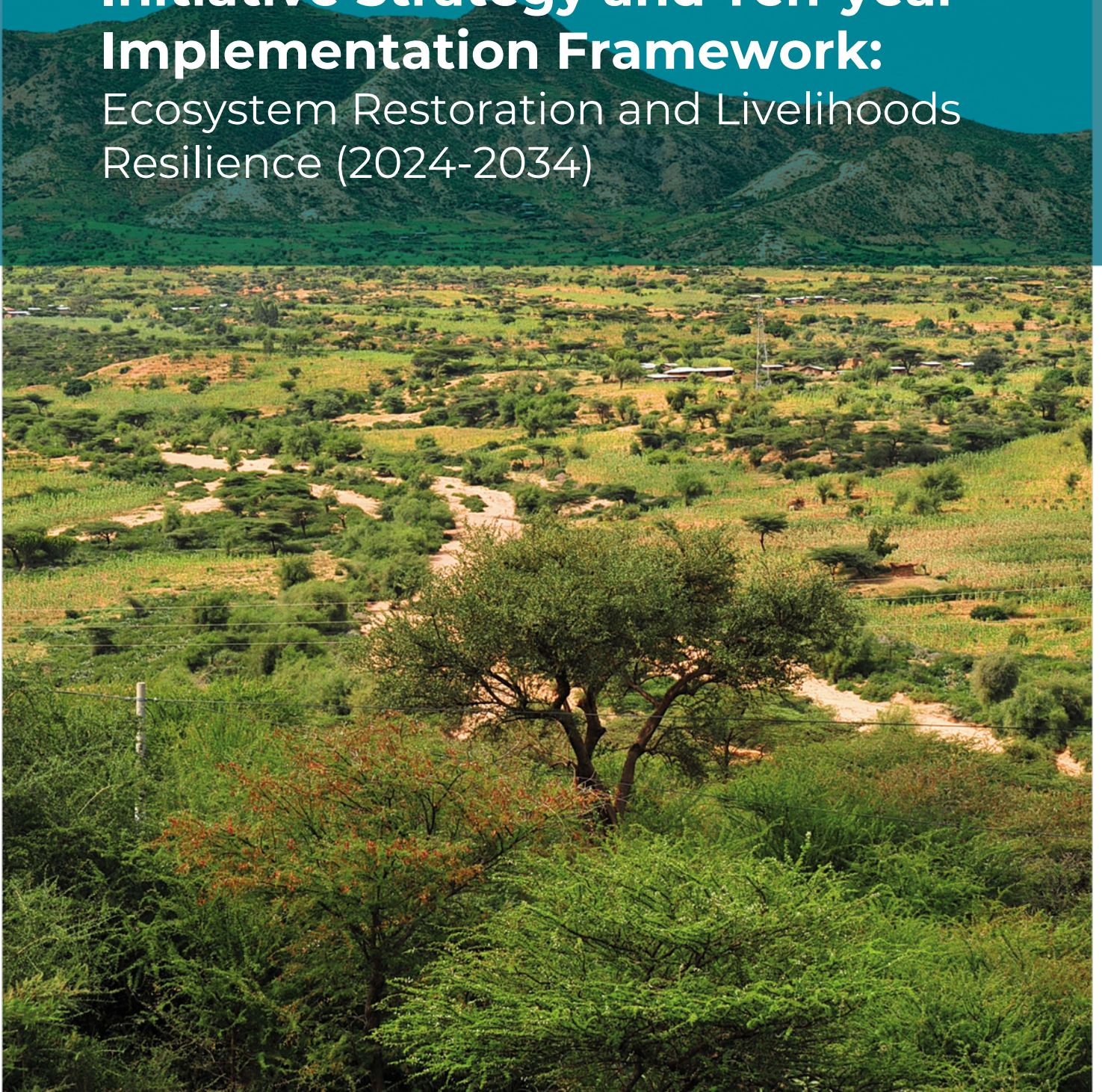




African Union Great Green Wall Initiative Strategy and Ten-year Implementation Framework: Ecosystem Restoration and Livelihoods Resilience (2024-2034)



FOREWORDS



H.E. Moussa Faki Mahamat
Chairperson
African Union Commission

Africa faces coinciding and compounding challenges of climate change, migration, climate related risk and conflict, land degradation, desertification, water scarcity and biodiversity loss, existential challenges to our Member States. These interacting challenges are further exacerbated by other factors, including the COVID-19 pandemic; the outbreak of global conflicts; unstable global economy, disruptions from emerging artificial intelligence; financial instability; regional migration; and climbing deficits in food, water, work, safety and security.

These stressors and shocks cannot be addressed without proactive, collective continental efforts targeting the impacts and encumbrances of these challenges, which are already hampering our integration and development. In addition, we seek harmonised and coordinated approaches for multi-scale action and enhanced coordination.

The new *Great Green Wall Initiative Strategy and Ten-Year Implementation Framework (2024-2034)* is one of our continent's flagship initiatives, providing a tool to help restore our landscapes and build resilient livelihoods. Today, there is unquestionable indigenous and scientific evidence to highlight the substantial benefits that restoring landscapes and soil health can offer Africa, to help us as a continent respond to the multiple challenges we face. Landscape restoration can directly combat desertification and land degradation by contributing to ecosystem resilience, making the continent and its people more adaptable to changes in the environment. This can in turn contribute to the achievement of our development aspirations outlined in Agenda 2063, as well as assist us in accomplishing our broader sustainable development goals through improved biological diversity, climate mitigation and adaptation, improved water quantity and quality and disaster risk reduction. In addition, land restoration can provide livelihoods and job opportunities to our continent's women, men and youth and enable greater peace and security while coalescing resilience building benefits derived through the nature-based solutions for sustained support of well-functioning ecosystem services.

Responding effectively to these multiple environmental and social challenges is going to require deep collaboration and synergies. As a continent, we need to work together, and we must also build effective and meaningful partnerships with the broader international community.

Much work has already been achieved, and we congratulate Member States and Regional Economic Communities who have made substantial headway on land restoration targets to date.

This revised Great Green Wall (GGW) Strategy has evolved substantially since its inception in 2007 as a response to advancing deserts using a band of tree plantations. Today, this initiative covers a mosaic of different land uses with the common objectives of restoration to support ecosystem function and services, while strengthening people's resilience. In 2023, over 24 additional Member States from North, West, East and Southern Africa joined the initial Member States from the Sahara and Sahel, including the eleven Member States of the Pan African Agency of the GGW achieving the true Pan African status as it was intended.

This new Strategy and Ten-Year Implementation Framework is a key instrument in enhancing our regional collaboration in combating land degradation, desertification, droughts, and sand and dust storms that result in water scarcity, biodiversity loss and climate change with devastating effects and impacts on the lives, livelihoods and peaceful existence in our communities. It provides a framework for joint action and clearly expresses our needs and priorities as a continent. If effectively implemented, it will unlock Africa's potential in building climate resilient communities and economies, which are an integral component of our continental vision for 'an integrated, prosperous and peaceful Africa, driven by its own citizens, representing a dynamic force in the international arena'. We all now have a responsibility to ensure that this becomes a living document, one that informs and enriches our collective actions at local, national regional and global levels.

I call on all Member States, Regional Economic Communities, and our development partners, collaborators, sympathisers and believers in the ideals of the Great Green Wall Initiative to join the Africa Union Commission in making use of this document to accelerate the achievement of restoration and resilience goals and aspirations.



H. E. Josefa Leonel Correia Sacko
Commissioner
Agriculture, Rural Development, Blue Economy and Sustainable Development
African Union Commission

Building on the pillars of our existing harmonised Regional Great Green Wall (GGW) strategies and the efforts and aspirations of African Member States, this new African Union (AU) *Great Green Wall Initiative Strategy and Ten-Year Implementation Framework (2024-2034)* provides a mechanism for a harmonised and coordinated approach for multi-scale, collective action for restoring landscapes and building resilient livelihoods.

The Strategy sets out a new continental vision and pathway, and includes common principles, priorities and action areas for achieving this at a pan-African scale, focusing on efforts to deepen our collaboration and inclusion among diverse stakeholders within and across scales.

Our vision is to transform African landscapes into bastions of productivity and resilience, securing a sustainable future for all its inhabitants. Importantly, this new GGWI Strategy and Implementation Framework strives to build on more than a decade of implementation of the Initiative, seeks to enhance understanding of emerging underlying drivers of change on our continent and sets out to address them in an integrated, inclusive and holistic way approach in order to build more transformative and sustainable community resilience to the considerable stresses and uncertainties that we face as a continent today.

This new GGW Strategy and Framework is founded under a wide range of core principles. It aspires to be African-led and African-owned, promoting regional integration, subsidiarity, local ownership and inclusive people-centred approaches. It also importantly seeks to enhance gender transformation, integrate traditional and indigenous knowledge and practices, and promote just and equitable transitions for scaling up land restoration. Intersectionality, transparency, accountability, efficiency and adaptive management are also key principles within the GG Strategy and Implementation Framework, and it seeks to align plans and priorities to a whole-economy and systems approach, promoting effective collaboration and coordination across disciplines, sectors and institutions.

The importance of co-design and co-delivery of transformative restoration, resilience, and development practices and processes emerging from inclusion and leadership of women and youth is also central to this document. The Strategy weaves together the threads of community engagement, scientific research, practical application, and policy development into a coherent tapestry that supports resilient food systems, sustainable land management, value chains and entrepreneurship.

For the GGW Strategy and Implementation Framework to be effectively implemented, it is essential that broad-based partnerships are established for knowledge management, knowledge exchange, capacity development and advocacy and resource mobilisation. In addition, existing initiatives, policies and strategies that have complementary objectives can be capitalised upon to accelerate the GGW goals and objectives. This GGW Strategy and Implementation Framework is informed and guided by the existing national climate, biodiversity, disaster risk efforts and aspirations of African Member States and regions. It also aligns closely with other continental frameworks and projects, such as, the CAADP Malabo Declaration agenda, programmes and projects, Great Green Wall Initiative 2021-2030 DPIP Decennial Priority Investment Plan of the Pan African Agency for the GGWI, our Climate Change and Resilient Development Strategy and Action Plan (2022-2032), the Green Recovery Plan (GRAP), Disaster Risks Reduction Strategy for Africa, the Biodiversity Strategy, Sustainable Forest Management and Framework for Africa (SFMF), Programme of Action for the Implementation of the Sendai Framework for Disaster Risk Reduction 2015-2030 in Africa, and the African Strategy on Combating Illegal Exploitation and Illegal Trade in Wild Fauna and Flora in Africa.

The Strategy further complements other flagship programmes of the AU and AUDA-NEPAD, including the African Forest Landscape Restoration Initiative, Global Evergreen Alliance, the One Billion Trees for Africa, the Programme for Infrastructure Development for Africa (PIDA) and the African Continental Free Trade Area (ActFA) among others.

We believe that this GGW Strategy and Ten-Year Implementation Framework provides an important point of convergence for the three global Rio Conventions, namely, the United Nations Convention to Combat Desertification, the United Nations Framework Convention on Climate Change and the United Nations Convention on Biological Diversity. It also intends to ensure its contribution as a cornerstone programme of Land Degradation Neutrality (LDN) and the Decade for Ecosystem Restoration, helping to meet key targets of the United Nations Sustainable Development Goals.

From the outset, this GGW Strategy and Implementation Framework sets out to clarify the roles and responsibilities of engagement to achieve its envisaged goals and objectives. It therefore underscores the importance of agreed coordination arrangements and mechanisms among regions, institutions, agencies, partners and stakeholders.

Significant support for the implementation of this Pan-African GGW Strategy and Implementation Framework is needed from Regional Economic Communities, Member States, Regional and GGW agencies, development Partners, NGOs, CSOs and citizens at large, and local and international partners. This is paramount in achieving the Strategy's objectives, as well as to scale the priority areas that are required to achieve sustainable land management, landscape restoration and livelihoods resilience through Nature Based Solutions over the next ten years.

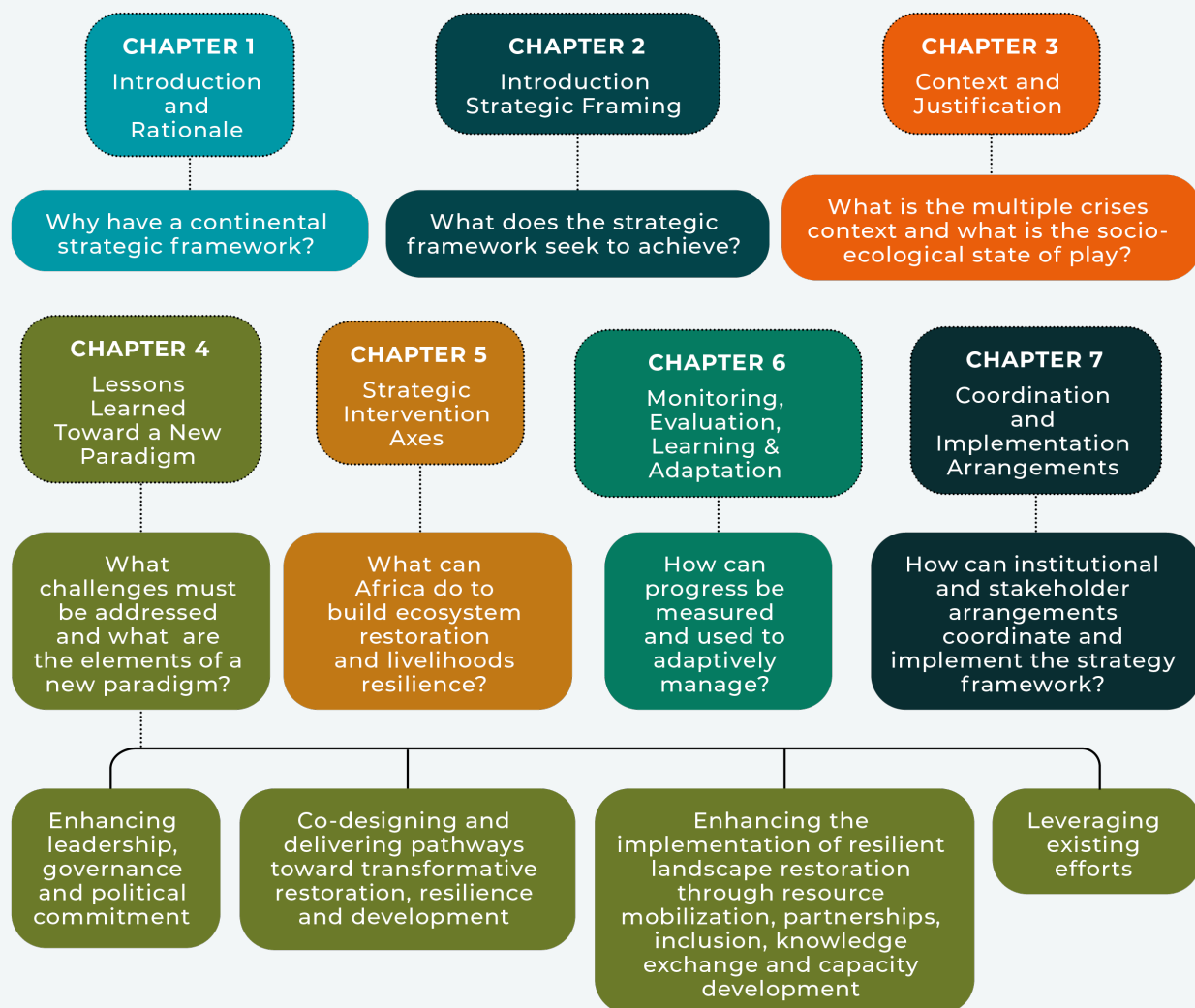


TABLE OF CONTENTS

FORWORDS	2
ACRONYMS AND ABBREVIATIONS	9
EXECUTIVE SUMMARY	12
CHAPTER 1. BACKGROUND AND RATIONALE	15
CHAPTER 2. STRATEGIC FRAMING	21
2.1 Vision	22
2.2 Goal	22
2.3 Overall objective	22
2.4 Objectives	22
2.5 Outcomes.....	23
2.6 Principles.....	24
2.7 Stakeholder and beneficiaries.....	26
2.8 Methodology and validation process	29
CHAPTER 3. CONTEXT AND JUSTIFICATION	30
3.1 Building resilience through the Great Green Wall.....	30
3.1.1 Great Green Wall as an integrator to address and respond to multiple crises.....	30
3.1.2 Great Green Wall as an integrator across multiple goals and commitments	33
3.2 Overview of the socio-ecological state of play	37
3.2.1 Ecosystem dimensions	37
3.2.2 Social dimensions	53
3.2.3 Summary.....	61
Chapter 4. LESSONS LEARNED TOWARD A NEW PARADIGM	62
4.1 Challenges to address.....	62
4.1.1 Governance and institutional relationship challenges.....	63
4.1.2 Participation and partnership challenges.....	65
4.1.4 Addressing monitoring, reporting and verification concerns	67
4.1.5 Policy environment and political support challenges	67
4.1.6 Funding and funding mechanisms.....	68
4.2 Towards a new paradigm: Great Green Wall 2.0	69
CHAPTER 5. STRATEGIC INTERVENTION AXES	83
5.1 Strategic Intervention Axis 1. Enhancing leadership, governance and political commitment	84
5.1.1 Intervention Area 5.1.1 Raise and secure the political commitment to achieve the Great Green Wall objectives	84

