



Climate-resilient development in Tanzania and Mozambique

SUSTAIN 2014-2019



INTERNATIONAL UNION FOR CONSERVATION OF NATURE



Government of the Netherlands

The designation of geographical entities in this document, and the presentation of the material, do not imply the expression of any opinion whatsoever on the part of IUCN concerning the legal status of any country, territory, or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries.

The opinions expressed in this document are those of the authors and do not necessarily reflect the views of the Ministry of Foreign Affairs of the Kingdom of the Netherlands or IUCN.

This document was made possible through support provided by the Ministry of Foreign Affairs of the Kingdom of the Netherlands.

Published by: IUCN, Gland, Switzerland

Copyright: © 2020 IUCN, International Union for Conservation of Nature and Natural Resources

Reproduction of this document for educational or other non-commercial purposes is authorised without prior written permission from the copyright holder, provided the source is fully acknowledged.

Reproduction of this publication for resale or other commercial purposes is prohibited without prior written permission of the copyright holder.

Citation: IUCN (2020) *Climate-resilient development in Tanzania and Mozambique: SUSTAIN 2014-2019*. IUCN, Gland, Switzerland.

Editor: Amy Sweeting

Cover: © ADPP-SUSTAIN-Africa, © ADPP-SUSTAIN-Africa, © IUCN-SUSTAIN-Africa, © Maria Ana Borges, © IUCN-SUSTAIN-Africa, © IUCN-SUSTAIN-Africa

Back cover: © ADPP-SUSTAIN-Africa, © James Dalton, © IUCN-SUSTAIN-Africa

Layout by: Imre Sebestyén jr. / Unit Graphics

Available from: International Union for Conservation of Nature (IUCN)
Global Water Programme
Rue Mauverney 28
1196 Gland
Switzerland
Tel +41 22 999 0000
www.iucn.org/resources/publications

Climate-resilient development in Tanzania and Mozambique

SUSTAIN 2014-2019



IUCN is a membership Union uniquely composed of both government and civil society organisations. It provides public, private, and nongovernmental organisations with the knowledge and tools that enable human progress, economic development, and nature conservation to take place together.

Created in 1948, IUCN is now the world's largest and most diverse environmental network, harnessing the knowledge, resources, and reach of more than 1,300 Member organisations and some 15,000 experts. It is a leading provider of conservation data, assessments, and analysis. Its broad membership enables IUCN to fill the role of incubator and trusted repository of best practices, tools, and international standards.

IUCN provides a neutral space in which diverse stakeholders, including governments, NGOs, scientists, businesses, local communities, indigenous peoples organisations, and others can work together to forge and implement solutions to environmental challenges and achieve sustainable development.

Working with many partners and supporters, IUCN implements a large and diverse portfolio of conservation projects worldwide. Combining the latest science with the traditional knowledge of local communities, these projects work to reverse habitat loss, restore ecosystems, and improve people's well-being.

www.iucn.org

<https://twitter.com/IUCN/>



IUCN NL is the Dutch national committee of the International Union for Conservation of Nature, the world's largest and most diverse environmental network. In the Netherlands, IUCN NL forms the platform of the 38 Dutch IUCN member organisations, including large and small nature and environmental organisations, the Dutch government, and knowledge institutions.

IUCN NL collaborates with and supports local organisations in Africa, Asia, and Latin America, together with IUCN Member organisations and other parts of IUCN, to safeguard important nature and biodiversity in these regions. Together we develop international collaborative programmes and acquire funds from different donors.

<https://www.iucn.nl/en>



AWF is an international nongovernmental organisation founded in 1961 and headquartered in Nairobi, Kenya, with program offices in Tanzania (Arusha and Kilombero-Morogoro).

AWF's work in Tanzania extends back to its creation in 1961. Tanzania has been and continues to be a conservation priority for AWF. AWF operates in northern and southern Tanzania. AWF programs are designed and implemented in partnership with government, communities, and the private sector. AWF's experience working on the nexus of conservation and community livelihood improvements gives AWF experience to optimise human benefit and conservation value.

In southern Tanzania, AWF has the ongoing program aims of enhancing conservation and management of protected areas, restoring traditional wildlife corridors, and utilising agriculture as an economic driver. An integral part of AWF's approach involves strengthening the use of business models and innovative financing to generate economic incentives and revenue streams for biodiversity conservation.

<https://www.awf.org>





SNV is a not-for-profit international development organisation that makes a lasting difference in the lives of people living in poverty by helping them raise their incomes and access basic services. We focus on only three sectors and have a long-term, local presence in over 25 countries in Asia, Africa, and Latin America. Our team of more than 1,300 staff is the backbone of SNV.

SNV has been present in Tanzania for over 45 years, working together with the Government of Tanzania to achieve its development agenda working in Agriculture, WASH and Renewable Energy, with cross-cutting emphasis across all projects Youth and Gender focused on market-based solutions enabling markets and private sector forces to pull sustainable development.

<https://www.snv.org>



ADPP is a Mozambican non-governmental association working in the areas of quality education, health and well-being, environment, and sustainable agriculture. It was established in 1982 and has grown steadily during its 37 years of existence. ADPP currently employs around 2,800 staff and implements over 60 projects across all provinces of the country, with a special focus on teacher training, food security, and HIV/AIDS and tuberculosis prevention and care. Each year, ADPP projects benefit more than two million Mozambican people. ADPP Mozambique works in close cooperation with the government of Mozambique and with local and international partners to improve the living conditions of the Mozambican people and to promote the equitable social and economic development of the country.

<https://adpp-mozambique.org/en/>



MICAIA Foundation is a Mozambican nonprofit organisation (NGO) that works mostly in Manica Province in the heart of Mozambique. Set up in 2009, we now reach more than 40,000 people and their families and communities. Our support is focused on enabling people to take action to change their lives for the better.

MICAIA Foundation works on all four of the 'Pillars of Local Prosperity'. We take a long-term approach, recognising that for most people the path out of poverty and vulnerability is an uphill struggle strewn with obstacles. Project funding comes and goes, but MICAIA Foundation remains committed to the people and the communities in which they live.

MICAIA Foundation's work in recent years has encompassed agriculture, natural product enterprises and value chains (including beekeeping), ecotourism, practical conservation, youth-led micro-enterprise, and more. Summaries of recent and current project work are available on our website.

<http://micaia.org/>





The African fisheries sector was estimated at more than US\$24 billion, or 1.26 percent of the GDP of all African countries (FAO) in 2011. SUSTAIN supports sustainable fishing practices, livelihood development and access to markets. Photo © SUSTAIN-Africa

Contents

Acknowledgments	vii
Summary	viii
Phase 1 in numbers	1
About SUSTAIN	2
Where SUSTAIN is active	3
This report	4
Green and inclusive toolbox	4
Learning on applying integrated landscape approaches in SUSTAIN landscapes	6
Results and learning from Phase 1	8
Governance and institutional strengthening	9
Key results	9
What we learned	14
Integrated natural resources management	15
Key results	15
What we learned	19
Business engagement and market opportunities	20
Key results	20
What we learned	22
Sustainable investment	24
Key results	25
What we learned	26
The future	30
What we will do differently	30
Ensuring long-term sustainability	31





Demand for wheat in developing countries is expected to increase by 60 per cent in 2050. Production challenges such as climate change, drought, diseases and pests make this a particularly volatile crop (Rosegrant and Agcaoili, 2010) © Photo ADPP/SUSTAIN-Africa

Acknowledgments

The Sustainability and Inclusion Strategy for Growth Corridors in Africa (SUSTAIN-Africa) would not have become a reality had it not been for the generous support and funding from the Ministry of Foreign Affairs of the Kingdom the Netherlands (DGIS). This funding was the catalyst that leveraged generous co-financing from a range of donors and partners, large and small, governmental and nongovernmental.

The Initiative owes its success over the years to the dedication of the SUSTAIN-Africa Coordination Team and, in particular, the National and Landscape Coordinators, as well as field staff, without whose knowledge, expertise, and energy, nothing would have been accomplished. We are particularly grateful to Michael Nkonu and Susana Gomes, Tanzania and Mozambique Coordinators, for their able management of the programme at national level and invaluable support provided to partners, which was paramount to the success of SUSTAIN. The Advisory Boards in Tanzania and Mozambique provided much needed and valued independent advice and knowledge. The national teams were ably supported by regional senior management,

who ensured that the necessary capacity to implement the portfolio was available.

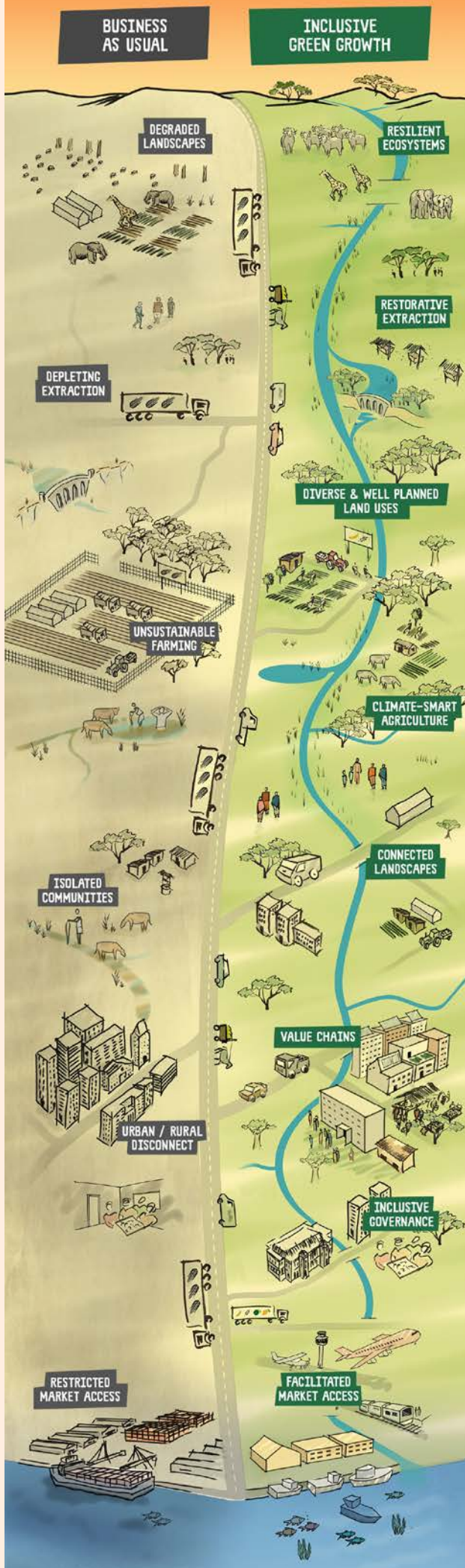
At IUCN headquarters, IUCN senior management enabled the Initiative to take shape and to grow into the dynamic programme that it has become. The Thematic Heads provided insightful input into the development of the Initiative and greatly contributed to the cross-cutting component themes of the portfolio. The IUCN support units (such as finance, administration, and human resources) all played a vital role in supporting SUSTAIN-Africa, and their contribution and collaboration are much appreciated.

