledge-management & communication are key for long-term impact:
Efforts to better align Pro and Eco components are underway, but gaps remain—particularly in knowledge capture, shared learning, and communication of success stories. Lessons from 2024 show that stronger internal learning mechanisms, clearer roles for the Knowledge Hubs, and more systematic documentation of what works well (and what doesn't) are needed to scale impact. Learning must be embedded not only in the MEL system, but also in day-to-day decision-making by partners and stakeholders.

The next year will see a continuation of these efforts, with a strong focus on refining MEL activities based on the lessons learned, to ensure the SUSTAIN initiative meets its strategic objectives in promoting sustainable ecosystem management.



IUCN Tanzania, A rice farmer, Kilombero landscape

Looking ahead to 2025

As SUSTAIN Pro enters the final year of the current phase, emphasis will be placed on consolidating results, amplifying impact, and ensuring sustainability of the programme's interventions in both Tanzania and Mozambique. Building on the progress over the past years, the programme will focus on deepening integration across outcomes, finalising key deliverables, and preparing for scale-up and policy uptake through strategic communications, investment planning, and the Mid-term Review (MTR).

Under Outcome 1, the programme will continue expanding adoption of sustainable agricultural practices, especially through the replication of successful demonstration plots and training models. In Tanzania, partnerships with KSC and TARI will be reinforced to extract lessons from sugarcane and rice production, support agroecological transition, and secure land tenure through CCROs. In Mozambique, the focus will be on institutionalising farmer training modules, expanding the reach of ToT networks, and embedding climate-smart practices into local government programmes. Both countries will leverage the SUSTAIN communications strategy to produce outward-facing knowledge products and increase visibility around climate-resilient farming aligned with NDC and NAP targets.

Under Outcome 2, with the Land Health Monitoring Index (LHMI) nearing completion in Tanzania, 2025 will see its application extended to more sites and its alignment with biodiversity and NbS tracking in Mozambique. Riverine restoration—particularly in Kilombero—and riparian protection actions will be a key focus in Tanzania. Mozambique will operationalise its NbS coordination groups, finalise action plans, and integrate restoration into district adaptation plans. Joint efforts will be made to document NbS processes and consolidate learning for policy advocacy and donor engagement. The Soil Health Compact will serve as a guiding framework for land governance and cross-sectoral collaboration.

For Outcome 3, The final year will mark a push to embed sustainability into value chains through the finalisation of business cases and investment factsheets. In Tanzania, a pilot funding mechanism in the SAGCOT corridor will be activated, supported by CEOrt-led private sector outreach and the implementation of sustainability targets using the IGG Toolkit. In Mozambique, certification pilots and corridor-level dialogues with agribusiness and financial actors will aim to strengthen access to finance and competitive markets. Support to associations, SMEs, and cooperatives will help local actors internalise sustainability norms and connect to investment pathways.

Cross-Cutting: Knowledge, MEL and Communications

The Water and Wetlands Team will be leading the rollout of peer-reviewed and grey publications, campaign materials, and a suite of videos and infographics highlighting project stories and evidence. A media campaign will run to elevate the visibility of SUSTAIN and create a lasting digital footprint. MEL efforts will focus on data capture, reflection, and communication of results through Power BI dashboards, stories of change, and outcome harvesting. Preparations for the MTR will begin in early 2025 to assess programme impact and formulate lessons for future scaling.

In 2025, we will also prioritise engagements with key partners including SAGCOT, CEOrt, IIAM, and national policy actors, ensuring ownership and uptake of tools, models, and frameworks piloted under SUSTAIN Pro. These steps will not only ensure a meaningful closure to this phase but also lay a strong foundation for a follow-on phase, aligned with regional and global ambitions for climate resilience, agricultural systems transformation, and biodiversity conservation.



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