5.1.2 Intervention Area 5.1.2 Strengthen the leadership, governance, efficiency and transparency of the Great Green Wall Initiative and its agencies	85
5.1.3 Intervention Area 5.1.3 Position, align and integrate Great Green Wall efforts within inter-related policies, mandates and commitments across nested scales.	86
5.1.4 Intervention Area 5.1.4 Deepen and broaden collaboration among diverse partnerships for resilience within and across different scales	86
5.1.5 Intervention Area 5.1.5 Analyse barriers and incentives for creating a more favourable economic and institutional framework for effective governance, resilience, stability, and security	87
5.2 Strategic Intervention Axis 2. Co-design and deliver pathways toward transformative restoration, resilience and development	88
5.2.1 Intervention Area 5.2.1 Bundle administrative, scientific and implementation and engagement capacities to tailor and scale landscape restoration and the management of ecosystems.	88
5.2.2 Intervention Area 5.2.2 Promote inclusive leadership and resilient land-based economic enterprises and entrepreneurial activities for men, women and youth	89
5.2.3 Intervention Area 5.2.3 Invest in integrated value chains and employment that promote land health, effective water cycles and biological diversity	90
5.2.4 Intervention Area 5.2.4 Invest in climate resilient infrastructure and access to renewable energy	91
5.2.5 Intervention Area 5.2.5 Promote community-led land restoration and resilience building by expanding socio-ecological and political approaches, tools, and contextualised options.	91
5.2.6 Intervention Area 5.2.6 Promote community-led land restoration and resilience building by expanding the nature based, agroecological and greening approaches, tools, practices and options.....	92
5.2.7 Intervention Area 5.2.7 Invest in coordinated scientific and experience-based support and the creation of a common monitoring framework.....	94
5.3 Strategic Intervention Axis 3. Enhancing the implementation of resilient landscape restoration through resource mobilisation, partnerships, inclusion, knowledge exchange and capacity development	95
5.3.1 Intervention Area 5.3.1 Enhance finance flows and resource mobilisation	95
5.3.2 Intervention Area 5.3.2 Develop creative partnerships and effective coordination	99
5.3.3 Intervention Area 5.3.3 Ensure inclusive leadership and participation, especially of women and youth.....	101
5.3.4 Intervention Area 5.3.4 Capacity development and knowledge exchange based on skills building and behavioural change	103
5.3.5 Intervention Area 5.3.5 Use engagement and planning tools.....	105
5.3.6 Intervention Area 5.3.6 Develop effective communications, advocacy approaches and visibility.....	107
5.4 Strategic Axis 4. Leveraging existing efforts.....	108

5.4.1 Landscape restoration, watershed management and resilience building	108
5.4.2 Healthy soil and water	114
5.4.3 Pastoral and silvopastoral systems	116
5.4.4 Renewable energy	117
5.4.5 Climate change and climate resilient agriculture	118
5.4.6 Biological diversity	119
5.4.7 Green cities	120
5.4.8 Scientific and academic support.....	120
5.4.9 Risk management	121
5.4.10 Scaling approaches and projects.....	121
CHAPTER 6. MONITORING, EVALUATION, LEARNING AND ADAPTATION.....	122
6.1 Monitoring progress.....	123
6.2 Learning and evaluation for adaptive management.....	126
6.3 Developing the monitoring, evaluation, learning and adaptation plan	127
CHAPTER 7. COORDINATION AND IMPLEMENTATION ARRANGEMENTS.....	129
7.1 Great Green Wall Initiative bodies and support institutions across various scales	130
7.1.1 Continental and regional bodies	130
7.1.2 International bodies	133
7.1.3 National, subnational and community levels	134
7.1.4 Private sector across scales	135
7.2 Coordination arrangements	136
7.3 Criteria to obtain membership to the Great Green Wall Initiative.....	137
7.4 Criteria for new projects contributing to the Great Green Wall Initiative	142
CHAPTER 8. INITIATING THE GREAT GREEN WALL STRATEGY	143
REFERENCES.....	150
ANNEX 1. AFRICAN UNION GREAT GREEN WALL DECISIONS.....	164
ANNEX 2. CONTRIBUTORS TO AND METHODOLOGY FOR DEVELOPING THE GREAT GREEN WALL STRATEGY	168
ANNEX 3. ANALYSIS OF STRENGTHS, WEAKNESSES, OPPORTUNITIES AND THREATS FROM THE GREAT GREEN WALL STRATEGY DEVELOPMENT PROCESS	182

ACRONYMS AND ABBREVIATIONS

AAD	Action Against Desertification
ACLED	Armed Conflict Location and Event Data
ACMAD	African Centre of Meteorological Applications for Development
ACPC	African Climate Policy Centre
AESA	Alliance for Accelerating Excellence in Science in Africa
AfCFTA	African Continental Free Trade Area
AfDB	African Development Bank
AFR100	African Forest Landscape Restoration Initiative
AFSH	African Union Fertiliser and Soil Health
AI	Aridity Index
AMCEN	African Ministerial Conference on Environment
ANR	Assisted Natural Regeneration
ARC	African Risk Capacity
AREI	Africa Renewable Energy Institute
ARLI	African Resilient Landscapes Initiative
ASARECA	Association for Strengthening Agricultural Research in Eastern and Central Africa
AU	African Union
AUC	African Union Commission
AUDA	African Union Development Agency
BRICKS	Building Resilience through Innovation Communication and Knowledge Services
CA4SH	Coalition of Action 4 Soil Health
CAADP	Comprehensive Africa Agriculture Development Program
CBD	United Nations Convention on Biological Diversity
CBNRM	Community-based Natural Resource Management
CBP	Carbon Benefits Project
CCARDESA	Centre for Coordination of Agricultural Research and Development for Southern Africa
CDE	Centre for Development and Environment, University of Bern
CEN-SAD	Community of Sahel-Saharan States
CGIAR	Consultative Group on International Agricultural Research
CIAT	International Center for Tropical Agriculture
CIFOR-ICRAF	Centre for International Forestry Research-World Agroforestry Centre
CILSS	Interstate Committee on Drought Control in the Sahel
COMESA	Common Market for East and Southern Africa
COMIFAC	Central African Forestry Commission
COP	Conference of the Parties
CORAF	West and Central Africa Council for Agricultural Research and Development
CRS	Catholic Relief Services
CSO	Civil Society Organisation
CSR	Corporate Social Responsibility
DPIP	Decennial Priority Investment Plan
DRC	Democratic Republic of Congo

EAC	East African Community
EAFF	East African Farmers' Federation
ECCAS	Economic Community of Central African States
ECOWAS	Economic Community of West African States
ELD	Economics of Land Degradation
EOV	Ecological Outcome Verification
ESG	Environmental and Social Governance
EU	European Union
EWG	Expert Working Group
FAGRIB	Futures Agribusiness
FAO	Food and Agriculture Organization of the United Nations
FARA	Forum for Agricultural Research in Africa
FEBA	Friends of Ecosystem-based Adaptation
FMNR	Farmer-Managed Natural Regeneration
GCF	Global Climate Fund
GDP	Gross Domestic Product
GEF	Global Environment Facility
GGW	Great Green Wall
GGWI	Great Green Wall Initiative
GGWSSI	Great Green Wall for the Sahara and the Sahel Initiative
GIS	Geographic Information System
GMES	Global Monitoring for Environment and Security
GSP	Global Soil Partnership
ICARDA	International Center for Agricultural Research in the Dry Areas
ICIMOD	International Centre for Integrated Mountain Development
ICPAC	IGAD Climate Prediction and Application Centre
IFAD	International Fund for Agricultural Development
IGAD	Intergovernmental Authority on Development
ILRI	International Livestock Research Institute
IPCC	Intergovernmental Panel on Climate Change
IRD	International Research for Development
ISRIC	International Soil Reference and Information Centre
IUCN	International Union for the Conservation of Nature
LDN	Land Degradation Neutrality
LDSF	Land Degradation Surveillance Framework
M&E	Monitoring and Evaluation
MELA	Monitoring, Evaluation, Learning and Adaptation
MODIS	Moderate Resolution Imaging Spectroradiometer
MRV	Monitor, Report, Verify
NAP	National Adaptation Plan
NARI	National Agricultural Research Institutes
NbS	Nature-based Solution
NBSAP	National Biodiversity Strategies and Action Plan
NDC	Nationally Determined Contribution
NEPAD	New Partnership for Africa Development
NGO	Non-Governmental Organisation
NTFP	Non-timber forest products

OSS	Sahara and Sahel Observatory
PAAGGW	Pan African Agency of the Great Green Wall
PAFO	Pan African Farmers' Organisation
PIDA	Programme for Infrastructure Development in Africa
PLUP	Participatory Land Use Planning
PRC	Permanent Representatives Committee
R&D	Research & Development
RECs	Regional Economic Communities
REFACOF	Regional Women's Networks
REFEDE	Women's Network for Environmental Rights
RFD	Results Framework Document
ROAM	Restoration Opportunities Assessment Methodology
ROPFA	Network of Farmers' and Producers' Organisations in West Africa
RSC	Regional Steering Committee
SACAU	Southern Africa Confederation of Agricultural Unions
SADC	Southern African Development Community
SAFGRAD	Semi-Arid Food Grain Research and Development
SAWAP	Sahel and West Africa Program
SDG	Sustainable Development Goals
SEBE	Sustainable Environment and Blue Economy
SHARED	Stakeholder Approach to Risk Informed and Evidence Based Decision-Making
SIA	Soil Initiative of Africa
SLM	Sustainable Land Management
SMEs	Small- and Medium-Sized Enterprises
SSA	Sub-Saharan Africa
SSP	Shared Socio-economic Pathway
STC	Specialised Technical Committee
SURAGGWA	Scaling-Up Resilience in Africa's GGW
SWOT	Strengths, Weaknesses, Opportunities and Threats
TOF	Trees Outside of Forests
UMA	Arab Maghreb Union
UNCCD	United Nations Convention to Combat Desertification
UNDP	United Nations Development Programme
UNECA	United Nations Economic Commission for Africa
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
USGS	United States Geological Survey
WFP	World Food Programme
WOCAT	World Overview of Conservation Approaches and Technologies
WRI	World Resources Institute



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EXECUTIVE SUMMARY

The Great Green Wall Initiative (GGWI), initiated by the African Union (AU) in 2007, is an African flagship solution that responds to the threat of advancing desertification. Initially envisaged as an extraordinarily long band of narrow tree plantations, this Initiative has evolved into a mosaic of different land uses that have as their common objectives, the restoration of agricultural, pastoral and dryland forestlands to support ecosystem function and services, while strengthening people's livelihoods and resilience against the myriad of stresses and shocks to which the region is prone. From its original form, the GGWI has evolved and grown over time. At its inception, 11 countries formed a green band across the Sahara and Sahel. Today this has expanded to include an additional 22 countries from North Africa, East Africa, Southern Africa and West Africa.

Cognisant of the extraordinary potential of the GGWI, along with historical implementation challenges and the growing threat of polycrises, the African Union Commission (AUC) recognised the need for an overarching GGW Strategy to enhance coordination and cohesiveness across countries, regions, agencies and partners, as well as to optimise implementation, secure and enhance the efficient distribution of resources, and to reboot the effort to allow it to reach and exceed its ambitious scaling objectives within the time frame of 2024-2034. This GGW Strategy is intended to serve as a well-orchestrated and coordinated agenda for the GGWI, outlining a common vision, priorities, strategies, and approaches based on evidence and experience that can catalyse synergies and system change. Backed by a well-resourced, long-term implementation plan it is intended to enhance the efficiencies

and effectiveness of the massive scaling of landscape restoration efforts that lead to ecosystem and livelihood resilience.

The GGW Strategy is positioned as a crucial component of the AU Agenda 2063 and provides a point of convergence for the three Rio Conventions, namely, the United Nations Convention to Combat Desertification (UNCCD), the United Nations Framework Convention on Climate Change (UNFCCC) and the United Nations Convention on Biological Diversity (CBD). The GGW Strategy is intended to ensure its contribution as a cornerstone programme of the Decade for Ecosystem Restoration and to meet key targets of the UN Sustainable Development Goals (SDGs). In addition, the GGW Strategy fully supports the AU Climate Change and Resilient Development Strategy (2022-2032), the AU Green Recovery Plan, and complements other flagship programmes of the AU and AUDA-NEPAD, including the African Forest Landscape Restoration Initiative (AFR100), the Programme for Infrastructure Development for Africa (PIDA) and the African Continental Free Trade Area (AfCFTA), among others.

The development of this revised GGW Strategy coincides with a time when Africa is recovering from impacts of the COVID-19 pandemic, while attending to the convergence of multiple and accelerating crises including rising climate change impacts, devastating floods and droughts, migration, conflict over resources and terrorist activities, food and fuel disruptions as a result of the Ukraine war, a steady rise globally of autocracies, emerging issues associated with artificial intelligence, global financial instability, and climbing deficits in food, water, work, safety and security. Investing in a Pan-African coordinated approach to landscape restoration, greening and resilience building is viewed as a means to enhance land and soil health, biological diversity, and effective water cycles to enhance the availability of quality water while enhancing the lives and livelihoods that depend on dryland ecosystems.

This GGW Strategy, revised from the Harmonised Regional Strategic Framework for Implementation of the GGWSI (2012), and drawing upon the lessons learned from two decades of implementation of the UNCCD GGW Accelerator Strategy (2021), the Investment GGWI Priority Investment Plan (2021-2030) and the Southern African Development Community (SADC) Strategy of the GGWI (2022), sets out an objective to build and enhance landscape resilience of African communities, ecosystems and economies by transforming the socio-political and bio-physical productivity of the targeted areas. This GGW Strategy seeks to encourage an integrated and holistic approach to rural development, land rehabilitation, and the building of resilience to the climate crisis. The GGWI's natural focus on landscapes and their inhabitants, including tens of millions of smallholder farmers, pastoralists, and the residents of rural market towns, makes it a radically new approach for many of the participating governments.

Today, the GGWI stands at a crossroads. Its rising popularity among African governments and international partners, provides an opportune moment to take stock and ask whether this Initiative has accomplished what it set out to achieve. This is an opportunity to assess the Initiative's past challenges and successes, revisit and co-design its broader objectives, and to develop the strategic partnerships needed to enhance its implementation and the delivery of its intended goals.