SUSTAIN Programme Management also thanks Dr Mark Smith and Dr Isabelle Fauconier, the architect of the Initiative and its Coordinator over most of its duration, for their untiring leadership, vision, and commitment to learning and to innovation.

Finally, IUCN is grateful to Marie Parramon-Gurney, Kahana Lukumbuzya, and Raquel Ataide for their research, field work, and inputs into the development of this learning document.



Sustainability and inclusion for growth corridors in Africa



At a glance

The Sustainability and Inclusion Strategy for Growth Corridors in Africa (SUSTAIN-Africa) was created to implement climate-resilient landscape development in Tanzania and Mozambique. The model for change used in SUSTAIN combines consensus building and joint action on the ground with learning for policy framing and scale-up, to transition from business-as-usual to economic trajectories that combine growth with ecosystem resilience and social prosperity. The project began in 2014 and is set to last for ten years. Having reached the midway point of implementation, we have started to see promising results.



Water security

New Water Use Associations: 8
Investments in water services: USD 230,000



Climate resilience

Area of land under sustainable management: 103,409 ha
Carbon sequestered: 658,286 t
Landscape and restoration plans: 35



Business and investments

Landscape partnerships: 18
Farmers linked to markets: 2,246
Women in savings groups: 69 percent



Policy and learning

Supportive bylaws: 24
Households with secure land rights: 1,181
Sensitisation and training on inclusive and green practices: 36,454 people

The **SUSTAIN Partnership** is composed of IUCN, the IUCN National Committee of the Netherlands (IUCN NL), the African Wildlife Foundation, SNV Netherlands Development Organisation, and Ajuda de Desenvolvimento de Povo para Povo (ADPP), with the MICAIA Foundation.

Results and learning from SUSTAIN Phase 1

Governance and institutional strengthening

Results

SUSTAIN's work on governance improved the functioning and inclusion of local governance structures, such as Water Use Associations, Catchment Committees, Village Land Use Committees, and Natural Resources Management Committees. SUSTAIN has also built capacity and strengthened governance in Forest and Farm Producer Organisations. Besides empowering local structures, SUSTAIN built linkages between these structures, culminating in their convergence through multi-stakeholder dialogues for optimising trade-offs between land, water, ecosystem, and business uses in the wider landscape.

Learning

- ❏ Local institutions stimulate economic development and livelihood security while also controlling forest conversion, food security, water abstraction, and pollution.
- ❏ Partnerships involving multiple stakeholders catalyse institutional change and, together with multi-stakeholder platforms, help ensure equitable participation and contributions to decision making.
- ❏ Sustainability capacity, together with champions from business and government, leads to mainstreaming sustainability principles into the development process.

Integrated natural resources management

Results

Implementation of integrated natural resources management has led to a total of 103,490 hectares of land being placed under sustainable management, two areas of forest being put under improved protection in Tanzania, and one protected area in Mozambique becoming better resourced. Water availability and quality has also increased, due to improved governance as well as monitoring implemented under SUSTAIN. The shift to climate-smart agriculture in SUSTAIN landscapes is leading to increased productivity whilst strengthening ecosystem connectivity. Diversification of crops, as well as nature-based business development, is increasing food security and incomes for local communities.

Learning

- ❏ Sustainable production in smallholder farms is key to achieving food security and prosperity, as well as habitat protection and ecosystem restoration.
- ❏ Climate-smart agriculture technologies can be simple to adopt AND effective at improving resilience and livelihoods. Partnerships between value chain actors help with technology transfer.
- ❏ Upfront investment in forming and/or strengthening local institutions, especially producer organisations, enables smallholder inclusion into value chains and improves smallholder access to capacity, finance, and markets.

Business engagement and market opportunities

Results

SUSTAIN has engaged with businesses, both within the landscapes where they operate and at the national level, to integrate sustainability into business policies, practices, and value chains. Landscape partnerships involved bringing multiple actors to the table, assessing their needs and interests, and then forming partnerships that addressed mutual goals. At the national level, SUSTAIN collaborated with the CEO Roundtable of Tanzania and ENAM Business School in Mozambique to develop guidance and build capacity of businesses on sustainability.

Learning

- ❖ Businesses with international linkages are useful allies to promote sector strategies for sustainability, though proposed solutions need to be practical and material.
- ❖ It is as (or more) important to engage with small and medium businesses as it is with larger ones.
- ❖ The establishment or strengthening of market linkages for smallholders enables the transition to inclusive and green development pathways.



Driven by investment, business, technology and the dynamism of its people, Africa is changing at a rate perhaps unmatched in recorded history. Of the 20 fastest growing economies in the world, nine are in Africa. Photo © Maria Ana Borges

Sustainable investment

Results

SUSTAIN's work on sustainable investment is still at an early stage of development. The main result under Phase 1 has been the establishment of a partnership with the CEO Roundtable of Tanzania and the Tanzanian Bankers' Association to adopt and implement sustainable finance principles for the banking sector. The intent is for these principles to help mainstream sustainability into lending and investment. In SUSTAIN landscapes, there has also been piloting of investment mechanisms for ecosystem services protection. Finally, SUSTAIN has established village savings schemes in both Mozambique and Tanzania.

Learning

- ❖ The finance sector needs to own the sustainability conversation.
- ❖ Scale is extremely important when it comes to finance.
- ❖ Leveraging finance and investment for growth that fosters ecosystem stewardship and social prosperity is a long-term endeavour.



Mining accounts for 60% of foreign exchange earnings in Southern Africa, yet its impacts on people and nature need to be carefully managed. Photo © IUCN/SUSTAIN-Africa

The future

A second phase of SUSTAIN is under development and is expected to begin in late 2020, subject to final approval. SUSTAIN 2 aims to build climate-resilient people-centred development by improving coordination and inclusion in governance structures and processes at different levels; by strengthening capacity, practices, and knowledge linked to sustainable land, water, and business management; and by increasing investment in ecosystems and inclusive and green businesses.

The main changes from SUSTAIN 1 to 2 will be:

- Tightening of intervention areas for impact.
- A people-centred inclusion component to ensure the programme's goal of social prosperity.

- A fit-for-purpose partnership for delivery that enables partners to work within their areas of expertise.
- Knowledge management and communications that reinforce learning and build a community of practice for climate-resilient development.
- Monitoring, evaluation, and learning that enables sustainability of results and learning.

During Phase 2, we will also plan for the long-term sustainability of SUSTAIN results. This involves building up a pipeline of co-investment, working with local organisations and communities to ensure local ownership, and capturing and disseminating learning to encourage replication and scale-up.

For more information:

- 🔗 SUSTAIN-Africa website: www.sustaininitiative.org
 - 🔗 Feature story on SUSTAIN-Africa: <https://digital.iucn.org/water/sustain/>
 - 🔗 Video library: www.sustaininitiative.org
 - 🔗 Twitter: www.twitter.com/IUCN_Water
-



Women directly contribute to reducing poverty, reinvesting on average up to 90 percent of their income back into their own households. Photo ADPP/SUSTAIN-Africa



SUSTAIN enabled the commercialisation of baobab powder and linked local production to national markets, increasing income for local communities. People have also learned to better negotiate prices, practice sustainable harvesting, and access new markets. Photo © SUSTAIN-Africa

Phase 1 in numbers

Work Area	Tanzania	Mozambique	Total
Governance and institutional strengthening			
Water Use Associations established/strengthened	8	n/a	8
Households where land-use rights have been secured ■	1031	~150	~1181
Number of supportive bylaws	24	n/a	24
Women in leadership roles in supported local governance structures or forest and farm producer organisations (including Producer Clubs)	25%	43%	31%
Integrated natural resources management			
Area of land and forests put under sustainable management (Hectares) ■	102,090	1,400	103,490
Number and type of new or improved landscape and restoration plans ■	20	15	35
Farmer associations established		10	10
CSA demonstration plots	41	40	81
Carbon sequestered (tonnes) ■	626,386	31,900	658,286
Business engagement and market opportunities			
Number of farmers linked to markets	1276	970	2246
Newly developed diversified and nature-based business initiatives	3	5	8
Amount generated through nature-based value chains (USD)	2,500	49,925.68	52,425.7
Number of people informed, sensitised, and trained on inclusive green-growth strategies	27,938	8,516	36,454
Sustainable investment			
Newly formed multi-stakeholder partnerships	13	5	18
Established village savings and loan associations (or similar structures)	4 ■	36	40
Percentage of women involved in savings groups	47% ■	70%	59%

■ Certificates of Customary Rights of Occupancy in Tanzania and land use certificate in Mozambique

■ Numbers include village forest management plans, protected area management plans, landscape and restoration plans

■ Figure includes area of forest reserve where deforestation, degradation and illegal logging have been avoided

■ Cumulative removal of CO₂ from atmosphere, based on area under sustainable management and using the Winrock tool

■ Figure only accounts for Kilombero as no saving groups were established in Sumbawanga



About SUSTAIN

The Sustainability and Inclusion Strategy for Growth Corridors in Africa was created to implement climate-resilient landscape development in Tanzania and Mozambique¹ and, ultimately, to support the transition from business-as-usual to economic trajectories that combine growth with ecosystem resilience and social prosperity in Africa. It was designed as a ten-year initiative, beginning in 2014.

The model for change and scaling-up used in SUSTAIN combines joint action on the ground, consensus building among stakeholders, dialogue to define more inclusive and sustainable actions for growth, and policy framing to help strengthen business approaches, institutions, rules, and implementation incentives. SUSTAIN-Africa engages at the landscape and national levels to achieve these goals with learning disseminated through the SUSTAIN partnership for replication and scale-up at the regional and continental scale. It is highly responsive to global and continental long-term and broad development agendas, such as the Sustainable Development Goals, the African Development Bank's High Fives, and the African Union's Agenda 2063.

The SUSTAIN Partnership is composed of IUCN, the IUCN National Committee of the Netherlands, the African Wildlife Foundation, SNV Netherlands Development Organisation, and Ajuda de Desenvolvimento de Povo para Povo, with the Micaia Foundation. SUSTAIN also has several strategic partners in each country, including the secretariat of the Southern Agricultural Growth Corridor of Tanzania (SAGCOT) and the Vice President's Office in Tanzania, as well as the

Zambezi Valley Development Agency (ADVZ) and the Ministry of Land, Environment, and Rural Development (MITADER).

The programme was developed with four strategic objectives:



Water security – Ensure a sustainable and climate-resilient supply of water for livelihoods, production, health, and ecosystems, coupled with lower water-related risks;



Climate change adaptation and mitigation through land resource management – Use landscape management and restoration to

enhance climate change resilience with climate-smart agriculture, while supporting food security and low-carbon development through new value chains that link primary production with trading and enterprise opportunities;



New investment and business partnerships – Develop new business models and partnerships in

growth corridors to build long-term synergies between development and biodiversity conservation, raise investment, and lower risks for rural households, commercial enterprises, and sustainable economic growth; and



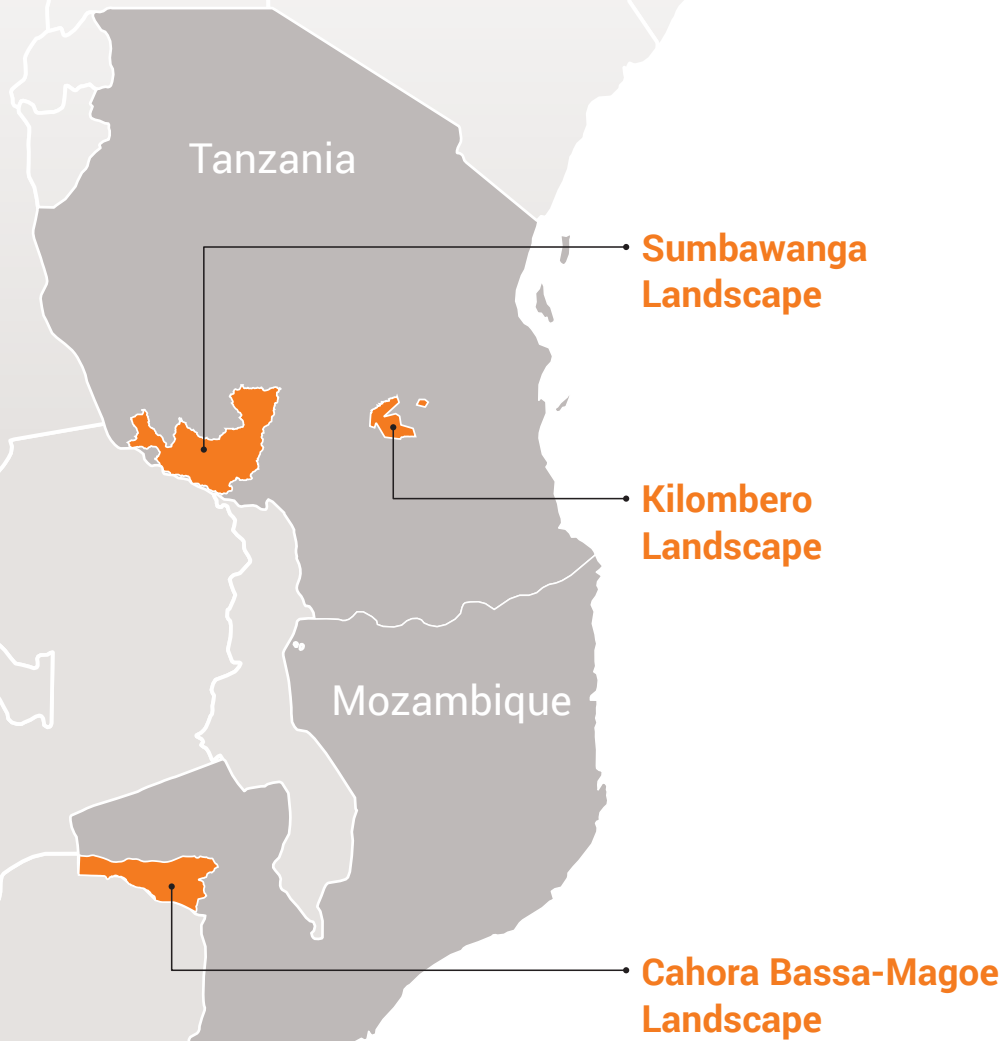
Policy, learning, and evidence –

Promote improved public and private sector strategies for sustainable water, land, and ecosystems and for climate change resilience that are integrated into policies on economic growth.

¹ SUSTAIN's work in Mozambique began after Tanzania, with the implementation phase being launched in 2016 and landscape work starting in 2017.



Where SUSTAIN is active



This report

This document summarises SUSTAIN Phase 1 results and learning from five years of implementing the programme in Tanzania and Mozambique. It outlines some of the programme's key features and describes its main achievements, as well as learning that would benefit others embarking on implementing inclusive and green initiatives in Africa and beyond.

Similar to the [2018-19 Progress Report](#), it was developed as an outward-facing document, to communicate SUSTAIN results and learning to the programme's stakeholders. The report covers the entire duration of Phase 1, from January 2014 to December 2019.

Like the 2018-19 Report, results are summarised under the areas of (i) governance and institutional strengthening, (ii) integrated natural resources management, (iii) business engagement and market opportunities, and (iv) sustainable investments.

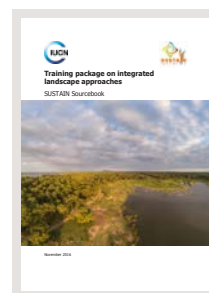
Green and inclusive toolbox

SUSTAIN was developed to apply solutions for climate change resilience, water security, sustainable agriculture, and land use to economic development in Africa. SUSTAIN proposed to address the intricate links between water, land, ecosystems, and business by implementing integrated landscape approaches² (ILAs). This required a shared understanding of ILAs to be developed within the SUSTAIN partnership and within landscape and national engagements. An

emerging green and inclusive toolbox was used to facilitate this. The components of this toolbox are discussed in more detail in this section.



SUSTAIN partners collaborated over the second half of 2015 to develop a **learning strategy** for the programme. A key element of the learning strategy was the Land Use Dialogues (LUDs), recurring "landscape-based" dialogues to facilitate the learning process. The dialogues were also expected to help build trust, understanding, and actionable solutions among key leaders and organisations locally, nationally, and internationally. Nine thematic learning questions were crafted as an integral part of the strategy that would be used to structure the LUDs.

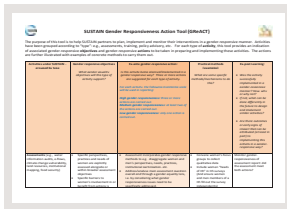


As part of the development of a **training package on the integrated landscape approach**, a SUSTAIN Sourcebook was compiled in 2017, with existing training materials on key concepts in the landscape approach, such

as water management, landscape restoration, ecosystem management, and business engagement. To complement the Sourcebook, a capacity-building matrix with relevant resources from SUSTAIN partners and other organisations was developed as a quick guide to ILAs and their implementation. The Sourcebook and training materials that have been compiled during Phase 1 will continue to be updated as learning from SUSTAIN progresses.

² An Integrated Landscape Approach is a systems approach that optimises multi-functionality. It integrates multi-sectorial planning and participatory approaches, facilitates setting out a stakeholder negotiation framework for land- and resource-use decisions and for balancing the trade-offs inherent in such large-scale approaches, and recognises the use of overlapping cultural, social, and governance "landscapes" within biologically defined areas. A landscape approach facilitates long-term collaboration among different groups of land managers and stakeholders to achieve the multiple objectives required from the landscape. It involves broad stakeholder participation, negotiation around objectives and strategies, and adaptive management based on shared learning.





The **Gender Responsive Action Tool (GReACT)** provides

simple guidance on the design,

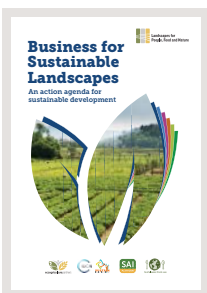
implementation, and monitoring of SUSTAIN activities in a way that is gender responsive and supports gender equality goals. GReACT provides concrete methods for meaningful participation of women, as well as qualitative learning that will help move the focus to real impact and change. The tool was incorporated into SUSTAIN reporting in 2017 and has already led to gender responsiveness improvements in the programme.



A **guidance note on business engagement** based on

SUSTAIN partner business engagement experience was developed, outlining shared principles for building strategic and transformative partnerships involving

business. Guidance is also provided to SUSTAIN implementation teams for integrating the broader goals (WHY) with the process (HOW) of engaging business stakeholders.



The **Business for Sustainable Landscapes Action Agenda** was the result of

a collaborative partnership between SUSTAIN, EcoAgriculture Partners' Landscapes for People Food and Nature, Sustainable

Food Lab, and Sustainable Agriculture Initiative Platform. The engagement aimed to shed

some light on the key features and dynamics in multi-stakeholder landscape partnership and to advance these through the development of supportive policies, tools, and strategies. This collaboration found that landscape partnerships are becoming a key strategy to achieve food and water security and other Sustainable Development Goals at sub-national scales. A targeted and ambitious action agenda was proposed to scale-up benefits, with the following goals:

- Businesses need to look beyond their fence lines;
- Financiers need to accelerate innovation;
- Governments need to integrate landscape strategies into policy; and
- Landscape programmes need to help remove barriers to businesses engagement.



The **Landscape Investment and Finance Tool (LIFT)** comprises of a set of

modules that help landscape initiatives define, develop, and find finance for their landscape priorities. The tool guides the user through

a process to find the type of investors that might be interested in their landscape-specific business cases and to develop pitch materials for successfully acquiring that finance. In 2018, the application of LIFT in the Kilombero landscape was initiated. SUSTAIN partners are currently working to: a) analyse financial flows in the landscape, b) influence investors to green their investments, and c) develop or attract public, private, and blended investments for sustainable landscape initiatives.

Learning on applying integrated landscape approaches in SUSTAIN landscapes

A shared vision and component parts of SUSTAIN's ILA needs agreement and capacity building.