The GGW Strategy proposes considerations for institutional arrangements of the key players including the AUC, the Pan African Agency of the Great Green Wall (PAAGGW), the Regional Economic Communities (RECs) and Member States. Critical roles of development partners, local governments, scientists and academics, private sector and civil society organisations (CSOs) including women's, youth, farmer and pastoralist groups are emphasised as these stakeholders and their collaboration and ownership are central to the effective implementation of the GGWI. Multi-stakeholder, multi-sectoral and multi-scale engagement processes for planning, decision-making, and implementation, are given emphasis along with evidence-based monitoring, reflection and accountability for flexible and adaptive management.

The GGW Strategy illustrates the critical importance of the AUC, the RECs and Member States to demonstrate committed leadership to mobilise the necessary capacities and resources to upscale and consolidate achievements. Africa holds an opportunity for sustainably financing the implementation of the Initiative. The GGW Strategy therefore proposes several investment and resource mobilisation mechanisms which can be deployed to raise the pre-requisite funding for the implementation of the Initiative.

The GGW Strategy highlights the integration value of the GGWI for development planning at the national level, supporting the combined priorities of sustainable land, water and biological diversity management, climate change adaptation and mitigation and enhancing incomes and livelihood resilience. A wide range of intervention areas and activities, if sufficiently resourced and adequately implemented, would set the GGWI on a new course as an instrument for resilient development in the dry zones of Africa and serve as an important pillar for the actualisation of the African Agenda 2063.

The GGW Strategy was developed under the leadership of the AUC, with the technical and financial support of the European Union (EU) and Catholic Relief Services (CRS).

CHAPTER 1.

BACKGROUND AND RATIONALE

Background

In 2007, the Great Green Wall for the Sahara and the Sahel Initiative (GGWSSI) (also known as the Great Green Wall Initiative, GGWI) was initiated by the African Union (AU) as a continental flagship solution in response to the increasing threat of advancing deserts. Initially pictured as an extraordinarily long band of narrow tree plantations (or green shield), the Initiative soon evolved into something resembling what it is today: a mosaic of different land uses with the common objectives of restoration to support ecosystem function and services, while strengthening people's resilience.

Using an integrated land management approach, the GGWI, a programme of the African Union Commission's (AUC's) Directorate of Sustainable Environment and Blue Economy (SEBE), ambitiously **aims to restore 100 million hectares of degraded land, create 10 million jobs, and sequester 250 million tonnes of carbon by 2030**. To achieve this, the GGWI employs landscape restoration, better natural resource management, efforts to provide improved access to clean energy and logistical infrastructure in rural areas, and a focus on improving access to basic human rights, including property rights and balanced access, by both genders, to resources of smallholder farmers, pastoralists, forest dwellers, and fisherfolk. Through rolling out and scaling-up its interventions, the GGWI aims to transform the lives of tens of millions of people living in marginal areas, by increasing their food security, providing additional and alternative incomes, and increasing their climate resilience.

To operationalise the vision of the GGWI, in 2010, the founding 11 countries set up a Pan African Agency for the Great Green Wall (PAAGGW) to coordinate efforts among each other. Furthermore, each participating country set up a National Agency for the GGW. While they vary from country to country, these Agencies include an institutional framework, legal architecture, and human and financial resources to support their operations.

Inspired by this vision, the Ministers of Environment of the GGW countries called on the international community to support their efforts through coordinated actions. Thereafter, strong international commitments were expressed during the GGW Investment Forum held during the January 2021 One Planet Summit for Biodiversity, convened by French President Emmanuel Macron with the President of the Islamic Republic of Mauritania, the President of the AUC and His Royal Highness the Prince of Wales. This Forum resulted in nine international organisations committing to coordinate efforts with the PAAGGW across five key pillars, namely agrosilvopastoral value chains; ecosystem restoration and development; clean energy infrastructure; local and regional consultation; and local training and empowerment. It also resulted in the development of a common vision for the original 11 countries and the creation of the United Nations Convention to Combat Desertification (UNCCD) hosted GGW Accelerator. The GGW Accelerator focuses on i) harmonised impact measurement indicators; ii) structured multi-stakeholder approaches to the identified pillars; iii) comprehensive funding and project mapping; iv) connecting actors to scale up

successful initiatives in the Sahel; and v) integrating the private sector, civil society, and research/innovation into the GGWI. The efforts and responsibilities of the UNCCD Accelerator were to be handed over to PAAGGW in 2023.

The 11 GGW partner countries associated with the PAAGGW include: Senegal, Mauritania, Mali, Burkina Faso, Niger, Nigeria, Chad, Sudan, Eritrea, Ethiopia, and Djibouti. By 2023, 23 new countries from North, West, East and Southern Africa joined the alliance, through various structural arrangements (Figure 1).

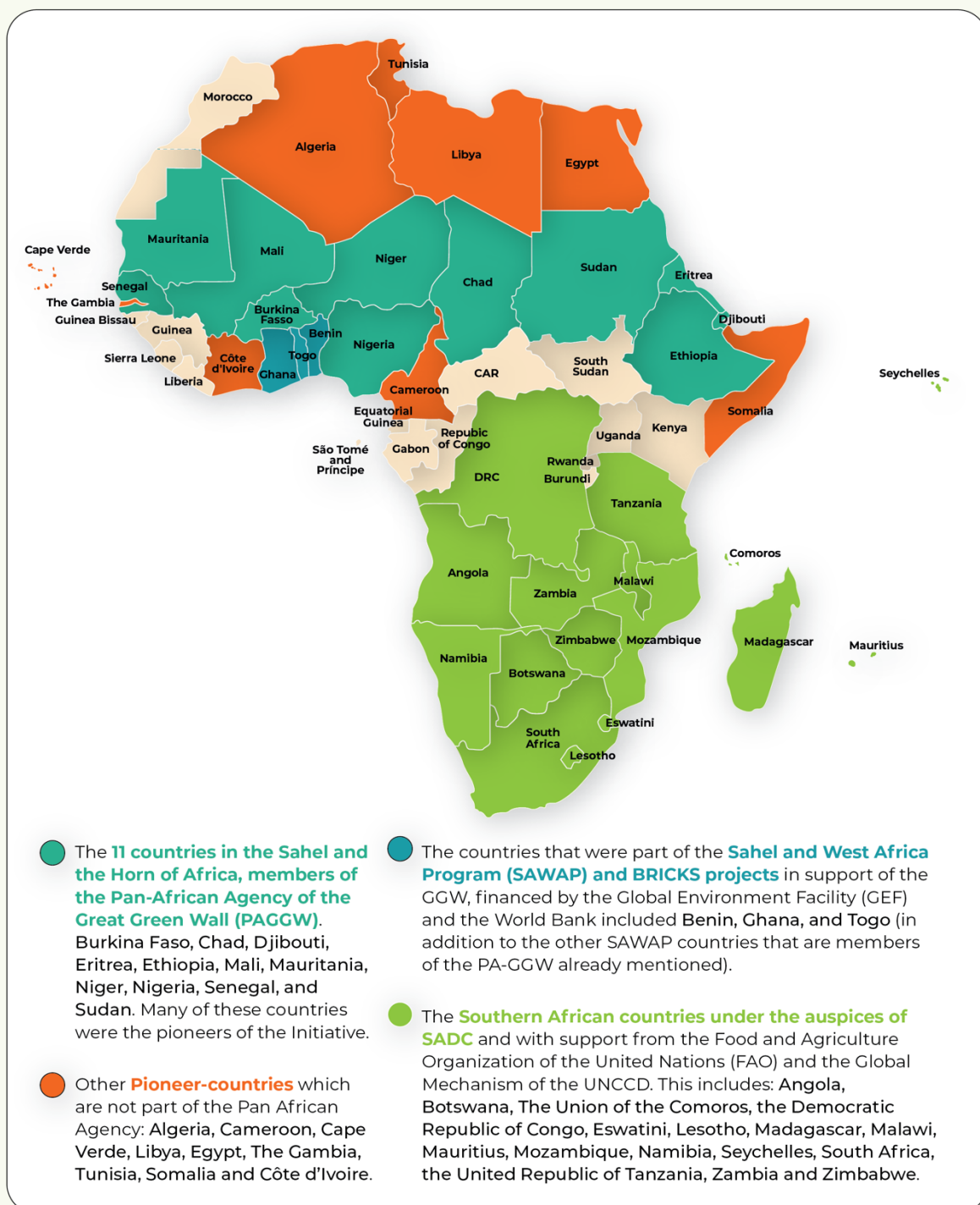


Figure 1: Map of different GGW member countries by type.

The countries that were originally supported through the Sahel and West Africa Programme (SAWAP) and Building Resilience through Innovation Communications and Knowledge Services (BRICKS) projects financed by the Global Environment Fund (GEF) and the World Bank and that are not part of the 11 countries of the PAAGGW include: Benin, Ghana and Togo. Other pioneer-countries including Algeria, Cameroon, Cape Verde, Libya, Egypt, The Gambia and Tunisia, which are not part of the Pan African Agency, have joined the GGWI.



Algeria, Cameroon, Egypt, The Gambia (reporting to the African Union) and Tunisia, Cape Verde, Libya were part of GGW from the start as members of the AU but did not join the PAAGGW.

Figure 2: Evolution of the Great Green Wall Initiative.

The AUC and the Southern African Development Community (SADC) launched an inception phase to develop a regional GGW in 2016. Thereafter the SADC GGWI Strategy was developed (in 2022), focusing on an expanded set of 6 pillars (water for all, access to renewable energy, productive and resilient ecosystems, climate resilient green infrastructure, strengthened agricultural productivity and resilient food systems and transformative economic and business development).

Over time, the GGWI has benefited from direct and indirect financial and technical support from a number of entities. These include the African Development Bank (AfDB), the European Union (EU), the Governments of France, Ireland, Austria, Italy, and Turkey, the International Fund for Agricultural Development (IFAD), the World Bank, the United Nations Food and Agriculture Organization (FAO), the United Nations Development Programme (UNDP), the United Nations Environment Programme (UNEP), and the Global Mechanism of UNCCD, GEF, the Global Climate Fund (GCF), AUC and AU Member State contributions and non-governmental organisations (NGOs).

Rationale for a new comprehensive Strategy

Over time, the implementation of the GGW Initiative has faced several challenges. A report by the UNCCD, for example, found that by 2020 the GGWI had collectively restored only 4,000,000 hectares of land (4% of its initial target) (UNCCD, 2020). Furthermore, a 2023 report by Transparency International highlighted difficulties regarding the governance of the GGWI, including difficulties faced by civil service organisations in participating in the Initiative and challenges flowing from weak accountability (Transparency International, 2023). The challenges and hurdles identified in these assessments were also regularly highlighted in the internal PAAGGW reporting structures, including the meetings of their national agencies. Furthermore, a challenge that still exists today and that continues to create confusion relates to the membership criteria for the GGW. The specific criteria for membership by new countries remains obscure.

To address these and other challenges, the AUC has revised the original GGW Strategy (2012), building upon the priority areas identified in the SADC, GGW Accelerator and Decennial Priority Investment Plan (DPIP) strategies (Table 1). In addition, a common vision, joint priorities, strategies, and approaches have been developed to strengthen synergies and system change across Africa's regions and Member States.

This new GGW Strategy seeks to enhance the coordination and cohesiveness of actions across countries, regions, agencies and partners. Through a detailed implementation plan, this GGW Strategy is calling for coordinated support and alignment in resource mobilisation and investments around priority themes and sectors. In addition, to enhance and scale the implementation of broad-based restoration actions on the ground in support of ecosystem and livelihood resilience, this GGW Strategy calls for the meaningful inclusion of communities, farmers, pastoralists, women, young people, as well as other vulnerable groupings.

Recognising the extraordinary potential of the GGWI, and its evolution from a proposed band of trees to an integrated and holistic landscape restoration and livelihoods resilience building initiative, it is essential that all parties commit to the continued development of the GGWI as well as its implementation, financing and its scaling over a 10-year timeframe.

Table 1: Pillars across recent strategies contributing to the GW Strategy.

Approximate Categories	GGW Implementation Status and Way Ahead to 2030 - Pillars (2021)	SADC Strategy for the Implementation of the GGWI - Pillars (2022)	Priority Investment Plan 2021-2030 Decennial Portfolio (2021)	GGW Implementation Status and Way Ahead Cross-Cutting Pillars
Economic Resilience and Governance Frameworks	Favourable economic and institutional framework for effective governance, sustainability, stability, and security	Transformative economic and business development Livelihoods versus wealth creation, green jobs , ecotourism, equitable and resilient communities , waste management and circular economy , private sector development	Resilient Economic Development and Security Promotion of productive green jobs, improving access to basic needs and services and social services	Governance
Production Systems	Investment in small- and medium-sized farms and strengthening of value chains, local markets, organisation of exports	Strengthened agricultural productivity and resilient food systems Food security, value chains, irrigation, commercialisation, fisheries, climate-smart agriculture and livestock	Resilient Economic Development and Security Development and enhancement of promising local opportunities, food and nutrition security	
Ecosystem Health	Land restoration and sustainable management of ecosystems	Productive and Resilient Ecosystems (Land, Biodiversity and Climate Change) Land restoration, soils land management, agroforestry, forests, rangelands, wetlands, coastal (Blue Wall), land use planning, nature-based solutions (NbSs),	Sustainable Management and Development of Land, Water Resources and Biodiversity Restoration and development of land and protection of biodiversity Mobilisation and integrated management of water resources	Disaster Risk Reduction and Early Warning Systems

		wildlife, natural resources management, water for all addressing drought and water scarcity	and watershed development	
Climate Adaptation	Climate-resilient infrastructures and access to renewable energy	Climate Resilient Green Infrastructure Access to Renewable Energy Renewable energy and energy efficiency for access and development	Climate Actions and Green Economy Adaptation and resilience to climate change and green growth, green growth and development of renewable energies, vulnerability management to climate risks	Green Technology and Technology Transfer
Capacity Development	Capacity building		Strengthening of Scientific and Technical Capacities Mobility and scientific and technical networks, Knowledge and innovation management, Strengthening logical, scientific and technical capacities, Terroirs development and resilience support centres	Capacity building (knowledge, education, awareness raising, research and innovation)
Information, Marketing and Advocacy			Information, Marketing and Advocacy Monitoring, evaluation, and information; Knowledge, communications, marketing and advocacy	
Gender and Youth				Gender and Youth
Resource Mobilisation				Resource Mobilisation and Innovative Financing



CHAPTER 2. STRATEGIC FRAMING

This GGW Strategy is a 10-year strategic planning document (2024-2034) that defines the main priorities, intervention areas and action areas required to scale up land restoration and resilience activities associated with agricultural, grazing, and forest landscapes across the African continent. This GGW Strategy is designed as a living and evolving document to keep pace with the latest science, technological advancements and other global, continental, sub-regional and national developments. As such, the GGW Strategy will be revised every five years.

In realisation of a shared vision for a prosperous, secure, inclusive and innovative future for Africa, and based on the aspirations of the AU's 2063 Agenda, the GGW Strategy builds on the continent's commitment to simultaneously ensure an effective multilateral approach to addressing climate change, land degradation, loss of biological diversity, water scarcity, as well as to ensuring people's livelihoods and jobs are protected and that broad-based climate-resilient development is enhanced through the achievement of Agenda 2030 and the SDGs. This GGW Strategy seeks strong alignment with Member State commitments to global agreements, such as to the Paris Agreement of the UNFCCC; to the targets of Land Degradation Neutrality (LDN) under the UNCCD; and towards the Kunming-Montreal Global Biodiversity Framework under the UNCBD. The GGW Strategy also seeks to complement other green and sustainable development policies and projects of the AU, including, among others, the Climate Change and Resilient Development Strategy and the AU Green Recovery Action Plan (GRAP). In addition, it seeks to orient African governance

and knowledge systems, as well as planning tools and mechanisms at multiple levels, to restoring landscapes and ecosystem health as a development imperative.