Through the design and early implementation of SUSTAIN activities, SUSTAIN partners had to come to a common understanding around ILAs, which involved capacity building and knowledge exchange as well as learning-by-doing. As a result, training materials were developed for internal and external use.

Adopting integrated landscape approaches requires multi-disciplinary skills and inputs. During the design phase of SUSTAIN, it became clear that a broad set of skills and inputs would need to be sourced across the partnership and from multiple stakeholders in different sectors. This meant that more time would be needed than to deliver single-issue, single-sector projects, due to the need for partners to make the necessary links and effectively integrate perspectives into viable landscape-level strategies and action plans.

When stakeholders are willing and mutual interests are clear, an ILA can yield quick results.

Upon invitation by the Kilombero district council to help protect Magombera Forest Reserve from deforestation, SUSTAIN convened stakeholders to resolve land-use conflicts between the Forest Reserve and farmers by considering ecological and social linkages. With SUSTAIN facilitation, the Land Use Plan for Katurukila village was reviewed through a participatory land-use planning process, and 300 hectares of Magombera Forest Reserve were protected. The process of resolving land-use conflict with an integrated landscape approach saved time and protected the forest from human pressure. SUSTAIN also attracted researchers, NGOs, and private companies to explore management options to improve the conservation status of the forest whilst creating economic incentives for surrounding communities.





Nearly 3 million hectares of forests are lost in Africa per year, contributing to land degradation and negatively affecting rural livelihoods. SUSTAIN has been developed partnerships between smallholders and business to restore degraded lands. Photo © Shutterstock/Adriana Mahdalova

Results and learning from Phase 1

Over the course of its first phase, SUSTAIN embedded itself into Kilombero Valley and Sumbawanga in Tanzania and Cahora Bassa-Magoé in Mozambique, and initiated a collective journey to contextualise and learn from the process of implementing integrated landscape approaches. This journey is just beginning, but results have begun to emerge indicating strengthening of governance and institutional structures and processes, improved natural resources management practices, a business sector that is engaged beyond its fence line, and communities that are benefiting from climate-resilient livelihoods.

Concretely, SUSTAIN's work on governance across the three landscapes has improved the functioning and inclusion of local governance structures, such as Water Use Associations (WUAs), Catchment Committees, Village Land Use Committees (VLUC), and Natural Resources Management Committees (NRMCs). SUSTAIN has also built capacity and strengthened governance in Forest and Farm Producer Organisations (FFPOs). Besides empowering local structures, SUSTAIN progressively built linkages between these structures, culminating in their convergence through multi-stakeholder dialogues for optimising trade-offs between



"After collecting a sample you look for the different bug groups and check the score. The score tells you the health class of the river, ranging across five categories from natural to very poor" explains Dr. Lulu Tunu Kaaya, a lecturer in freshwater ecology from the University of Dar es Salaam. Photo © Grace Wairima

land, water, ecosystem, and business uses in the wider landscape. At the national level, SUSTAIN engaged with key actors responsible for developing policies and managing natural resources, such as the Ministry of Water and Irrigation, the Ministry of Agriculture, the National Land Use Planning Commission, and the SAGCOT Secretariat in Tanzania and MITADER and the ADVZ in Mozambique. These engagements led to better integration in NRM policies, practical advice on policy implementation, and sustainability guidelines for agricultural companies and SMEs.

Improvements in natural resources management have been wide-ranging in all three landscapes, leading to a total of 103,490 hectares of land being placed under sustainable management, two areas of forest being put under improved protection in Tanzania (Magombera Forest Reserve and Kalambo Nature Reserve), and Magoé National Park in Mozambique becoming better resourced and park management having improved capacity to protect its important ecosystems. Water availability and quality has also increased, due to improved governance as well as monitoring implemented under SUSTAIN. A shift to climate-smart agriculture has also taken place in all three landscapes, leading to increased productivity. Diversification of crops and nature-based business development is increasing food security and incomes for local communities.

Initial challenges in bringing business to the table were overcome by coupling a landscape partnership approach with national-level engagement through industry associations, CEO-led groups, and business schools. Landscape partnerships involved bringing multiple actors to the table, assessing their needs and interests, and then forming partnerships that addressed mutual goals. Kilombero Valley, where a considerable number of agriculture and forestry businesses operate, has the longest-standing engagements that have demonstrated shifts

in business practices, such as climate-smart agriculture with vertical expansion (Kilombero Sugar Company), community-based forest management (Kilombero Valley Teak), and payments for ecosystem services (Kilombero Plantations Limited). At the national level, SUSTAIN has collaborated with the CEO Roundtable of Tanzania and ENAM Business School in Mozambique to develop guidance and build capacity of businesses on sustainability.

SUSTAIN's work on sustainable investment is still in its infancy, but in Tanzania it is showing some promising progress with the recent partnership between the Tanzania Bankers' Association (TBA), CEOt, WWF, and SUSTAIN in the development of Sustainable Finance Principles for the banking sector.

Governance and institutional strengthening

Integrated and inclusive governance is central to the SUSTAIN programme vision. The aims are to strengthen local governance structures, especially those responsible for natural resources management, and to build dialogues between stakeholders and sectors at the landscape level to influence decision making by key institutions in charge of economic development. The ultimate goal is to contribute to the improvement of coordination between public and private institutions at different levels, from landscape to national.

Key results

Tanzania results

During Phase 1, considerable investment went into strengthening the framework for water resources management in Kilombero and Sumbawanga, as well as building supportive basin-wide and nation-wide governance and institutional mechanisms related to water.



With SUSTAIN's support, a new irrigation scheme was built for the Katuma river. Farmers pay a much lower cost than before, water use is more efficient and caters to a higher number of farmers, and the river feeds water into Katavi National Park more abundantly. Photo © SNV

The approach used was to build capacity at the local level through the establishment and strengthening of Water Use Associations (WUAs). In total, eight WUAs were established due to SUSTAIN. The role of WUAs is to enable collaborative and inclusive water resources governance among water users in sub-catchments (see Box 1). At the basin level, SUSTAIN established partnerships with both the Rufij Basin Water Office (RBWO) and the Lake

Rukwa Basin Water Office (LRBWO) to design and implement Integrated Water Resources Management Development Plans (IWRMDPs) for the two basins. At the national level, an MoU with the Ministry of Water and Irrigation led to increased flow of information from basins to the national level, building a knowledge base and learning for policy making around integrated water resource management.

Box 1. SUSTAIN's approach to supporting effective implementation of policy and regulatory frameworks

SUSTAIN supported the implementation of the Tanzanian Water Resources Management Act by enabling the formation of WUAs. According to the Tanzanian Water Resources Management Act No 11 of 2009, section 80 (1), WUAs are recognised in the legislation as the link between Basin Water Boards and water users, both big and small, within the communities. In addition to convening meetings of water users, WUAs also collect water user fees on behalf of the Basin Water Boards and monitor and enforce compliance with various water resource regulations. A WUA may be formed by the agreement of the majority of a group of water users. The objectives of WUAs include:

- Managing, distributing, and conserving water from sources used jointly by members;
- Acquiring and operating water-use permits;
- Resolving conflicts over water use; and
- Collecting water user fees on behalf of the Basin Water Board and representing special interests and value arising from water used for a public purpose.

The creation or consolidation of such institutions was instrumental in supporting better implementation of integrated water resource management.



SUSTAIN's work also supported participatory land-use planning at the village level, which has a direct impact on land-use management practices as well as planning and management of land use to enable sustainable growth for local economic activities. This work has also enabled increased participation of women in natural resource management and planning. (See case study *Building landscape approaches into land-use planning in Tanzania* in Box 2.)

Integrated multi-stakeholder platforms (MSPs) were initiated in both Sumbawanga and Kilombero during Phase 1. These have built linkages between water, land, ecosystem, and business planning; developed landscape visions; and begun prioritising interventions. In Kilombero, the MSP has accelerated the nomination of Kilombero Landscape as a Special Planning Zone. Under Phase 2, SUSTAIN will further strengthen these platforms by developing MSP principles and procedures focused on inclusive governance, implementation action, learning, and financing.

SUSTAIN shaped national-level processes linked to natural resources management through its engagement with the Ministry of Water and Irrigation and by working with the National Land Use Planning Commission to help increase the number of villages with integrated land-use plans in place, which totalled only 10 percent nationwide in 2018. Together with the SAGCOT Secretariat and other national stakeholders, SUSTAIN has influenced investment policy and

led to the development of inclusive green growth toolkits for agriculture sector actors, to ensure legal compliance and support sustainable land management and investment in the SAGCOT corridor.



Villagers demonstrate the new irrigation channels, Mpanda, Tanzania. Photo © IUCN/Mark Smith



“Easily accessible and reliable financing could help farmers combat the effects of climate change that continue to cause setbacks to their initiatives. The private sector is ready to help, but an enabling business environment is needed. Implementation of the IGG toolkit will ensure businesses are adhering to international environmental and social best practices and level the playing field for businesses in Tanzania.” – Geoffrey Kirenga, CEO, SAGCOT Centre

Box 2. Building landscape approaches into land-use planning in Tanzania

Guidelines for village land-use planning have existed in Tanzania for 20 years and are designed for district councils to facilitate participatory land-use planning at the village level. Yet, they promote a relatively static approach to planning, with areas being designated for different uses based on productive practices that exist at a specific point in time. As a result, communities sometimes perceive the process as constraining their economic activities. Furthermore, the focus of the land-use planning process is at the village level, neglecting to capture the larger context of the landscape and hence ignoring shared resources beyond village boundaries.

The SUSTAIN partners in both the Katuma River in Katavi Region and the Mngeta River in Kilolo and Kilombero Districts have used the existing Village Land-Use Plan (VLUP) legislation in innovative ways to plan land uses concurrently across several villages, which are recognised in law as administrative units. Although the approval of land-use plans and the passing of bylaws that are necessary to enforce provisions of the VLUP followed the provisions of the legislation, communities were brought together across village boundaries during the land-use planning process in order to plan how to best use their common land and water resources. The participation of all stakeholders in planning processes has been key to successful management across SUSTAIN landscapes.