2.1 Vision

By 2034, Africa's dry regions are transformed into socially, economically and environmentally resilient and stable regions.

2.2 Goal

To provide a continental framework for collective action and enhanced coordination in the scaling-up of landscape restoration and resilience, increasing biological diversity, improving water cycles, and addressing climate change impacts while improving livelihoods and well-being and sustainable economic growth.

In practice, this GGW Strategy will build on the aspirations of local communities to deploy innovative natural resource management systems, initiated and maintained by communities enjoying strong backing from state structures and technical assistance, to protect productive lands, restore degraded lands, and so achieve a number of direct and indirect benefits. These include better food security, the opportunity to earn additional income, much better resilience against floods, droughts and the other adversities exacerbated by climate change, and a bedrock of better productivity by agroecosystems upon which investments in value chains, renewable energy systems, agrosilvopastoral food systems and logistical infrastructures such as roads and agricultural storage facilities can bring much better, multi-dimensional returns.

2.3 Overall objective

Enhance the resilience of communities, ecosystems, and economies in the African drylands by improving the living conditions of populations, improving the state and health of ecosystems, advocating and mobilising resources, strengthening institutional collaboration and promoting policy coherence.

2.4 Objectives

The GGWI is centred around improving the living conditions of populations, improving the state and health of ecosystems and advocating and mobilising resources to achieve these.

Specific objectives thus include the following:

- **Invest in, and scale up, nature-based practices and inclusive landscape approaches** to sustainable land, water and biodiversity restoration and management to support resilient value chains.

- **Promote locally led land planning, land restoration and resilience building initiatives and nature-based entrepreneurial and livelihood activities** that improve the well-being and incomes of communities, as well as empower them, particularly women and youth.
- **Catalyse inclusion, alignment, cooperation and ownership of land restoration and resilience-building** related strategies, policies, programmes and plans.
- **Promote policy coherence, alignment, and a common** narrative in strategies, policies, programmes and plans.
- **Develop, invest in, and support, economic and environmental infrastructure** facilitating the move to a green and circular economy.
- **Enhance the linkage and effective collaboration among community, practice, science, policy and private sector stakeholders** fostering knowledge sharing and learning from experience and building upon a harmonised knowledge management system.
- **Encourage systems-oriented, cross-sectoral and coordinated decision-making and adaptive management environments** that facilitate the integration of activities across all stakeholders, sectors and scales.
- **Enhance Africa's capacity to mobilise resources** at multiple scales.

2.5 Outcomes

- **Large areas of restored and resilient landscapes** with agricultural, grazing and forested areas that are more resilient, support livelihoods and are better able to resist floods and droughts and natural disasters.
- **Increases in the productivity of landscapes**, including annual and perennial crops, grasses, shrubs and a variety of nature-positive products from regenerated, planted, and natural trees and forests.
- **Greater access to cleaner energy in rural areas**, mostly supplied by solar power, wind and biomass.
- Improved infrastructure and land management practices to better harness and use available **rainwater and groundwater resources**.
- A regulatory environment conducive to the **growth and development of entrepreneurial nature-based businesses and value chains** and well-managed rural areas.
- **The widespread availability of local and scientific knowledge and advice to households and communities** on the multiplicity of interventions they can apply to restore their degraded lands and nurture their natural resources.

2.6 Principles

The GGW Strategy being presented here is inspired by the experience of the GGWI, since its founding rests on the following core principles:

1. **African-led and African-owned.** Building on the foundations of Agenda 2063, the continent must generate its own dynamic scientific, technological and entrepreneurial capabilities, and innovate new, predictable and sustainable sources of funding for its response to climate change that includes Africa's social and cultural values and natural capital endowments.
2. **Promote African integration.** Promote African integration through the implementation of transboundary projects and joint projects between sub-regions: North Africa-Sahel; Sahel-Central Africa; Central Africa-Horn of Africa, Sahel-Horn of Africa; etc.
3. **Promote the cultural values of African people.** The cultural values of African people underpin social cohesion, peace and security.
4. **Solidarity.** Solidarity among African nations and institutions and reduced inequalities between drylands and other agro-ecozones across the continent.
5. **Subsidiarity.** The GGW Strategy bridges efforts across local, national, regional, continental and international scales, and to ensure effectiveness, actions should be carried out at the most local level of organisation possible.
6. **Local ownership and leadership, and inclusive and people-centred approaches.** Landscapes are inhabited and managed by rural populations organised in families, communities, villages and customary groupings. Recognising this vast pool of engaged stakeholders and co-developing interventions in their areas with their input is foundational. Achieving the GGW objectives thus requires broad-based citizen engagement, facilitated by participatory processes that integrate - and act - on diverse viewpoints, including those of women, youths, and nomadic pastoralists as well as marginalised groups such as people with disabilities. For that reason, delegating the primary responsibility for the design, implementation and adherence to agreed interventions, to local communities, acting in concert with local governments and local CSOs, is crucial. And, given the strong interest young people have in their futures, it is just as crucial to co-design and co-manage local interventions with them.
7. **Gender transformative approaches, equity and benefit sharing.** The GGW Strategy should challenge gender inequality by transforming gender norms, roles and relations, and promoting the redistribution of power, resources, and services more equally. Promote equity and access to benefits accruing from the conservation and restoration of biodiversity.

8. **Respect and integrate traditional and indigenous knowledge, practices and preferences.** The importance of indigenous management of natural resources for biodiversity and the climate will be recognised and upheld, with impetus given to often-neglected dryland areas.
9. **Develop and enhance diverse partnerships.** Foster and enhance diverse partnerships across private, public, non-profit and market sectors for efficient, effective and timely implementation.
10. **Address justice and equity and ensure just transitions for scaling-up land restoration.** Multiple crises are exacerbating inequality throughout the continent. This includes procedural, distributional and recognitional justice, especially in relation to who is most vulnerable, where on the ground change is needed. Land restoration efforts that require long-term changes must ensure that just transitions are enabled.
11. **Intersectionality.** The GGW Strategy recognises that vulnerabilities overlap in multiple ways (climate, gender, poverty, age groups, etc.) and supports comprehensive, integrated responses to resilience-building.
12. **Transparency, accountability, efficiency, and adaptive management.** Leadership, management and coordination of the GGW Strategy must be based on transparent and accountable governance at all scales, efficient implementation and integrating structured feedback mechanisms for adaptive management. The GGW Strategy emphasises the value of scanning the horizon with foresight analysis.
13. **Align plans and priorities to a whole economy and systems approach.** The GGWI has a mandate to restore millions of square kilometres of land and will therefore be active in areas where multiple other development plans are rolled out. Its success depends on the close adaptation and alignment with a range of partners and plans across multiple local and national authorities, including those dealing with agriculture, climate change, environment, water and forests, education, infrastructure and the regulatory and physical tools within which businesses operate. Integrated, cross-sectoral and holistic approaches are needed throughout national and regional economic planning. The alignment of national GGW initiatives to existing development plans and priorities within fiscal budgetary planning processes is therefore strongly recommended. This should be guided by frameworks such as Agenda 2063, the SDGs and post-COVID-19 recovery. Co-benefits with these agendas should be promoted.
14. **Promote effective collaboration and coordination across disciplines, sectors and institutions.** Promote mechanisms for long-term multi-stakeholder partnerships and the consequent development of interdisciplinary and intersectoral and inter-institutional collaboration. Integrate anticipatory and preventive approaches (adaptation to climate change, risk management) in a changing world.
15. **Employ structured evidence- and experience-based approaches that link science, practice and policy.** The GGW Strategy must continue to draw on the best available science, knowledge, and expertise within

international, regional and national contexts to support the adoption of best practices and policies. This should be based on existing experiences, natural resources and social sciences and traditional knowledge and practices. Policy and solutions should be based on accessible evidence, including both scientific, practitioner and local knowledge, and focused on meeting the needs of local actors.

16. **Develop capacities, shifting behaviours, sharing knowledge and scaling practices that work.** The GGW Strategy builds on what is working and developing the capacities and behaviours and harmonised knowledge management system to massively scale up landscape restoration efforts and employing a co-learning and knowledge sharing approach.
17. **Promote secure access and use rights to land, trees and other resources.** Enable women, youth, pastoralists, indigenous peoples, persons with disabilities and other vulnerable groups, to gain secure and equitable access to land, trees and other natural resources to enhance their food security and combat poverty and vulnerability.
18. **Promote labour intensive investments.** Promote labour intensive investments in the planning and budgeting of national investments earmarked for the GGWI with a view to maximising opportunities for decent and productive employment and creating sustainable livelihoods for youth, women, men, and people with disabilities.
19. **Promote shared value environmental and social governance (ESG):** The GGW Strategy will promote the engagement of private sector actors and impact investments based on corporate social responsibility (CSR), shared value and ESG investments, encouraging companies and enterprises across value chains to act responsibly.
20. **Attract and deploy capital.** The success of the GGW Strategy is dependent upon the effective mobilisation of resources, the use of new funding mechanisms and the efficient distribution and use of those resources.

2.7 Stakeholders and beneficiaries

The success of this GGW Strategy is highly contingent on the active commitment and involvement of the beneficiaries and stakeholders in its development and implementation. The main beneficiaries of the GGWI are smallholder farming, fishing and pastoralist households, as well as other participants in rural economies and landscapes. However, many local, regional, national and international institutions will also benefit from the restored landscapes of the GGW and are key stakeholders to ensure its success.

These other beneficiaries and stakeholders represent international bodies and government decision-makers, technical agents and NGOs, science and academic institutions, community-based and farming, pastoral and forest-dweller organisations, women and youth groups, the media, rural businesses, other private sector bodies, and various financing and investment entities. Defining the respective roles and responsibilities among diverse stakeholders and beneficiaries is important for

designing structured coordination and collaboration between all parties. They include (but are not limited to) the following:

Local level

- Rural households and their members;
- Community groups and institutions;
- Women's organisations, associations, and cooperatives;
- Youth groups;
- Smallholder farmer groups;
- Pastoralists' organisations;
- Smallholder forest managers and groups;
- Tree-based and natural resources value chain actors;
- Local businesses;
- Value chain processors, transporters, and other middlemen;
- Faith-based organisations and spiritual leaders;
- Influencers and media groups (issue focused campaigns); and
- Formal and informal local authorities and territorial organisations.

Subnational level

- Regional state authorities;
- Chiefdoms and other traditional community authorities;
- Regional chambers of agriculture;
- Regional chambers of commerce;
- Regional private sector players in upstream and downstream agricultural value chains; and
- Community natural resources management committees.

National level

- Heads of State and Government;
- Line ministries (finance, agriculture, natural resources, environment, rural development, education, health etc.);
- National policy institutions such as Rio Convention national focal points;
- National farmers' organisations;
- National women's networks;
- National research institutions;
- Private sector entities;
- Religious institutions;
- National NGOs;
- National subsidiaries of international NGOs; and
- Media networks (radio, television and press, social media influencers, etc.).

Regional level

- Regional technical institutions responsible for implementing actions such as the PAAGGW, Permanent Interstate Committee for Drought Control in the Sahel (CILSS), Sahara and Sahel Observatory (OSS), IGAD Climate Prediction and Application Centre (ICPAC), and African Centre of Meteorological Application for Development (ACMAD);
- Regional financial institutions such as the AfDB;
- Regional agricultural research centres such as the Centre for Coordination of Agricultural Research and Development for Southern Africa (CCARDESA), West and Central Africa Council for Agricultural Research and Development (CORAF), and the Association for Strengthening Agricultural Research in Eastern and Central Africa (ASARECA);
- Regional farmers' organisations such as the Southern Africa Confederation of Agricultural Unions (SACAU), Network of Farmers' and Producers' Organisations in West Africa (ROPPA), and the East African Farmers Federation (EAFF);
- Regional women's networks (REFACOF); and
- RECs such as the Arab Maghreb Union (UMA), Common Market for East and Southern Africa (COMESA), Community of Sahel-Saharan States (CEN-SAD), East African Community (EAC), Economic Community of Central Africa States (ECCAS), Economic Community of West African States (ECOWAS), the Intergovernmental Authority on Development (IGAD), and SADC.

Continental level

- AUC;
- AU political and technical structures such as African Ministerial Conference on the Environment (AMCEN), Specialised Technical Committee (STC), and the Permanent Representatives Committee (PRC);
- African Union Development Agency-New Partnership for Africa's Development (AUDA-NEPAD);
- United Nations Economic Commission for Africa (UNECA);
- Forum for Agricultural Research in Africa (FARA);
- Centre for International Forestry Research-World Agroforestry Centre (CIFOR-ICRAF);
- World Resources Institute (WRI);
- International NGOs operating in Africa; and
- Pan African Farmers Organisation (PAFO).

International level

- United Nations (UN) agencies (e.g. UN World Food Programme (WFP), UNEP, FAO, UNDP, UN Habitat, UN Women);
- Consultative Group of International Agriculture Research (CGIAR);
- Multilateral Environmental Agreement Institutions (UNCCD, UNCBD, UNFCCC);
- International Union for the Conservation of Nature (IUCN);

- International Financial Institutions (World Bank, IFAD, GEF);
- Prominent donors and partners (EU and bilateral donors); and
- International foundations.

2.8 Methodology and validation process

The GGW Strategy was developed based on the premise of creating an evidence- and experience-based document built on consultative sessions with individuals, institutions, and representatives from different stakeholder and thematic groups. The key efforts undertaken, include:

- Review of formal and information assessments, evaluations and lessons learned, along with questionnaires and interviews to understand strengths, weaknesses, opportunities, and threats.
- Review of documents produced by regional and national bodies.
- Literature review and interviews and writing contributions to characterise the socio-ecological state of Africa.
- A wide range of virtual meetings and interviews with related individuals, agencies, and stakeholder groups including focused consultations among civil society and NGO partners, farmer groups, youth groups and scientists.
- A virtual validation event was held with RECs and Member States of the AU and other stakeholders (31 October 2023).
- A consultation was held during the 8th GGW Regional Steering Committee (RSC) in Addis Ababa, Ethiopia with representatives of the AU, GGW institutions, Member States, RECs and representatives of civil society, research and academia, private sector and the donor community.
- The GGW Strategy was presented to the Specialised Technical Steering Committee on 16 November 2023.
- The draft GGW Strategy was adopted by the Ministerial with the provision that specific changes were made.
- *Still to take place*: Presentation to the African Heads of State at the AU Summit during February 14-18, 2024.

Contributors to the GGW Strategy development and more detail about the methodology can be found in **Annex 2**.



CHAPTER 3. CONTEXT AND JUSTIFICATION

3.1 Building resilience through the Great Green Wall

3.1.1 Great Green Wall as an integrator to address and respond to multiple crises

Understanding how multiple factors and drivers interact as a system requires a new approach for planners and policymakers. Increasingly people are describing the coinciding and compounding challenges of climate change, migration, conflict, land degradation, water scarcity, biodiversity loss, and other factors, as a polycrisis.

As the African continent interacts globally, there are further contributing issues, including the COVID-19 pandemic, the outbreak of global conflicts, shifting legacies of colonial powers, a steady rise of autocracies, propaganda influence, disruptions from emerging artificial intelligence, global financial instability, regional migration crisis, nuclear risk, and climbing deficits in food, water, work, safety and security. As such, this GGW Strategy recognises that humanity, and Africa in particular, is facing a confluence of environmental, social, technological, financial-economic, natural, and other forces interacting with increasing unpredictability, rapidity and power. In addition, many entities in the past have treated conflict, climate, and migration as distinct and unrelated processes. More recently research literature has sought to investigate how these drivers interact, and how they may have to be addressed in an integrated fashion in order to reduce risks, bring more equitable outcomes, and be sustainable in the longer term (

Figure 3).

In this regard, commentators such as Michael Lerner (Lerner, 2023) suggest that overcoming a polycrisis requires a shift in the overall system and the need to address problems holistically. This in turn will build more transformative and sustainable community resilience to the considerable stresses and uncertainties.