Sustainable land-use management in the Upper Mngeta Sub-Catchment

Increasing threats due to population growth and agricultural expansion were causing degradation of the Mngeta Catchment in Kilombero that required urgent attention if ecosystem services deriving from this catchment were to be maintained. Between 2015 and 2018, SUSTAIN collaborated with a variety of governmental and non-governmental partners, at the national, regional, and local levels, to introduce landscape approaches to land-use planning in the catchment. This involved engaging upper stream villages to develop Village Land-Use Plans (VLUP), River Bank Management Strategies (RBMS), and Community-Based Forest Management Plans (CBFM), as well as legally enforceable bylaws that enshrine the collectively agreed management plans. All of the villages also established Village Land Forest Reserves (VLFRs), with a combined coverage of 3,475 ha.

Land-use planning to counter degradation in the Katuma Catchment

The Katuma sub-basin is one of six sub-basins of the Lake Rukwa Basin, encompassing 18 percent of the basin. Catchment degradation due to poor land-use practices, deforestation, and overgrazing is a common feature in the landscape and resulted in the Katuma River being re-designated as a seasonal river in 2002. SUSTAIN collaborated with the National Land Use Planning Commission (NLUPC) to guide the process of preparing VLUPs in the area as a way to counter degradation in the catchment. This involved working with District Council officers to coordinate the process across different villages, so that a 60-meter riverbank buffer zone would be in place along the entire length of the river to protect the riverine environment. The prioritisation of villages was linked to a demarcation of vulnerable water sources in the catchment.

Mozambique results

SUSTAIN contributed to decision making on water resources management in the Zambezi Basin as a member of the Upper Zambezi Basin Sub-committee and the Zambezi River Basin Committee. In Phase 1, the programme

assisted the restructuring of the Zambezi River Basin Committee, mainstreaming an integrated landscape approach into its policies. SUSTAIN also engaged NMRCs and Community Councils in the process of establishing producer clubs, and more broadly around implementation. Local



government authorities (LGAs) were also involved in the programme, with SUSTAIN providing advisory services on ILAs and sustainable land, water, and ecosystem management.

In the final year of Phase 1, ten of the 40 producer clubs set up by SUSTAIN were legally registered as associations, and the land under these associations' jurisdiction received Land User Rights Certificates. This was an important step toward land security, as well as a safeguard of the investments made by the clubs. The newly formed associations now have further incentives to ensure protection and conservation of their land, and invest in processes that will ensure higher yields in the long term.

SUSTAIN's activities in the Magoe, Cahora Bassa, and Marara districts in Mozambique have also contributed to various national and regional

policy strategies. Specifically, SUSTAIN promoted community development and poverty alleviation, water security, biodiversity conservation, and best practices on sustainable agriculture production and sustainable fisheries by local communities. SUSTAIN has been working in collaboration and coordination with government institutions at all levels, as well as local partners, communities, and local structures. SUSTAIN was also involved in the development of the Master Plan (PEOT) for the Zambezi Valley.

Strategic institutional partnerships with the Parliamentary Group on the Economy and Agriculture, MITADER, and ADVZ served to bring evidence from landscape interventions and advocate for integrated natural resources management in national dialogue platforms and fora.



Women play a major role in agricultural production making up 43% of the agricultural labour force in developing countries. SUSTAIN actively supports women's empowerment and inclusion throughout its project activities. Photo © ADPP/SUSTAIN-Africa

What we learned

Visible commitment from top-level officials goes a long way towards securing support for sustainability. National leadership with clarity on its pivotal role for sustainability, combined with effective inter-sectoral collaboration, has helped make the case for the adoption of sustainability policies and practices. Support from central-level officials to local authorities has facilitated the adoption of new approaches, plans, and strategies, as was the case with land-use planning. Similarly, the support of village leaders for the communication and implementation of the required land-use process in their respective villages proved key to implementation.

Partnerships involving multiple stakeholders are essential for catalysing institutional change. SUSTAIN invested in multi stakeholder partnerships as a mechanism to build trust and catalyse systemic change at different levels. More than 15 landscape partnerships involving business, local communities, and local government were established for integrated land-use planning and natural resource management, as well as to improve local livelihoods. These partnerships allowed actors to share risks, resources, and rewards leading to, for example, fruitful arrangements on technology transfer for smallholders that improve sustainable production.

Local institutions are largely responsible for stimulating economic development and livelihood security, while also controlling forest conversion, food security, water abstraction, and pollution. Effectively engaging and empowering existing governance structures is important to effectively scale-up the impacts of partnerships and ensure their sustainability in the long term. SUSTAIN has worked at different levels to strengthen institutions, linking them together and bringing business to the table. Gaining trust from communities and ensuring villagers understood their benefits in the exercise was essential.

Multi-stakeholder platforms are important for gathering the experiences of different stakeholders, as well as ensuring equitable participation and contributions to decision making. The creation of these fora contributes to the development of trusted relationships and partnerships that also build bridges between otherwise siloed institutions. However, these platforms are resource intensive and require commitment from landscape actors, so their design and facilitation needs to build in local ownership and consider financing upfront.

Sustainability capacity at all levels is critical for successful mainstreaming of sustainability principles in the development process through improved cross-sectoral planning, strategy development and implementation. National and local institutions need a better understanding of their respective roles in achieving climate-resilient development, so that they can then effectively engage in the requisite strategic planning.

National advisory boards provide strategic direction and become champions promoting results and learning. In setting up national-level advisory boards composed of influential individuals from government, business, and civil society, SUSTAIN not only received strategic advice on the programme but also was able to influence leadership through advisory board members.





Africa's many wetlands support a great diversity of plants and animals, and their productivity provides natural resources essential to the survival of a significant part of the African rural population. Photo © SUSTAIN-Africa



“SUSTAIN’s approach of promoting partnerships between different entities helps find complementarity between activities in the landscapes, benefiting the entities themselves as well as bringing livelihood and ecosystem improvements.” – José Chiburre, SUSTAIN Manager in Cahora Bassa-Magoé Landscape, ADPP

Integrated natural resources management

As a complement to the governance and institutional strengthening work, SUSTAIN’s work on integrated natural resources management combines landscape-level planning with solutions aimed at enhancing water and food security, as well as climate resilience. To achieve this, context-specific strategies have been employed in the programme, ranging from implementation of water monitoring technologies, to deployment of climate-smart agriculture practices, to restoration of degraded lands and improved management of conservation areas.

Key results

Tanzania Results

To help improve water quality in Kilombero, SUSTAIN has worked with WUAs and the Rufiji Basin Water Office (RBWO) to implement a participatory, low-technology monitoring system for river health and used the resulting data to prioritise water management actions. The system was adopted by Tanzania’s National Environmental Management Council (NEMC), Basin Water Boards, and WUAs across Tanzania³ and is now known as the Tanzania River Scoring System (TARISSfupi). In Sumbawanga, SUSTAIN strengthened and built capacity of water resources management institutions, improving

³ Read more on SUSTAIN’s contribution to collaborative citizen science here: <http://www.waterandnature.org/stories/grace-wairima-collaborative-citizen-science> and community-led river monitoring to protect wildlife and wildlands here: <https://www.awf.org/blog/community-led-river-monitoring-protects-wildlife-and-wild-lands>

data collection (for informed decision making), and resource evaluation and protection.

Both in Kilombero and Sumbawanga, SUSTAIN promoted the adoption of climate-smart agriculture practices and technologies, setting up farmer field schools and demonstration plots, and building capacity of FFPOs and extension service providers. To increase the reach of SUSTAIN-promoted agricultural practices, we partnered with Farm Radio International (FRI) and the Technical Centre for Agricultural and Rural Cooperation (CTA), based in the Netherlands, to select and disseminate through radio programmes best practices on sustainable land and water management for smallholder farmers in Tanzania. The radio programmes reached millions of listeners in rural settings and shared

expert views and farmer-tested good practices in an interactive manner.

Conservation and restoration were also important aspects of SUSTAIN's work over the course of Phase 1. Highlights in conservation included the upgrading of Magombera forest to a Nature Reserve in Kilombero and the establishment of the 62,000-ha Kalambo Nature Reserve in Sumbawanga, the first Miombo nature reserve in Tanzania. Connectivity in the landscape was also improved through CSA and beehive fencing. A total of 103,490 hectares of land were placed under sustainable management through a mixture of conservation, restoration, and CSA activities. SUSTAIN also supported the development of Village Land-Use Plans (VLUPs) in both landscapes of operation.



"The establishment of Kalambo Nature reserve, the first Miombo Nature Reserve in Tanzania, is an illustration of how far we've come under SUSTAIN in Sumbawanga. In the past, unsustainable practices in the region were widespread leading to the degradation of natural resources, but by working with the Tanzanian government and the local communities we've demonstrated the added value of integrating conservation and development." - **Lucy Fulgence, SNV Deputy Country Director for Tanzania**



Africa is a resource-rich continent. Sub-Saharan Africa, in particular, is expected to reach a GDP of \$29 trillion by 2050 (The Economist) Photo: Maputo harbour, Mozambique. Photo © Simon_g /Shutterstock



Box 3: Mapping and data in SUSTAIN

SUSTAIN explored the feasibility of a collaborative data-sharing platform between several organisations involved in collecting and analysing data related to agriculture, economic growth, and environmental and sustainability issues in Tanzania. The intent was to avoid duplication of work and facilitate access by users who would benefit, including policy makers, businesses, and farmers. This resulted in the development of a draft Tanzania Data Inventory. This inventory was built with inputs from a number of partners followed by interviews, providing a robust starting point for the pooling of data. There was emerging consensus that the Data Partnership Platform concept would be taken forward by a quadripartite consortium of organisations including dLab, NLUPC, SAGCOT Centre Limited, and Sokoine University of Agriculture (SUA).

The partnership has contributed a geo-spatial mapping of the interactions between growth corridors and key habitat areas (KHA) on the African continent, including the SAGCOT and Zambezi Corridors, to data on inclusive green growth. A policy brief was also developed as a result of this work.



“Careful planning at the corridor scale, based on spatial scenario modelling, could help refine corridors’ routes and morphology, resulting in different types and degrees of developments within corridors that take ecological and sustainability issues into account.” – David Williams, AWF

Mozambique results

In order to encourage smallholder farmers in the Cahora Bassa-Magoé Landscape to implement solutions for better management of natural resources, SUSTAIN created 40 Producer Clubs, composed of about 50 members each, a significant proportion of whom are women. The establishment of these clubs allowed the dissemination of easily applied climate-smart agriculture practices and technologies, whilst at the same time boosting productivity in the region. Farmer capacity was built through farmer field schools, where different conservation agriculture techniques were demonstrated. Each club benefited from a wide range of inputs and the opening of wells for irrigation.