In this regard, much of what is proposed with the GW Strategy could bring a 'polycrisis' lens to track across sectors and geographies, and place greater emphasis on implementation and learning on the ground, bringing the relationships between multiple drivers into greater scrutiny and identifying options for collective action.

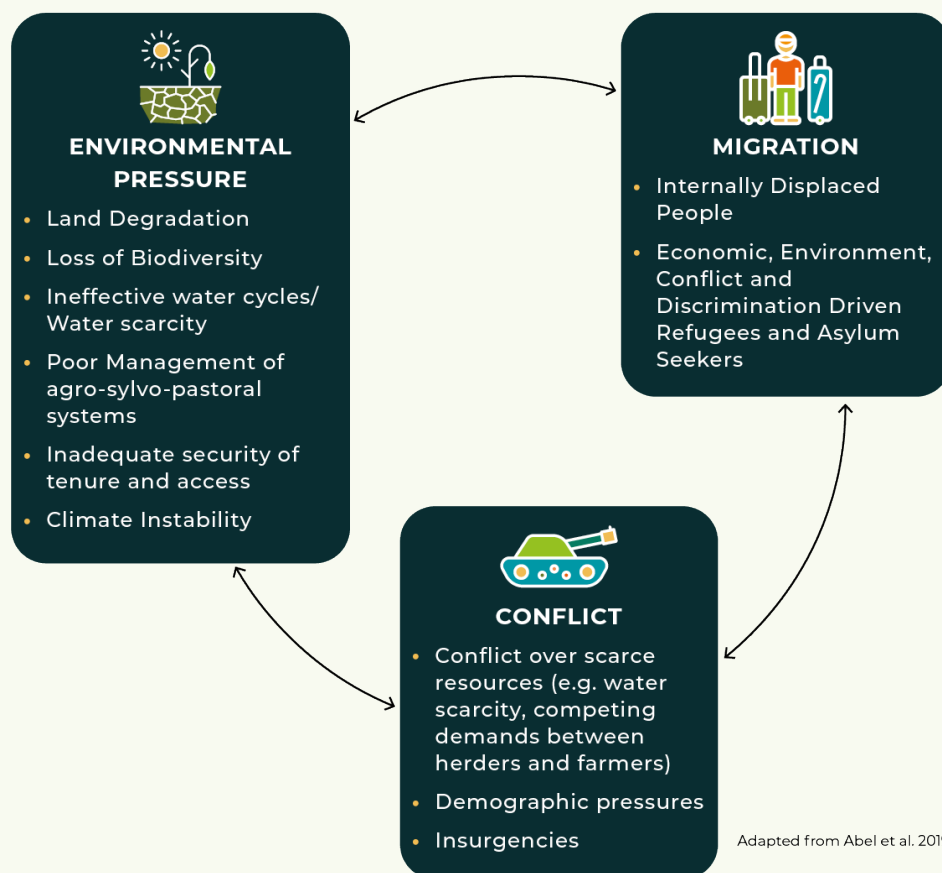


Figure 3: Inter-relationships between environmental pressure, conflict and migration.

An integrated approach to resilience building

Climate change impacts are expected to interact with and exacerbate existing drivers of migration like poverty, conflict, lack of opportunity, and political marginalisation. This complex interplay needs to be understood both dynamically and as a spatially distributed phenomenon. While climate migration is likely to be within countries, and increasingly urban, support is also needed for climate adaptation and resilience building in rural areas and for urban planning and services.

In this same vein, reversing land degradation, improving water harvesting and soil moisture enhancement, and incentivising greater and more diverse tree and other

vegetative cover can be better understood as bringing benefits to both rural and urban regions – linking ecosystem services (drought and flood mitigation included) between them, providing livelihoods that may stabilise migration, and potentially reduce the sources of conflict between resource users at local and regional scales.

Climate change impacts pastoralist and agriculturalist livelihoods, causing competition over scarce resources, as it alters pastoral migration patterns, often concentrating livestock and exacerbating farmer-herder conflicts. A case study of Darfur, Sudan, shows how desertification and unpredictable weather increased tensions between pastoralist and farming communities. Mali, Niger and Burkina Faso have also witnessed climate change weaken livelihoods and facilitate spread of jihadi groups who recruit pastoralists (Freeman, 2017; Tarif, 2022). From this security perspective, climate change acts as a threat multiplier, worsening pre-existing social and political tensions in the region. In addition, human security is also impacted by multiple other factors, including infectious disease, food insecurity, forced migration, and mental health issues.

There is great need for climate change adaptation and mitigation strategies that enhance an integrated, social-ecological approach to resilience-building that addresses local capacities to restore the land and communities as coupled systems. Where land degradation, poverty and food insecurity are further stressed by climate impacts, community members may be taken advantage of or recruited by armed groups leading to great prevalence of conflicts and violence.

Environment-migration and climate-conflict research finds environmental factors alone do not directly cause migration or conflict. Intervening social, political, and economic factors determine if and how environmental change leads to migration or conflict. Climate-conflict sensitive policy requires strengthening governance, adaptation, migration management, and inclusive development.

The GGW reflects many of these elements by having a focus on root causes and drivers of environmental degradation that empowers land managers to act, while also promoting both local and regional mechanisms for information sharing across levels of governance, building of capacities across sectors, and having a fundamental commitment to local actors and conditions shaping the planning and implementation of projects.

The GGW represents the opportunity to address problems by taking a transboundary approach to the co-creation of solutions that are more effective in terms of implementation, south-south cooperation and cross learning at local and regional scales, and more efficient in terms of return on impact investment.

Restoring the landscape health is a powerful GGW Strategy that can mitigate different facets of the polycrisis, simultaneously building climate resilience, enhancing biological diversity, and improving water quantity and quality while providing numerous stabilising benefits to the communities whose lives and livelihoods depend on the underpinning ecosystem functions.

3.1.2 Great Green Wall as an integrator across multiple policy goals and commitments

Integration of the Great Green Wall Initiative across the three Rio Conventions, the Sendai Framework for Disaster Risk Reduction and Agenda 2030

Several international agreements and dialogue processes address the interlinked challenges, concerns and opportunities that are pertinent to land restoration efforts within the GGWI, including the UNCCD, the UNCBD, and the UNFCCC. These international agreements each focus on different aspects of environmental sustainability, but they intersect in many ways, with land restoration and livelihoods serving as a central pillar to all their overarching objectives.

Landscape restoration:

- Directly addresses the issues of **desertification and land degradation**, rehabilitating degraded land, improving soil health, and restoring ecosystem functionality. Restored ecosystems are more resilient to drought, erosion, and other forms of land degradation.
- Contributes to **biological diversity** by increasing above and below ground biological diversity and creating and restoring habitats of plant and animal species. More diverse landscapes are better able to adapt to changing conditions.
- Contributes to **climate change mitigation** through carbon sequestration from, for example, reforestation, afforestation, agroforestry and other sustainable land management (SLM) practices.
- SLM practices restore ecosystem resilience, further increasing the **adaptation** capacity of people and nature to climate change impacts.
- Provides **livelihood and job opportunities** to millions of vulnerable people through enhancing the productivity of landscapes and presenting opportunities for employment and entrepreneurial activities stemming from nature-positive value chains.
- Contributes to **disaster risk reduction** through building the resilience of ecosystem functions and services and adaptation capacities through diverse income streams.
- **Coalesces resilience building benefits** as an outcome of increasing natural, human, social, cultural, and institutional assets.

In addition, other global agenda processes include the UN and AU Member State collective focus upon unsustainable food systems, deforestation, disaster risk reduction, as well as Agenda 2030 and its 17 SDGs. Restoration is a core theme of this transformation agenda and is related to achieving almost all the SDGs, including, climate action (goal 13), food security (goal 2), biodiversity conservation (goal 15), poverty reduction (goal 1) and health (goal 3). Policy coherence is not only inherently beneficial, but also important to ensure results on the ground and the

bottom line. Better alignment can strengthen the implementation of restoration commitments and enhance the complementarity and mutual benefits between objectives. Improved policy coherence can also improve synergies to help address trade-offs, coordinate financial flows and streamline monitoring and evaluation (M&E).

The strategic priorities of these dialogue processes frame the collective efforts needed for an integrated agenda to address long-term, low emissions, climate-resilient development and human well-being. Each framework also sets targets, timeframes, and guidelines that inform national actions and guide broader stakeholder engagement.

The challenge and opportunity for national level implementation of these multiple elements is to find ways to coordinate across them, tracking progress and enhancing policy and programmatic implementation coherence between these initiatives. Active efforts to define and identify opportunities for synergy among the environmental and development conventions have made progress through workshops specifically convened at national and regional levels. Proposals are identified for harmonisation of the National Biodiversity Strategies and Action Plans (NBSAPs) for the UNCBD, national voluntary LDN targets for the UNCCD, and Nationally Determined Contributions (NDCs), National Adaptation Plans (NAPs) and Long-term Low Emission Development Plans associated with the UNFCCC, as well as plans and programmes for other environmental conventions and agreements. They include emphasis upon the importance of capacity building, public awareness and education as fundamental for developing synergistic implementation of the Conventions and related global agenda elements. The true convergence of these Rio Conventions could escalate conservation, sustainable use and restoration of land resources.

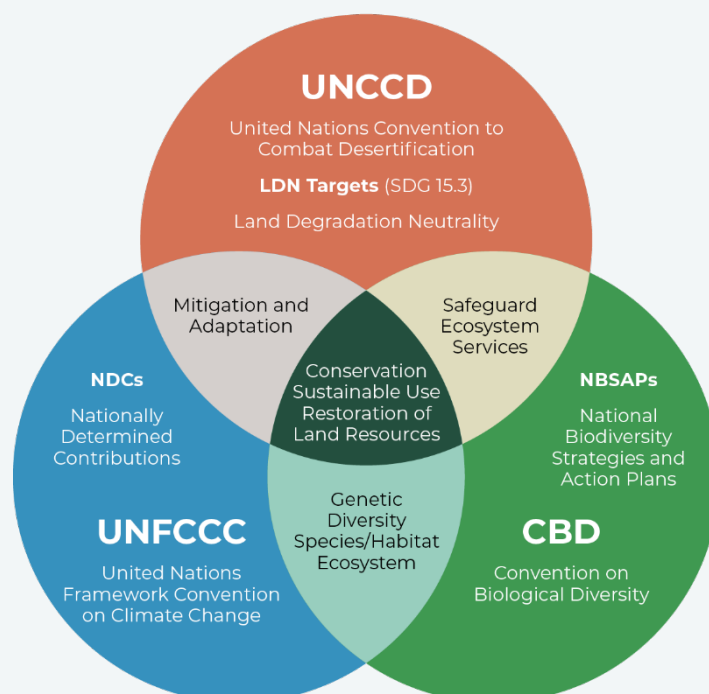


Figure 4: Land restoration and the Rio Conventions (UNCCD, 2022).

Integration across continental goals and commitments

The GGW is a flagship initiative with the AU which seeks to achieve the objectives encompassed in the AU's Agenda 2063 – namely the socio-economic transformation of Africa. The GGWI and its mission to massively restore degraded lands aligns with several key aspirations and developmental goals of Agenda 2063, including:

- **Aspiration 1. A prosperous Africa based on inclusive growth and sustainable development** to which land restoration promotes SLM, enhancing agricultural productivity through nature-based value chains and land management practices, preserves ecosystems and supports rural livelihoods.
- **Aspiration 2. An integrated continent, politically united and based on the ideals of Pan-Africanism and the vision of African renaissance** to which land restoration contributes by fostering community engagement, social cohesion, and shared responsibility for natural resources, supporting local self-reliance and collective action.
- **Aspiration 3. An Africa of good governance, democracy, respect for human rights, justice and rule of law.** Land restoration requires effective governance and regulations including land and tree tenure to ensure equitable access to resources and promote SLM practices and shared benefits among stakeholders.
- **Aspiration 4. A peaceful and secure Africa** is contributed to through restored ecosystems that contribute to stability and resilience, reducing conflicts over resources and supporting overall security.
- **Aspiration 5. An Africa with a strong cultural identity, common heritage, values and ethics** to which land restoration respects and integrates traditional knowledge and indigenous practices for SLM while incorporating culturally significant crops, medicinal plants, trees, and livestock.
- **Aspiration 6. An Africa whose development is people-driven, relying on the potential offered by African people, especially its women and youth, and caring for children.** Land restoration can create opportunities for youth engagement, skills development and employment related to sustainable agriculture and natural resource management. Women play leadership roles in land, biodiversity and water management and restoring landscapes and as such, land restoration can also create opportunities for women's empowerment, rights over resources, skills and employment.
- **Aspiration 7. An Africa as a strong, united, resilient and influential global player and partner.** Landscape restoration, ecosystem health, productivity of forest, agricultural and pastoral systems and their governance underpins the potential for the countries and regions across Africa to be united, economically viable, and form a resilient global partner.

While reports indicate that progress on Agenda 2063 have predominantly focused on governmental destabilisation, defence, and security across the five regions, there is a need to focus on the empowerment of local people and the ecosystems that serve as their livelihood and cultural foundation.

Within Africa, there are several African plans and actions for which the GGW is highlighted (Figure 5).

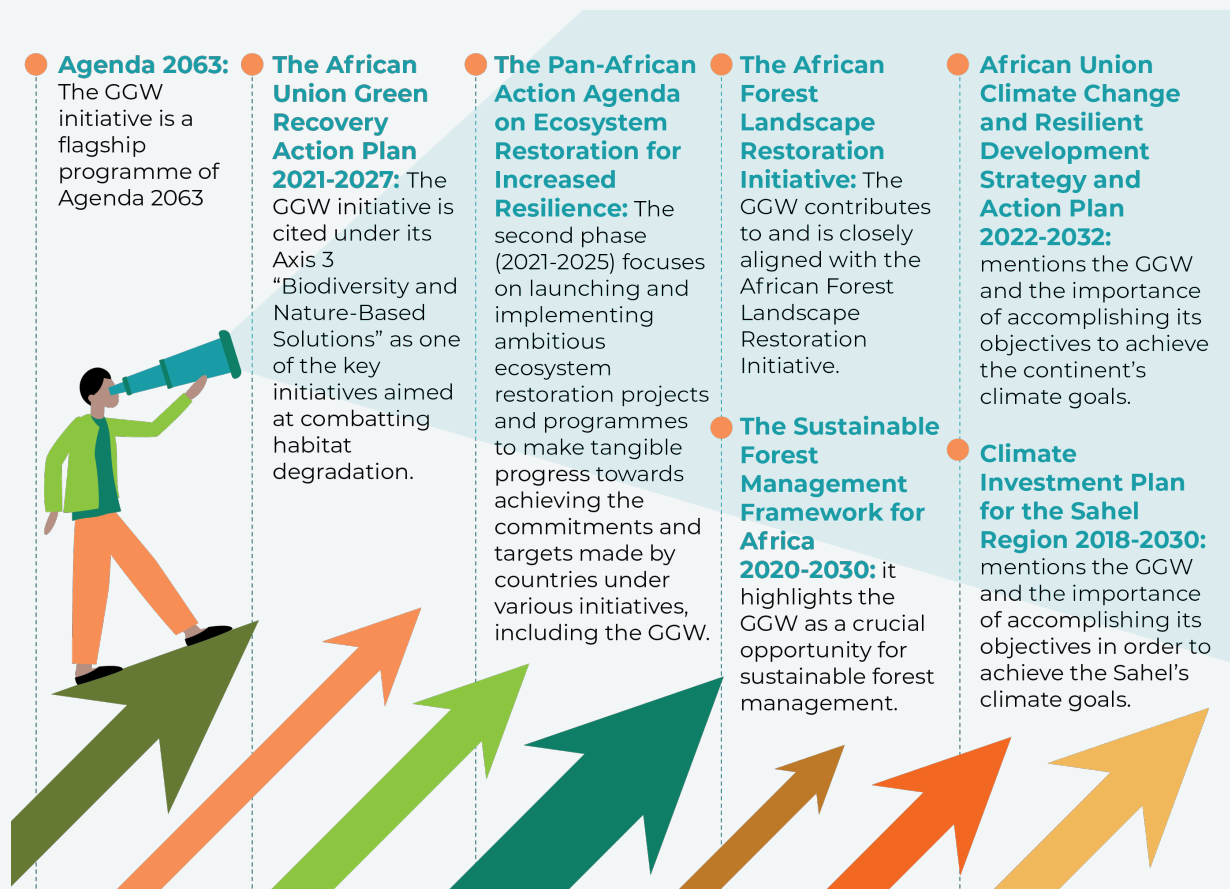


Figure 5: The Great Green Wall is a contributor to indicative African plans, actions, frameworks and strategies (Regreening Africa, 2023).