SUSTAIN established different partnerships at the landscape level to support water and land management. The partnership with ARA Zambeze has resulted in improved monitoring of water quality, assessments to improve water harvesting and irrigation in the landscape, and solutions for improved water security. A partnership with the National Administration of Protected Areas in Mozambique (ANAC) is supporting Magoé National Park management, including through the development of an investment strategy for the park. SUSTAIN also engaged the Natural Resources Committees identified in each community and governmental institutions to elaborate plans for restoration and monitoring implementation of forest restoration activities.



“It was thought that some crops could not be produced here, but SUSTAIN challenged the producers and they realized that after all, much more can be done. Clubs taught how to rotate crops and how to combine different crops to help fight pests.” Helena Zebedias, Administrator of Magoé District

Box 4. Safeguarding important ecosystems and strengthening connectivity in the Udzungwa-Magombera-Selous Landscape

Kilombero Valley, a key catchment of the Rufiji Basin, is the largest low-altitude freshwater wetland in East Africa, and its flood plain is recognised internationally as of high importance both ecologically and for biodiversity. Forest ecosystems in the north and south of the valley act as catchments and provide important services for people and wildlife.

Agricultural expansion and the related migration of people are posing increasing threats to the valley's important water resources, ecosystems, and biodiversity. Human-wildlife conflict is also on the rise in the region, resulting in negative impacts on people and livelihoods, particularly from damage caused by elephants. SUSTAIN's interventions in the area were designed to counter these threats.

During Phase 1 of SUSTAIN, significant progress was made on safeguarding important ecosystems in the valley through integrated landscape planning and management. SUSTAIN spearheaded participatory land-use planning efforts to reduce conflict, strengthen protected area management, and increase connectivity. An important outcome of this work was the upgrading of Magombera Forest Reserve to the status of a Nature Reserve, under which a forest is managed by the Tanzania Forestry Services Agency (TFS) and is fully protected. Further to this, SUSTAIN facilitated a lease transfer agreement of 1,254 ha of forest from Kilombero Sugar Company (KSC) to government reserved land under TFS, thereby increasing the area of this important Nature Reserve. In collaboration with Tanzania Forest Conservation Group, Reforest Africa, and Flamingo Land Ltd, forest restoration planning and implementation is ongoing in Magombera Forest.

In order to maintain connectivity between important ecosystems and to ensure the safety of communities living in the area adjacent to two protected areas in the Valley – Udzungwa Mountains National Park and Magombera Nature Reserve – SUSTAIN, in partnership with the Southern Tanzania Elephant Research Programme (STEP), assisted communities in establishing

beehive fencing groups. These groups aimed to reduce elephant crop raiding and increase local incomes through beekeeping. The initiative has been extremely successful in reducing conflict with elephants and almost eliminating elephant raiding of crops in the area. The three beehive groups also set up and ran Village Savings and Loans Accounts (VSLA) to help buffer farmers from crop losses to elephants; by the end of Phase 1, these VSLAs had already issued 56 loans worth approximately USD 2,500. SUSTAIN also established a honey collection and processing centre to add value to the “elephant-friendly” honey produced by the farmer groups through better bottling and packing and improved quality of honey.



Udzungwa National Park's Sanje Waterfall overlooks farmland that depends on its water © Benjamin Drummond

Partners: Reforest Africa, Tanzania Forest Conservation Group (TFCG), Kilombero Sugar Company (KSC), Tanzania Forest Services Agency (TFS) in Kilombero District, Southern Tanzania Elephant Programme (STEP), United Bank of Carbon, Flamingo Land Ltd.

Co-investment through partners: 948,281 EUR



To encourage smallholder farmers in Mozambique to implement solutions for better management of natural resources, SUSTAIN created 40 producer clubs. These clubs help increase productivity and disseminate climate smart agriculture practices and technologies. Photo © IUCN/SUSTAIN-Africa

What we learned

Successful sustainable production in smallholder farms is key to achieving food security and prosperity, as well as habitat protection and ecosystem restoration. The cumulative environmental impacts of smallholder farmers in one landscape can be substantial, as was observed in Sumbawanga, where smallholder production was contributing to deforestation, erosion, water scarcity, etc. Incorporating smallholder farmers into government-led and other agricultural and/or rural development programmes focused on implementing climate-smart and conservation agriculture are key to mitigating these impacts and will enable smallholder farmers to produce more sustainably on existing farmland in ways that generate more food and revenue for the household.

Climate-smart agriculture technologies can be simple to adopt AND effective at improving resilience and livelihoods. The Producer Club model used by SUSTAIN in Mozambique is built around the concept of farmer field schools and involves the establishment of clubs of smallholder farmers that become champions for conservation agriculture in their communities. This approach aims to build enough capacity and ownership to then catalyse large-scale adoption of practices.

Partnerships between value chain actors can lead to technology transfer that puts smallholder farmers on a path to sustainable production. The engagement that SUSTAIN facilitated between Kilombero Sugar Company, Tanzanian Agricultural Research Institute (TARI), Kilombero Community Charitable Trust, and sugar cooperatives opened up an opportunity for technology transfer to smallholders (See case study *Strengthening food security and climate resilience of sugar outgrowers in Kilombero Valley* in Box 5).

Upfront investment in forming and/or strengthening local institutions, especially producer organisations, enables smallholder inclusion into value chains and improves smallholder access to capacity, finance, and markets.

Approaches differed based on the context and needs of the institutions, but have included support to governance structures (including gender-responsive governance systems), business planning and financial management, design and establishment of offtake agreements, and benefit-sharing arrangements. In Kilombero, an example was SUSTAIN's work to introduce conservation covenants into offtake agreements between smallholder farmers and local companies. In Cahora Bassa-Magoé, farmer clubs have been established as a stepping stone for forming functional farmer associations/cooperatives.



“In order to shift traditional practices to greener and more inclusive practices, those need to add value. For example, when you promote climate-smart agriculture and farmers experience greater yields due to more efficient and environmentally friendly practices that is a clear win-win, both for the farmer and the landscape.” – Susana Gomes, SUSTAIN Programme Manager for Mozambique from 2017 to 2019

Business engagement and market opportunities

Businesses and markets are important levers for transitioning to climate-resilient economic models. SUSTAIN has engaged with businesses both within the landscapes where they operate and at the national level to integrate sustainability into business policies, practices, and value chains. SUSTAIN has also facilitated nature-based business development and market linkages as a way to incentivise sustainable and inclusive landscape practices.

Key results

Tanzania results

In the Kilombero Valley, Tanzania, SUSTAIN worked in partnership with three private sector companies: Kilombero Valley Teak Company (KVTC), Kilombero Sugar Company (KSC), and Kilombero Plantations Limited (KPL).

In the work with KVTC, SUSTAIN facilitated the development of a tripartite agreement among KVTC, six communities, and the Belgian Development Agency (BTC) to pilot collaborative

forest management using a public-private partnership (PPP) model on 6,000 hectares of KVTC land. Under the agreement, in addition to land, KVTC provided training for communities to build technical and commercial skills through co-investment of €140,000.

SUSTAIN strengthened the partnership between Kilombero Sugar Company and cane farmers groups, enabling climate-smart technology adoption, contributing to the establishment of Cane Supply Agreements, and improving farm economics of smallholders while safeguarding the ecological systems in which the smallholders are operating. These interventions have also resulted in an important increase in productivity, equivalent to a more than 70-percent increase in yields and 10-percent sucrose content. (See the case study in Box 5 for further information.)

As for KPL, the engagement was focused on the development of a payment for ecosystems services (PES) scheme (described in the Sustainable Investment section of this report). Unfortunately, after the signing of the PES agreement between the company and communities upstream, KPL ceased its





Africa's population will double to 2 billion by 2050, while population growth in much of the rest of the world slows. Photo © ADPP/SUSTAIN-Africa

operations in Kilombero. AWF is maintaining the agreement with local communities through co-financed projects until a buyer is identified for KPL, at which point their engagement in the scheme will be negotiated.

In both Kilombero and Sumbawanga, SUSTAIN engaged Agricultural Cooperative Marketing Societies (AMCOS) and crop processors (such as RK Industries in Mpanda) to bring smallholder farmers into formal value chains, thereby securing reliable markets, predictable pricing, and access to extension support and financial services.

At the national level, a long-standing engagement with the SAGCOT centre yielded the SAGCOT IGG toolkit. Led by SUSTAIN and co-developed under SAGCOT's Green Reference Group, the toolkit provides guidance for businesses to comply with environmental and social legislation, as well as to adopt improved environmental and social management practices. SUSTAIN also engaged with CEOrt to mainstream sustainability in business and implement a business and

biodiversity strategy and sustainability reporting framework for CEOrt members. Sector-specific interventions have been identified for the financial sectors focused on setting principles and targets for integrating sustainability into business policies, practices, and decision-making processes for investment (see Sustainable Investment section).

Mozambique results

Since 2018, SUSTAIN has ramped up its engagement with businesses in the Cahora Bassa-Magoé Landscape, specifically with Olam in Mozambique and Cahora Bassa Hydroelectric (HCB), both of which operate in the landscape. As SUSTAIN Phase 1 ended, advanced discussions were taking place on a Memorandum of Understanding between SUSTAIN, HCB, and the Zambezi Valley Development Agency (ADVZ). The engagement is expected to begin in 2020. (See case study ***A Landscape partnership in the making*** in Box 6.) Engagement with Olam around building a partnership will continue once Phase 2 is confirmed.

Prior to these bigger engagements, most of the focus was on the development of non-timber forest product (NTFP) value chains to increase market opportunities for local communities. SUSTAIN has established market linkages for both the baobab and honey value chains, with Mozambique Honey Company (MHC) and Baobab Products Mozambique (BPM), respectively.