Integration to support resilient food systems

The Africa common position on food systems (2021), anchored in the Comprehensive Africa Agriculture Development Programme (CAADP), emerged out of wide consultative and iterative processes with AU Member States’ highlighting their key aspirations and priorities. These included: ensuring resilient food systems; improved production technologies and securing access; and innovation, biotechnology and integration. The game changing solutions that were identified to accelerate action, include: safe and nutritional food; sustainable consumption and production; nature-positive production at scale; equitable livelihoods; and value distribution and access to production and productivity enhancing technologies and resources. Both the Dar es Salaam Africa Food Systems Forum held in September 2023) and the Nairobi Africa Climate Summit (held in September 2023) provide reinforcing aspects of inclusivity and a focus on land degradation and ecosystems in their respective communiques.

These further highlight the key role of locally led restoration which is central to the GGWI and well-aligned with the wider policy thrust among Member States and civil society, private sector investors and value chain actors.

The GGWI uses a systems approach and integrates actions related to the achievement of resilient food systems into its programme to support food security, food nutrition, reduce food waste and enhance livelihoods resilience. As the GGWI expands across Africa it serves as a key integrator, contributing to the mitigation of ongoing and inter-related polycrises, robust ecosystems, lives and livelihood resilience through land health, effective water cycling, enhanced biological diversity, and adaptation and mitigation of the impacts of climate change.

3.2 Overview of the socio-ecological state of play

Understanding and interpreting the biophysical, ecological, and socio-economic evidence base is an important dimension of a demand driven and relevant GGW Strategy. This section offers a high-level review of important emerging trends and drivers at a global and continental level and takes stock of these significant developments around which the GGW Strategy must integrate and respond.¹ It is also important to map the key drivers of change so that Africa can anticipate these changes and adapt its practices accordingly. This data underpins the decisions around the actions and strategies that are being put forward in the 10-year Strategy for the GGW by the AU. As new data and evidence-based projections become available, the specific actions of the GGW Strategy may be updated or adapted. Finer resolution data at national and subnational level will provide the local context to drive the options for strategic interventions at national and subnational levels. In addition, it must be noted that while climate change impacts are shown as one dimension in this section, it is critical to emphasise that the climate is increasingly changing and will continue to exacerbate existing and future opportunities and challenges.

3.2.1 Ecosystem dimensions

Increasing climate change impacts in Africa's arid and semi-arid environments.

Climate change has significant and wide-ranging impacts on natural resources in Africa. The continent's high vulnerability to climate variability and change, coupled with its reliance on rainfed agriculture and natural resource-dependent economics, makes it particularly susceptible to the adverse effects of a changing climate.

Figure 6 provides an overview of the current and projected climate impacts on temperature and precipitation in different African regions. To address the continent's climate vulnerabilities, the AU Climate Change and Resilient Development Strategy and Action Plan (2022-2023) outlines the key mitigation and adaptation actions needed over the next ten years.

¹ The Institution of Environmental Sciences (2023) has identified global, long-term trends that will have far reaching global impacts for Africa and the world at large. For further information, please see these trends [here](#).

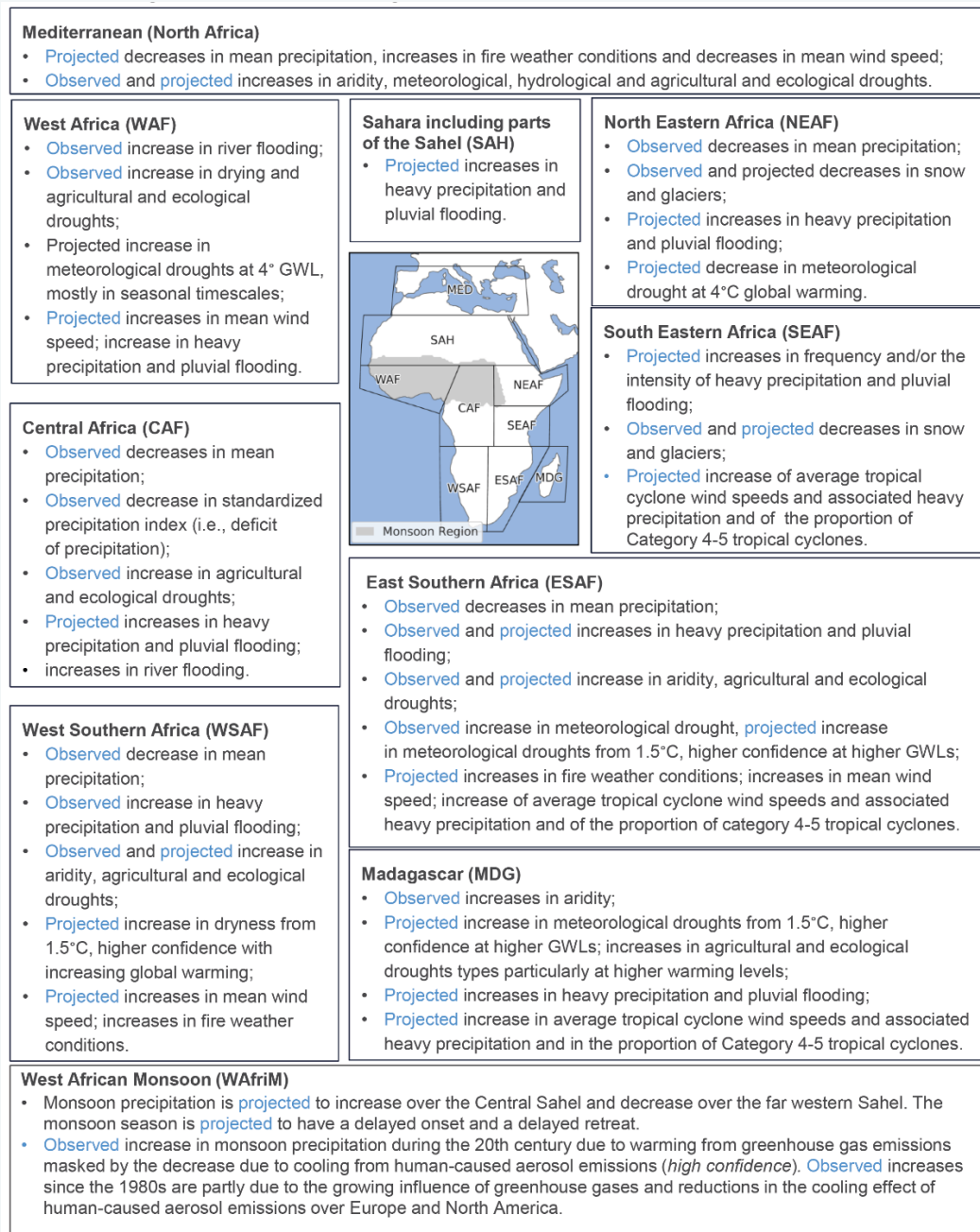


Figure 6: Projected and observed climate change impacts (Intergovernmental Panel on Climate Change, 2022).

Climate change is placing increasing stress on agriculture, forestry, fisheries, and aquaculture, affecting food production, food quality and harvest stability, with wide-ranging and negative consequences for food security and livelihoods. These effects are projected to become increasingly serious to mid-century, with some food-producing areas becoming unsuitable for production, increasing the numbers of people at risk of hunger, malnutrition and diet-related mortality. In addition, climate change will increasingly expose outdoor workers and animals to heat stress, reduce human labour capacity, negatively affect the health of workers and animals, and reduce livestock production and productivity. Projections indicate that crops and livestock in the arid and semi-arid drylands of Africa will be particularly affected. This

is highlighted in Figure 7 which illustrates crop stress related to agricultural drought, and Figure 8 which shows livestock heat stress. In addition, changes in grassland productivity to mid-century will have negative impacts on the livelihoods of more than 180 million people. Change in species composition and forest structure in tropical forests are projected to decrease production. Particularly in the Sahel, projections indicate a shifting of the boundaries between pastoral and agropastoral production systems, with cropping becoming increasingly challenging in the latter.

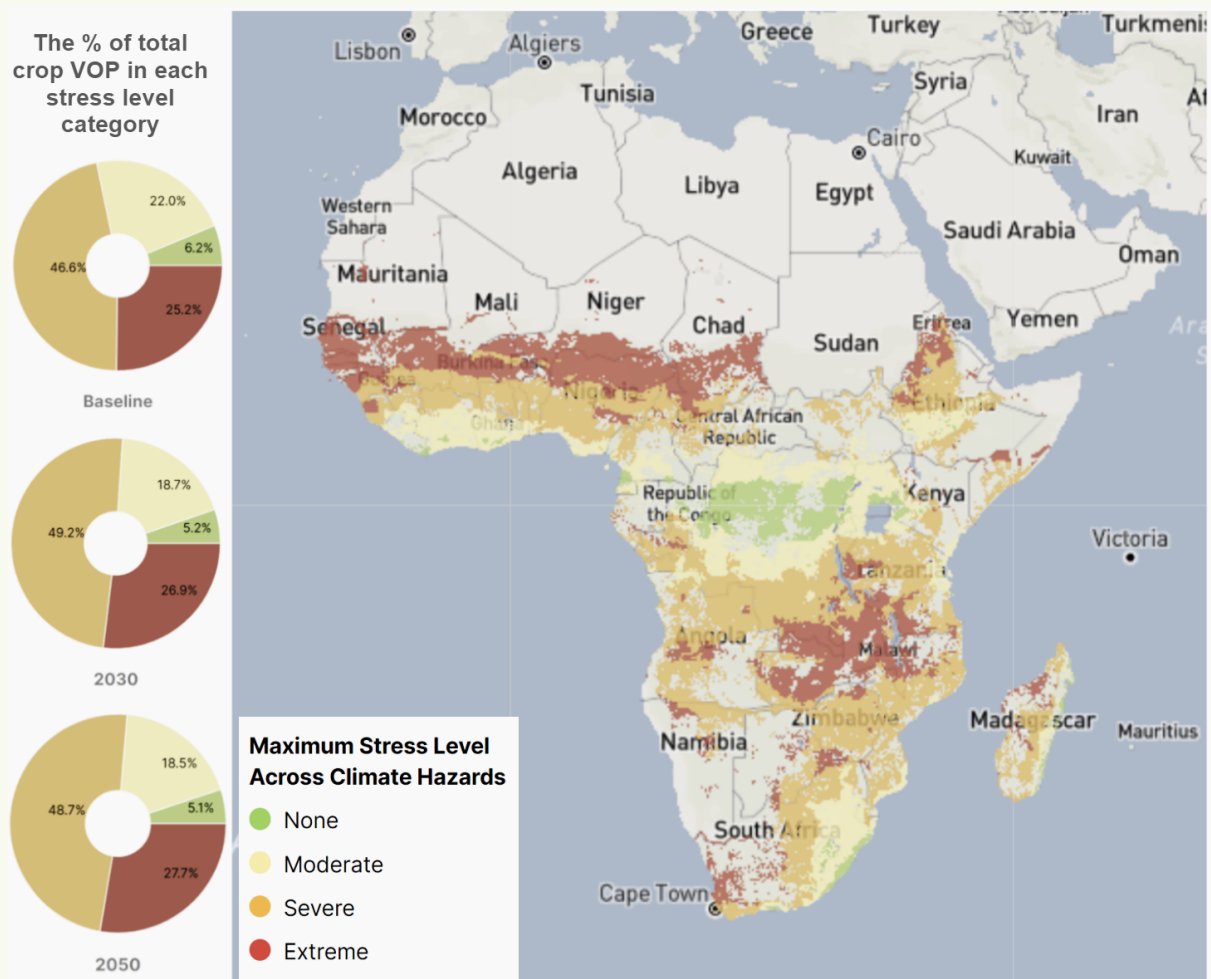


Figure 7: Projected crop stress levels from drought in 2050 under RCP 4.5 using Thornthwaite's Aridity Index (CGIAR, 2022).

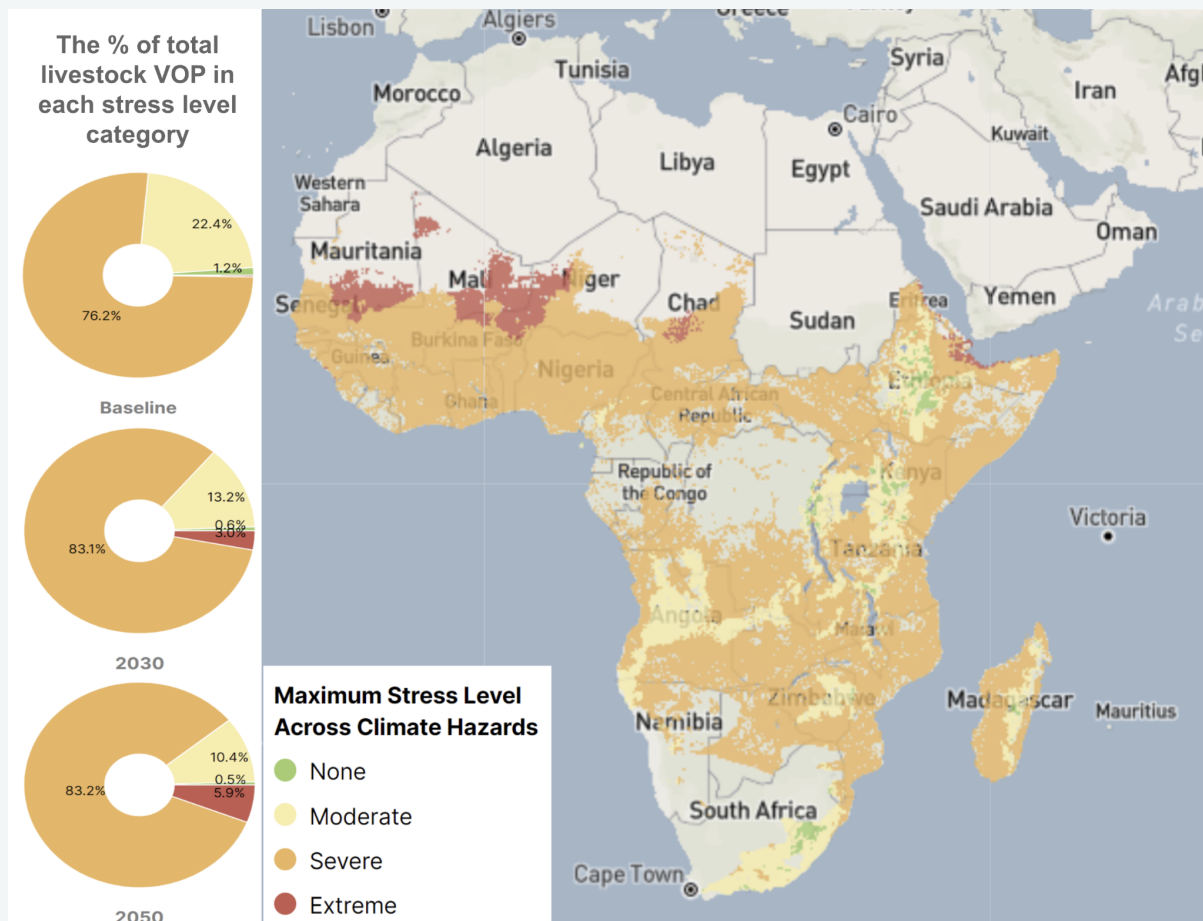


Figure 8: Projected livestock heat stress for 2050 under RCP 4.5 (CGIAR, 2022).

Numerous adaptation options exist that can reduce climate impacts in different socio-cultural, economic, and geographical contexts, although the feasibility of many of these (and their limits) are still largely unknown. Ecosystem-based approaches, such as land restoration and agroforestry, have the potential to strengthen resilience to climate change with multiple co-benefits, although trade-offs and benefits vary according to specific socio-ecological contexts. For example, the expansion of silvopastoralism in the arid and semi-arid drylands could help provide feed, shade for livestock, carbon sequestration and reduce soil erosion. Figure 9 illustrates some of the benefits and trade-offs of expanding agroforestry, alongside the climatic and socio-economic conditions that enable its use.



Figure 9: An overview of agroforestry related interventions (CGIAR, 2022).

Box 1. African drylands

Drylands are defined as lands where the ratio of annual precipitation and the mean annual potential evapotranspiration, also known as the aridity index (AI), is no more than 0.65. African drylands cover two-thirds of the continent, including three-fifths of its agricultural land, and are home to two-fifths of the population. In addition, if 'presumed' drylands (areas that contain dryland features but with AI greater than or equal to 0.65) are taken into account, the area covered is far greater (Figure 10) (FAO, 2019).

Dryland areas are hyper-arid, arid, semi-arid and dry sub-humid, and are regions where primary production is limited by water availability. These areas are also characterised by low and erratic rainfall, droughts, heatwaves, and occasional floods. The distinct biophysical features of drylands make them highly susceptible to the negative impacts of climate change. Upsurging temperatures, changes in precipitation and rainfall patterns, land use, nutrient availability, atmospheric carbon and other greenhouse gas emissions, are key driving factors of unprecedented dryland expansion. In addition, drylands are associated with substantial land degradation and are extremely vulnerable to severe environmental shocks. Despite this, the results from a 2019 FAO global assessment (FAO, 2019) demonstrate that African drylands are not wastelands, but productive landscapes with considerable economic potential and environmental value. The economic value of dryland ecosystems is described in more detail below.

Figure 11 shows the drylands of Africa with land use delineations. As expected, these hyper-arid and arid areas are dominated by other land and grassland areas, and semi-arid and dry sub-humid categories are dominated by grassland, followed by forestland followed by cropland (Sacande et al., 2022).

However, model simulations clearly show that continued global warming will make the earth's drylands drier over time. Climate models predict high evapotranspiration and lower soil moisture levels in arid and semi-arid regions of Africa, suggesting some tropical grasslands could become drier and unsuitable for farming (Schmidhuber and Tubiello, 2007).

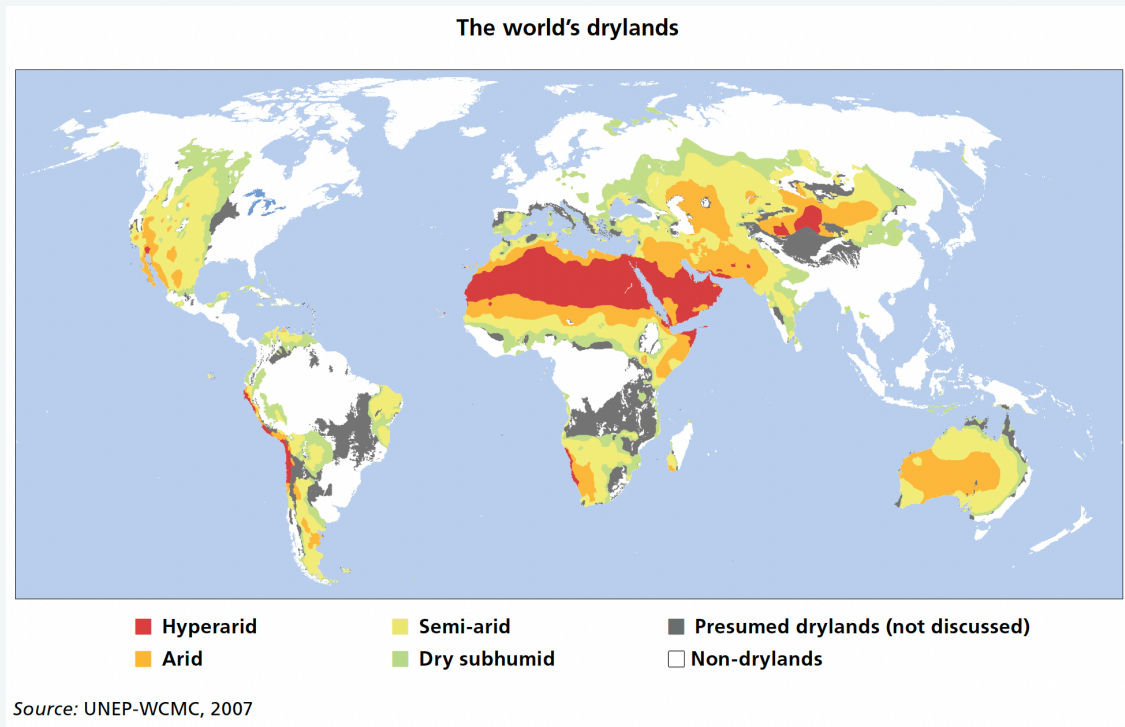


Figure 10: Global drylands featuring the different types of African Drylands (FAO, 2019).

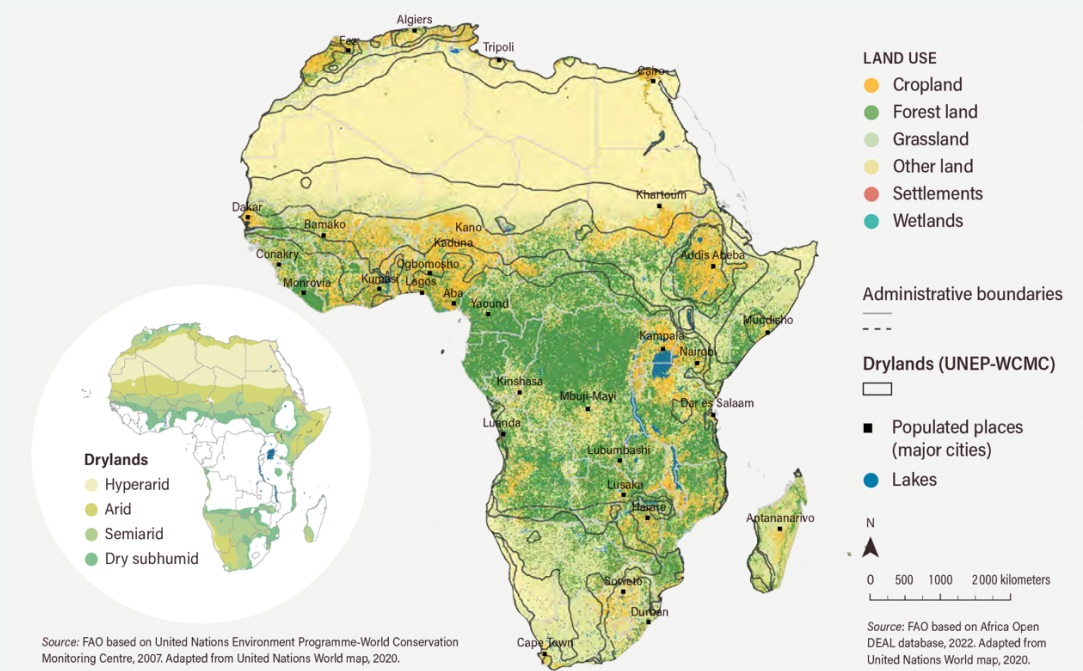


Figure 11: Map of land use delineations in Africa with dryland boundaries (Sacande et al., 2022).

Increased land degradation and soil erosion. In 2021, the FAO reported that in Africa, up to 65% of productive land is degraded, while 45% of Africa's land area is experiencing spreading desertification (Berrahmouni and Mansourian 2021). Soil erosion has long been recognised as a major process of land degradation resulting in losses of productivity and biological diversity, decreased resilience of landscapes and increased vulnerability to climate change.

Through an assessment of soil erosion based on the Land Degradation Surveillance Framework (LDSF) and earth observation data from the Moderate Resolution Imaging Spectroradiometer Platform (Vågen and Winowiecki, 2019), it is evident that data on land health dynamics, including erosion potential and soil organic carbon, can help to target interventions to restore degraded land and monitor restoration through time (Figure 12). Using the same methodology, Figure 13, shows greater detail of erosion percentage across the GGW 11 countries (Vågen, 2023. Regreening Africa).

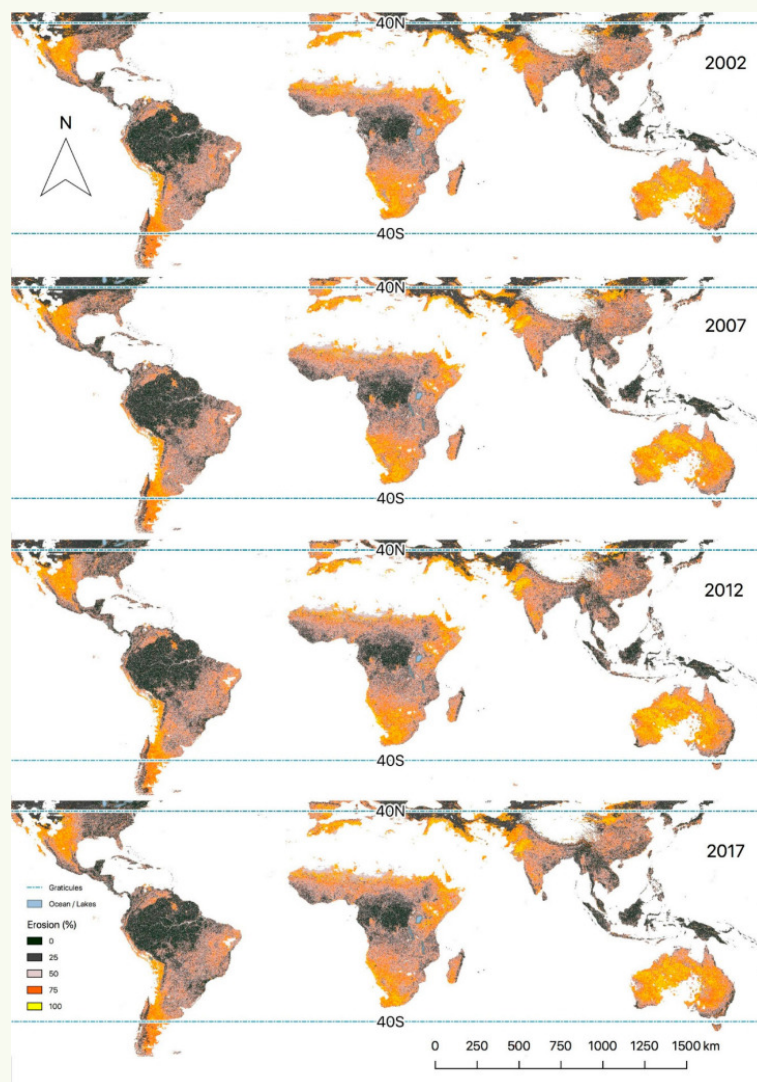


Figure 12: Predicted probabilities of soil erosion in the global tropics. The prediction model was developed based on MODIS imagery over the period 2005 to 2017, matching annual composites to the years of LDSF field data collection and fitted to annual composite reflectance data for 2002, 2007, 2012, and 2017. Hyper-arid (i.e. deserts) areas and areas with elevations higher than 4,300 m were masked (i.e. white areas on the map) (Vagen and Winowiecki, 2019).

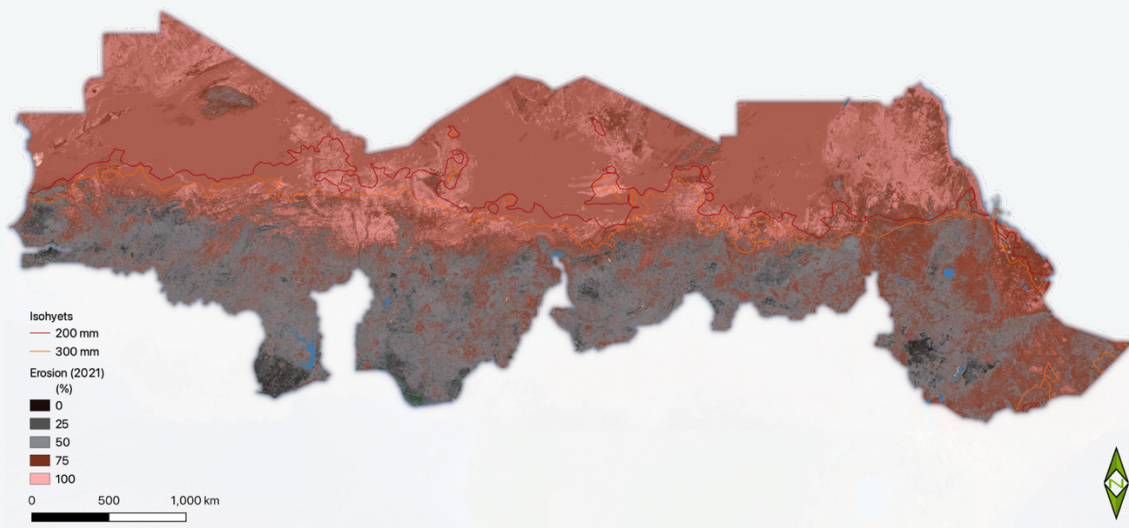


Figure 13: Percentage erosion (2021) across the GWSSI (Vågen, 2023).

Escalating water stress. Water insecurity in Africa, particularly in some countries and in some regions, remains a significant challenge. In addition, there is also marked differences in water availability within countries due to spatial and temporal variability in rainfall which affects water supply (Nkiaka et al., 2021). Water stress in Sub-Saharan Africa (SSA) stems from a myriad of sources including unsustainable water management practices, unreliable and erratic rainfall and increasing temperatures associated with climate change, and greater demand for water in food production, industry, and population growth, among others. By 2050, water demand in SSA is expected to skyrocket by 163% predominately from an increase in water use, mainly expected for irrigation and domestic water supply. Inefficient water usage and unsustainable land and water management, unless significantly transformed to more restorative and resilient conditions, threaten to lower the region's Gross Domestic Product (GDP) by 6% (WRI, 2023) (Figure 14a and b).

While Africa is endowed with abundant groundwater resources, its exploitation is currently constrained by limited financial resources and a lack of institutional support (Cobbing, 2020). While research has established the biophysical drivers of water stress in SSA, Nkiaka et al. have highlighted the urgent need to assess the level of water stress (low, moderate, or high) across countries and basins so that measures may be put in place to mitigate the socio-economic risk posed by water stress in Africa. There is acute paucity in water quality data in Africa, the evidence that does exist suggests that water quality is a critical and growing challenge in Africa and could potentially exacerbate water stress in the future (Liu et al., 2017). Water quality is expressed as the concentration of certain pollutants. Poor water quality in Africa has been attributed to several factors, including naturally occurring hazardous compounds in the soil such as nitrates and arsenic, aquifer characteristics including depth, type, and groundwater recharge rate, mining, industrial oil pollution, leaching of agrochemicals, land use change resulting in increased sediment loads, untreated sewerage discharged or leakage of organic and microbial pollutants and seawater intrusion particularly in coastal areas (Nkiaka et al., 2021).