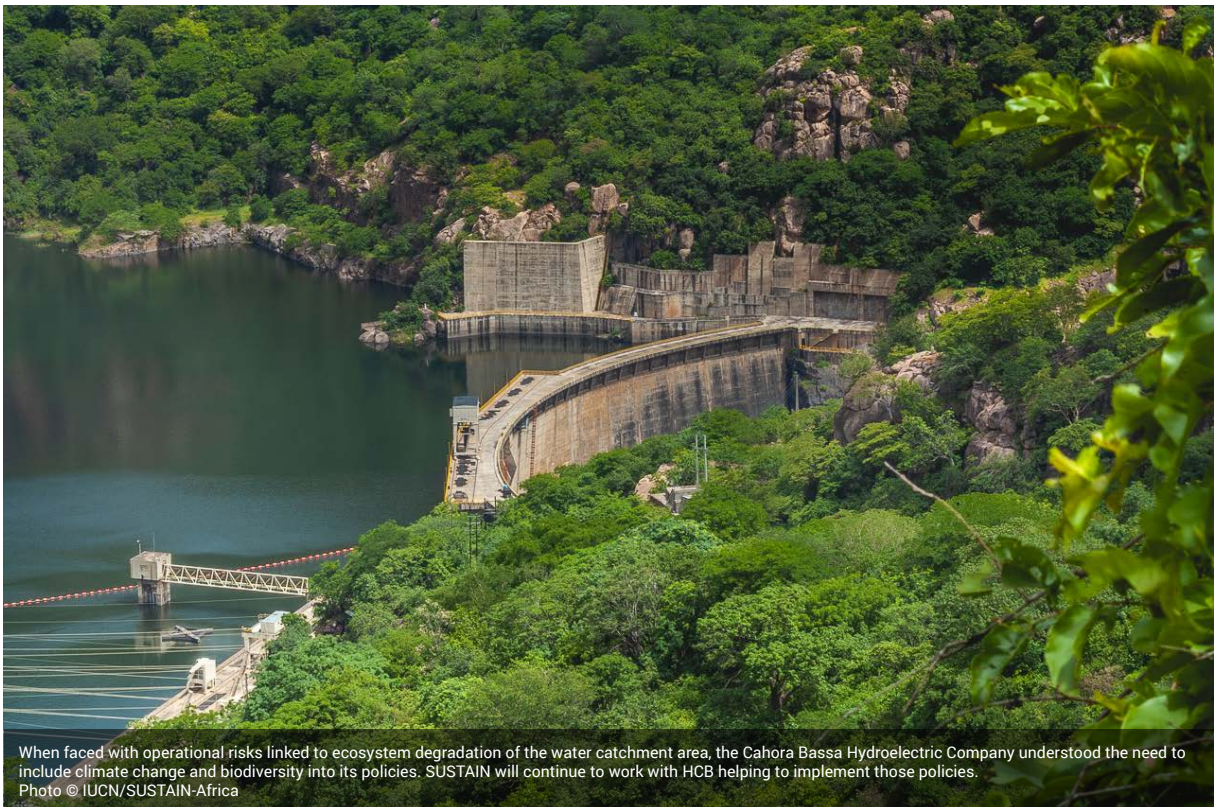
At the national level, partnerships with ENAM Business School and the Confederation of Economic Associations (CTA/CEP) served to raise awareness and build capacity of business to embark on sustainable and inclusive growth trajectories.



“The fact that we have Magoe National Park in the Landscape could help to encourage the embrace of organic forms of production, which could allow the access of products from these landscapes to organic markets, which are increasingly secure internationally.” Milagre Nuvunga, Executive Director of the Micaia Foundation

What we learned

Businesses with international linkages are useful allies in the early stages of promoting sector strategies for sustainability. Many of these businesses have corporate social and environmental requirements mandated by their head offices and are keen to level the playing field to increase competitiveness. Furthermore, their corporate policies often extend to third parties such as other value chain actors. This indicates that properly developed value chains, including properly aligned



When faced with operational risks linked to ecosystem degradation of the water catchment area, the Cahora Bassa Hydroelectric Company understood the need to include climate change and biodiversity into its policies. SUSTAIN will continue to work with HCB helping to implement those policies.
Photo © IUCN/SUSTAIN-Africa



local value chains, could be the key to mainstreaming sustainability strategies in the agricultural and other sectors.

Business resources are scarce, so solutions need to be practical and material. Although the approaches being implemented in SUSTAIN resonate well with civil society, these can come across as theoretical and abstract for businesses operating in landscapes where human and financial resources are scarce and problems are “real” and immediate. To make its agenda relevant to business, SUSTAIN had to look at entry points that are material and offer practical solutions to existing challenges. It needed to make sense “within the fence” for resources and time to be dedicated to efforts “beyond the fence.”

It is as (or more) important to engage with small and medium businesses as it is with larger ones.

Not only are smaller businesses more widely spread across the two corridors, together they are likely to be managing more land, and cumulatively their operations may result in greater impacts to biodiversity and ecosystems. On the opportunity side, by engaging with SMEs there is increased room for innovation and testing new models.

The establishment or strengthening of market linkages for smallholders enables the transition to inclusive and green development pathways. Without securing and differentiating markets for products and services that safeguard local livelihoods, ecosystems, and their services, sustainable development is unlikely to be attained. Blockages that need addressing include limited quality standards, lack of proper and safe storage facilities, inappropriate infrastructure, and lack of or limited extension services for smallholder farmers. SUSTAIN has acted at different levels to address some of these barriers, including through forming multi-stakeholder partnerships to find innovative policy solutions and market-based strategies to strengthen local business development and support value chain investment.

Securing and differentiating markets for products and services that safeguard local livelihoods, ecosystems, and their services is key in the transition to climate-resilient development.

Integrating sustainability considerations into existing businesses and value chains is important but will not change the *status quo*. SUSTAIN will need to put more emphasis on local-level product and service diversification, focusing on products and services that have sustainability and inclusion at their core, and then establish market linkages as incentives for mainstreaming green and inclusive practices.

Sustainable investment

There are many ways in which to encourage better land and water resource management practices, including finance and investment, which are important levers to achieve better management. This can be done by both incentivising a shift in the supply side,

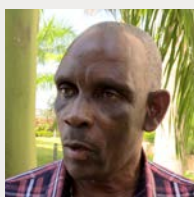
encouraging business development that has sustainability and inclusion at its core, and by acting upon the demand side, implementing environmental and social conditions for lending and investment. When it comes to finance and investment, SUSTAIN has focused on the latter, engaging with the financial sector to influence the rules for investment and contributing to

Box 5. Strengthening food security and climate resilience of sugar outgrowers in the Kilombero Valley

Tanzania's agriculture is highly vulnerable to the effects of climate change, and smallholder farmers are particularly susceptible due to their small farm sizes, low productivity, and high dependence on rain-fed agriculture.

In the Kilombero Valley, sugarcane cultivation has increased tremendously over the last 20 years, driven mainly by Kilombero Sugar Company (KSC), Tanzania's largest sugar producer. While KSC has a plantation, a sizeable portion of its sugarcane is sourced from outgrowers around the two mills that it operates. The number of outgrowers supplying KSC increased from approximately 2,000 in 1998 to more than 8,000 today.

When SUSTAIN began working in Kilombero in 2015, smallholder production and income were challenged by a number of factors, including low productivity, low soil fertility, and no control over fluctuations in demand from KSC. Based on these challenges, SUSTAIN initiated engagement with sugar value chain actors to develop a multi-stakeholder partnership around improving productivity, strengthening inclusion, and building climate resilience of sugar outgrowers. This engagement involved building trust between KSC and the outgrowers by promoting climate-smart agriculture, specifically the use of improved seed cane, best business practices, and establishing and strengthening producer associations or cooperatives.



"SUSTAIN's understanding of what is happening on both the miller's side and on the grower's side was fundamental for building trust and helped us secure the license to operate in the community. In addition, SUSTAIN's initiative on climate-smart agriculture is giving us the confidence that our business is here to stay, because if the environment is well-managed and well-protected, then 20 to 30 years from now, this business will still be running." – Jobra Zahoro, KSC Grower's Development Manager

For outgrowers, SUSTAIN focused on product quality management from agronomy to post-harvest handling, by establishing farmer field schools with demo plots of drought-tolerant seed cane varieties, high-yielding seed cane varieties with high sucrose content, and disease-resistant varieties. The shift to these seed cane varieties, together with agronomic support and capacity building, has resulted in crop yields increasing in Kilombero from 50 tons/ha 10 years ago, to 82 tons/ha currently, with a planned increase to 100 tons/ha by 2021.

Direct engagement with KSC was instrumental in the success of this initiative and depended on building a mutually beneficial relationship between the company and sugar outgrowers. SUSTAIN helped future-proof the business by building conservation covenants into agreements with sugar cooperatives as well as empowering cooperatives to negotiate conditions related to demand and pricing. Engagement with government and the Tanzanian Agricultural Research Institute (TARI) ensured that the agronomic practices promoted were aligned to regulations and prevailing scientific advice.

As a result of the collaboration with SUSTAIN, KSC is now a partner in RE-SUPPLY, a new IUCN project looking at restoration and investment opportunities in Kilombero around sugarcane-growing areas. This project will enable KSC to design and implement a vertical expansion plan whilst safeguarding and restoring ecosystems that the company and its outgrowers depend on for prosperity.

Partners: Kilombero Sugar Company (KSC), Tanzanian Agricultural Research Institute (TARI), Kilombero Community Charitable Trust, Sugar Cooperatives

Co-investment through partners: 826,284 EUR



the development of a sustainable and inclusive finance toolbox.⁴ SUSTAIN has also engaged extensively with the private sector to develop IGG partnerships to catalyse private financing, using direct investment, PES, and public-private partnership (elements covered in the previous section of this report).

Key results

Both in Kilombero and in Sumbawanga, SUSTAIN tested models for mobilising private investment to incentivise ecosystem protection. In the case of Kilombero, this was done in partnership with Kilombero Plantations Limited through a payment for ecosystem services (PES) scheme, whereby the company paid communities upstream to protect water resources based on a mutually agreed governance structure and benefit-sharing model. In Sumbawanga, this was focused around replacing illegal dams on the Katuma River with legal water offtake structures by securing investment from a local

entrepreneur. By mobilising private investment in local irrigation, SUSTAIN helped bring water use into legal compliance – including restoration of environmental flows – with the additional result that funds that were going to illegal water operators will now flow back into the community for re-investment.

At the national level in Tanzania, one of the main results has been establishment of a partnership between TBA, CEOt, SUSTAIN, and WWF for the development and adoption of Tanzanian Sustainable Finance Principles (SFPs). This process is well underway, with a set of principles developed with input and backing from the financial sector as well as a process for adoption, which will continue into 2020 with co-financing from the Mitsubishi Foundation. SUSTAIN has also secured support from the Kenyan Bankers' Association to provide the web infrastructure for developing training and guidance for the SFPs in 2020.

⁴ The toolbox is led by IUCN NL and includes the Green Finance Academy, the Mobilising More for Climate Fund, and the Landscape Investment and Finance Tool.



“The Sustainable Finance Principles, once adopted and implemented, are expected to enhance business opportunities and to create a long term and impactful sustainable business environment in Tanzania by prioritizing environmental and social sustainability”. **Tuse Joune, Executive Director, Tanzania Bankers Association**

Earlier in Phase 1, and using co-investment from the Rockefeller Foundation, a prototype design for a Natural Infrastructure Financing Facility (NIFF) was tested in Tanzania by SUSTAIN. The NIFF is a concept for creation of a platform for facilitating investment in natural water infrastructure and incentives for sustainable and equitable allocation of water resources. The project concluded that facilitation of natural infrastructure investment would need to work at two levels in order to successfully match project needs to the needs of the finance sector:

- A regional or continental (Africa-wide) financing facility working with conservation finance and with (conventional) infrastructure investment financing; and
- Project preparation facilities that work within agencies such as SAGCOT Centre in public-private partnerships to bring together the

partners needed to create investable natural infrastructure projects.

Recommendations from this process are being used to refine the finance and investment component of Phase 2.

In Mozambique, despite early engagement with national stakeholders in 2016 to establish a working group on responsible investments, there was limited appetite to embark on a more structured process to integrate sustainability into the finance sector. The main result during Phase 1 was therefore a partnership with Gapi, a development finance institution, focused on providing access to finance and capacity around household savings and investments to producer clubs. This work resulted in the establishment of 36 saving groups – self-selected members of the producer clubs who agree to save together and take small loans from those savings.

What we learned

Scale is extremely important when it comes to finance. Both through SUSTAIN’s experience trying to set up a Green Guarantee Facility (GGF) and engagements with the finance sector through the NIFF project, it became clear that size matters. In both cases, the small size of the financial resources available (GGF) and the sourcing geographies (NIFF) were identified as barriers to success, due to the high operational and risk management costs involved.

Leveraging finance and investment for growth that fosters ecosystem stewardship and social prosperity is a long-term endeavour. Access to finance is essential for all types of businesses currently operating or with interest in investing in SUSTAIN landscapes. SUSTAIN has begun the long journey of influencing the financial sector to put in place environmental and social safeguards for investment and is exploring innovative financial mechanisms that incentivise environmentally and socially progressive business practices. However, change will take commitment from financial actors, as well as persistence and time.



The finance sector needs to own the sustainability conversation. While SUSTAIN and partners can and are providing technical support to the financial sector in Tanzania for the development of Sustainable Finance Principles, leadership and ownership from the sector is needed as the process progresses into refinement, adoption, and implementation. Some aspects that are helping with this include:

- ❧ Awareness raising, capacity building, and prioritising sustainability in business strategic planning;
- ❧ Cross-learning among businesses as a conduit for the transfer of knowledge and skills from international to local banks; and
- ❧ A commitment from the leadership of key financial institutions and regulators.



Given its location and low levels of cultivated farmland, Mozambique has vast potential to be a major food producer in Southern Africa and to play a role in minimising food insecurity for its landlocked neighbours (USAID,2016) Photo © IUCN/SUSTAIN-Africa

Box 6. A landscape partnership in the making

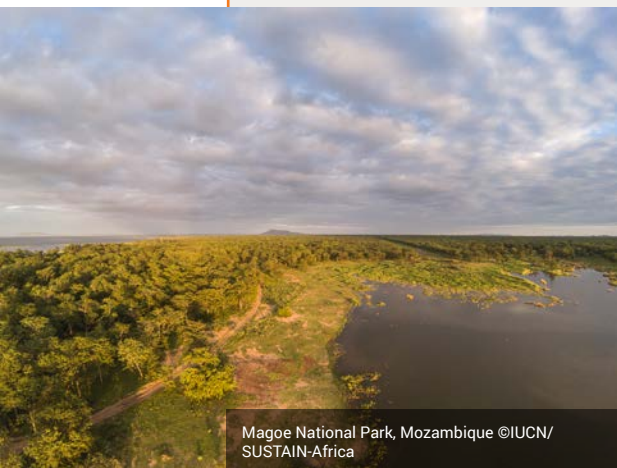
Mutual interest in investing in green and inclusive development has brought to the table a coalition of actors intent on securing a sustainable future for the Cahora Bassa-Magoé Landscape. Cahora Bassa lake stretches for 270 km over the Zambezi river and is considered the epicentre of Tete province. Cahora Bassa Hydroelectric (HCB), which is situated on the lake, is also southern Africa's largest independent power producer. On the south bank of Cahora Bassa Lake is Magoé National Park (PNM), which has been a protected area since 2013 and is crucial for safeguarding biodiversity and the important ecosystem services that people and businesses depend on in this rapidly growing region with a well-established extractive sector.

Beginning with the desire of local actors to see Magoé National Park properly resourced to carry out its important mission, SUSTAIN convened HCB, PNM, and the Zambezi Valley Development

Agency (ADVZ) to discuss the type of support that each actor could provide to the park. From this first engagement, it was clear that there was a need and willingness of those sitting around the table to go beyond philanthropic support. So began the journey to build a partnership aimed at the integrated management of natural resources in the area of the Cahora Bassa dam and its surrounding landscape.

The first step in this process was to understand each actor's interests and motivation for being around the table. Once this was clear, it was possible to determine common goals and the steps needed to accomplish these goals. These discussions resulted in the decision to create a Memorandum of Understanding between SUSTAIN partners, HCB, and ADVZ, with the goal of carrying out a baseline study of the entire landscape. The study will be carried out over the course of several months to analyse the main factors (social, economic, and environmental) contributing to the loss and degradation of biodiversity and ecosystems and will help to identify priority ecosystems to conserve and restore. The resulting report will serve to structure a joint action plan for the landscape.

As Phase 1 of SUSTAIN came to an end in December 2019, the MoU and terms of reference for the baseline work were in the final stages of negotiation between the partners. Discussions have been progressing in 2020, with ADVZ taking the lead until SUSTAIN 2 is approved.



Magoé National Park, Mozambique ©IUCN/ SUSTAIN-Africa



Park rangers Rita Joao and Jose Clemente ©ADPP Mozambique / SUSTAIN-Africa



"Business engagement in conservation action is crucial: HCB is a worldwide company and, if successful, the case could serve as an example to be replicated in the rest of the country with various types of companies operating in other areas." – **Mauricio Xerinda, IUCN Representative in Mozambique**

Partners: Zambezi Valley Development Agency (ADVZ), Cahora Bassa Hydropower (HCB), Magoé National Park

Co-investment through partners: under discussion



The future

SUSTAIN was designed as a ten-year programme with a midway checkpoint for reflection and refinement. As part of this process, the SUSTAIN Partnership had the opportunity to analyse what went well and what could be improved, in order to achieve the ambitious agenda that we set out to achieve. We were helped by an [external review of the programme](#) that gave us valuable feedback on where we were adding value and where we were not.

A second phase is currently under development that takes into account this feedback as well as the needs and priorities identified through a series of engagements at national and local levels with SUSTAIN partners and friends. It is expected that the second phase will begin in late 2020, subject to final approval.

SUSTAIN 2 aims to build climate-resilient people-centred development by improving coordination and inclusion in governance structures and processes at different levels; by strengthening capacity, practices, and knowledge linked to sustainable land, water, and business management; and by increasing investment in ecosystems and inclusive and green businesses.

In this section, we outline some of the aspects that will change in the second phase, as well as how we envisage reaching our goals, whilst striving for long-term sustainability and scale-up.

What we will do differently

The broad geographies and areas of intervention in SUSTAIN will remain the same: Kilombero Valley and Sumbawanga Landscape in Tanzania and Cahora Bassa-Magoé Landscape in Mozambique. However, the size of the intervention areas for Phase 2 will be reduced and more clearly delineated to ensure impact. We will concentrate on smaller areas of the Phase 1 landscapes where there are solid engagements and progress, and focus on a more realistic scale that delivers a streamlined programme structure.

The process initiated under Phase 1 to integrate SUSTAIN's objectives and work packages so that they align with the programme's cross-cutting and cross-sectoral nature will be finalised during the accelerated Phase 2 kick-off phase. The result will be a clear theory of change for the programme built around its vision of "climate-resilient people-centred development balancing economic growth with ecosystem stewardship and social prosperity."

People-centred development and local ownership will be important tenets of the programme's second phase and are articulated both under its goal to achieve social prosperity and in each of the programme's outcomes. SUSTAIN's inclusion work is underpinned by the [Natural Resource Governance Framework \(NRGF\)](#). Of



particular concern to the SUSTAIN partnership is empowering the most disadvantaged groups and eliminating disparities that reduce economic and social potential. Gender and youth strategies will be developed to ensure that targeted approaches are implemented for empowering these important segments of society.

SUSTAIN's partnership approach has been and will continue to be one of the main features of the programme. This will be further strengthened by ensuring that each partner works within their areas of expertise, by bringing into the partnership organisations with expertise in thematic areas that are newer to the programme (e.g., finance and investment), and by linking co-investment more closely to delivery.

Knowledge management and communications will ensure that learning from the programme is both widely available and targeted to those stakeholders that will most benefit. It will translate complex programme concepts and definitions into more accessible language, convert internal and external project lessons into practical and transferable knowledge, and cover stories and progress more broadly by linking into current affairs. SUSTAIN will also aim to position itself as a learning lab for climate-resilient

development approaches, providing lessons on landscape development beyond the geographies and countries of focus.

The area of the programme that will experience the most significant changes will be Monitoring, Evaluation, and Learning (MEL). In Phase 1, MEL was entirely reliant on a large set of indicators and neglected the need to ensure that associated systems, processes, and capacity were in place. Phase 2 will therefore have a system that measures progress on SUSTAIN results with a core set of indicators and then focuses on learning needs.

Ensuring long-term sustainability

As this will be the second and final phase of the programme, it will be essential to plan for the long-term sustainability of SUSTAIN results. This involves building up a pipeline of co-investment, working with local organisations and communities to ensure local ownership, and capturing and disseminating learning to encourage replication and scale-up. An effective and inclusive exit strategy will be developed to help ensure the continuation of results and structures after the programme phases out.



INTERNATIONAL UNION
FOR CONSERVATION OF NATURE

GLOBAL WATER PROGRAMME
Rue Mauverney 28
1196 Gland
Switzerland
Tel +41 22 999 0000
Fax +41 22 999 0002
www.iucn.org