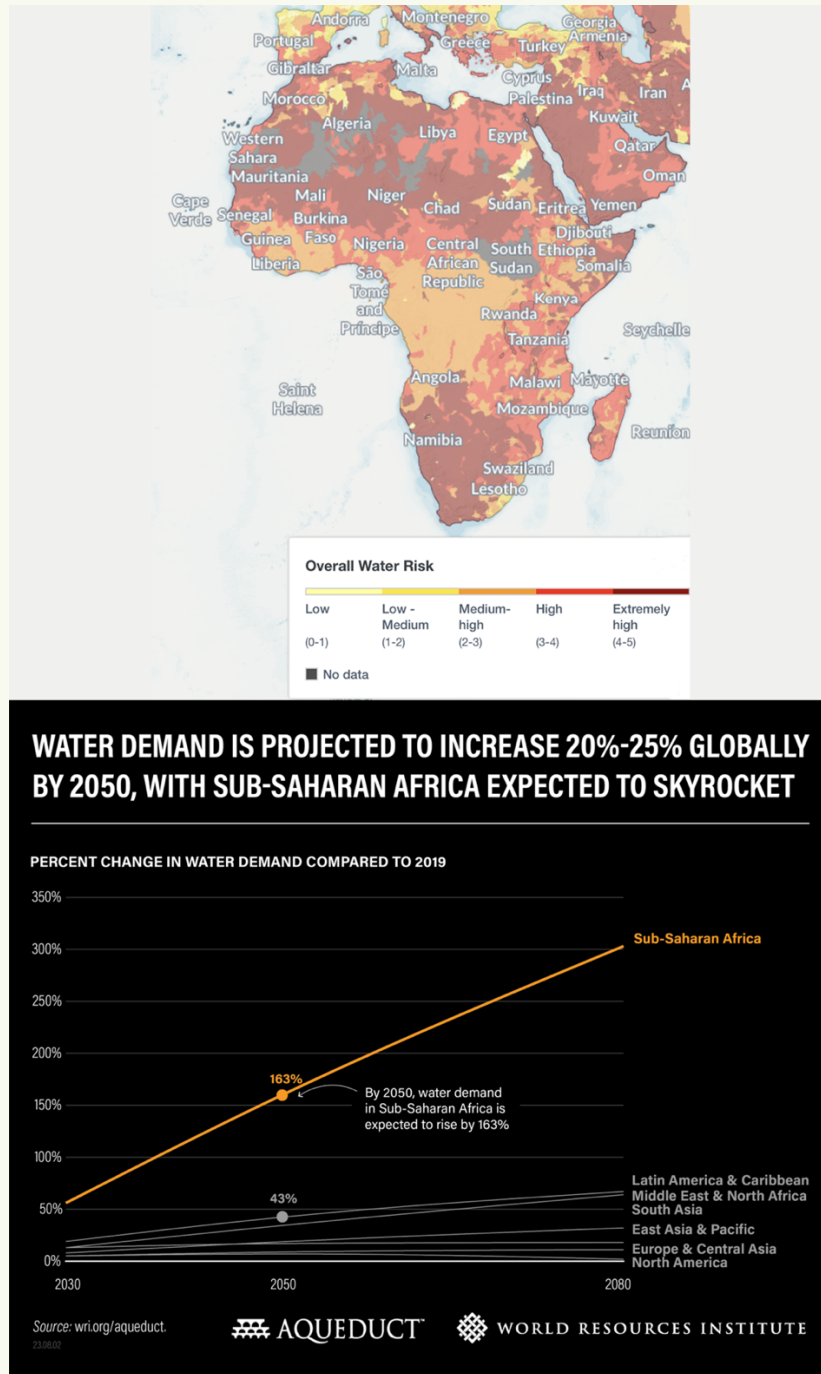


Figure 14: Water stress risk across the continent (a) and anticipated water demand by 2050 in Sub-Saharan Africa (b) (WRI, 2023).

Spread of wildfires. Wildfires are an increasing threat to dryland environments due to increased ignition potentials by humans, the spread of fire-prone invasive grasses, and shrubs, surface temperature, and dry conditions. The dramatic increase in wildfire prevalence in recent decades poses serious threats to human safety, infrastructure, agricultural production, cultural resources, native ecosystems, and watershed functioning. It is especially prevalent in Africa, with up to 9% of the continent burned on an annual basis, which contributes to 70% of the global burned area. More extensive dry season fires lead to wet season rainfall deficits of up to 30 mm.

Subsequently, the occurrence and impacts of wildfires must be reduced through prevention, preparedness, and pre-fire management. The post-fire response, such as erosion control and replanting in burned areas, helps reduce the immediate impacts of wildfire and the establishment of non-native grasses, thereby reducing the risk of future fires.

The economic, social and environmental undervaluation of biological diversity in drylands and more broadly. Africa's rich biological diversity and natural ecosystems underpin the food, water, energy, health and livelihood needs upon which the population relies (ACSS, 2022). While the African continent is home to 25% of the world's mammal species and 20% of the world's bird species, the economic value to livelihoods of nature in Africa are well-documented by the Intergovernmental Science Policy Platform on Biodiversity and Ecosystem Services (IPBES) and described by the Africa Centre for Strategic Studies (2022) (Figure 15). African drylands harbour enormous levels of biodiversity and provide a variety of invaluable ecosystem goods and services. These include, among many others, food and nutrition, habitats and shelter, fuelwood and timber, erosion protection, carbon sequestration (and the emergence in some cases of related carbon markets), biodiversity protection, wild harvest of medicines, and tourism based on wildlife, culture, and landscapes. These services contribute largely to achieving Africa's development goals.

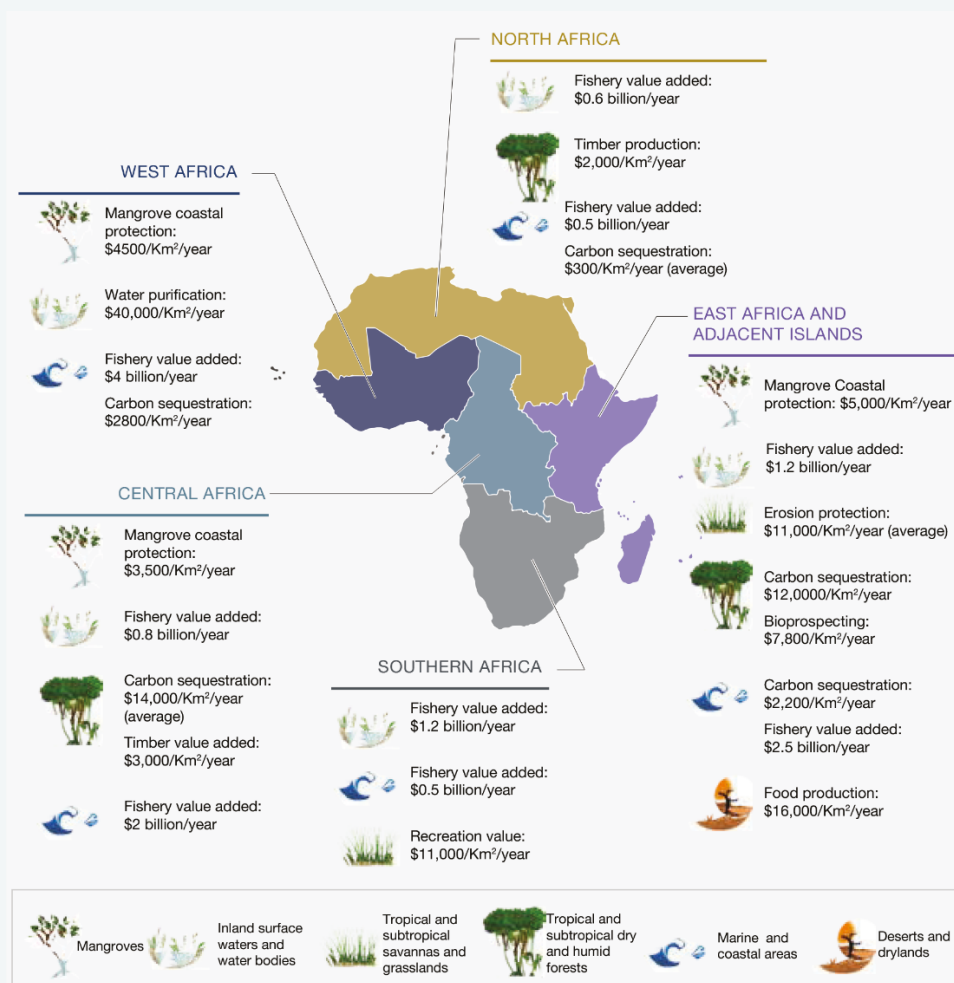
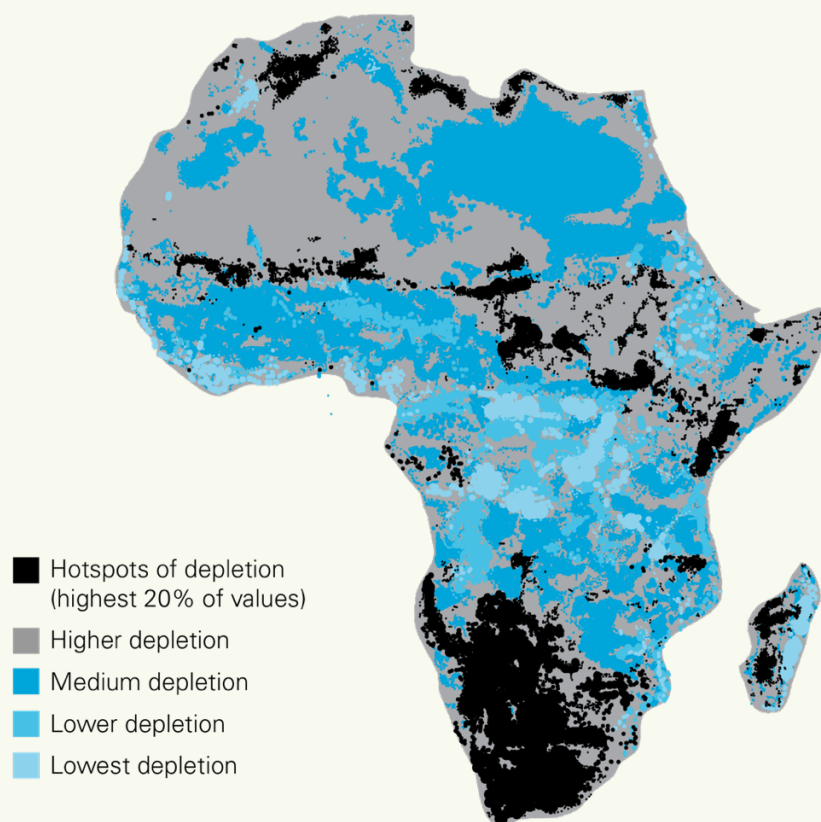


Figure 15: Economic values to livelihoods from nature (Hussain, 2023).

Loss of biological diversity. While the value of Africa's biodiversity is well-known, it continues to be lost. This represents a significant concern with wide ranging ecological, economic and social implications for the continent. Factors contributing to the decline of the continent's biodiversity include deforestation and land conversion, overharvesting of plants, trees, animal and fish resources, altered habitats, and encroachment of invasive species. Unsustainable land management practices, as well as rapidly expanding infrastructure, is causing losses of above- and below-ground biological diversity. Dam construction, for example, has led to the decline of water levels and the near collapse of aquatic ecosystems in some lakes across Africa with notable examples being Lake Chad and Lake Turkana (Avery and Tebbs, 2020; Gao et al., 2011). Efforts to preserve and restore biological diversity are crucial for the health of ecosystems but also for the well-being of the people who depend directly or indirectly on these ecosystems for resources and services.



Source: Natural Capital Finance Alliances

Figure 16: Levels of biological diversity loss in Africa (Hussain, 2023).

Box 2. Forested land

Forestland. Tree cover in Africa varies widely across the different regions and eco-zones. Tree cover includes both forests and non-forested areas with scattered trees, including trees outside of forests (TOF) both of which contribute to the overall ecological balance of the continent. The forestland subdivisions for 2019 in Africa identify that the forestlands consist of 38.8% broadleaf deciduous, 31.5% broadleaf evergreen and 22.4% as broadleaf mixed. This is followed by mixed forest (broadleaf-coniferous), other plantations and riparian forest (Sacande et al., 2022). The geographic distribution of the forestlands in Africa in 2019 is shown in Figure 17.

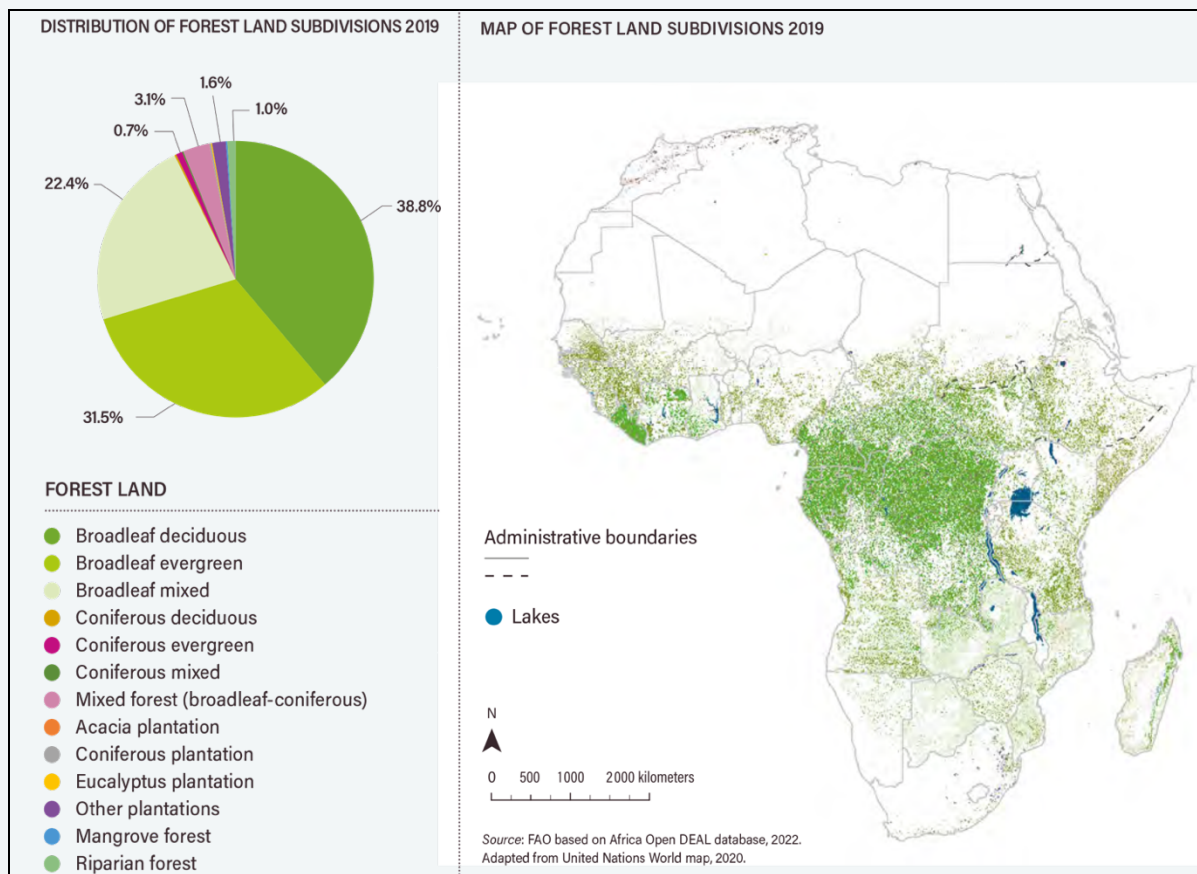


Figure 17: Distribution of forestland subdivisions (Sacande et al., 2022).

Dryland forest. In Africa, the dryland forests are important for livelihoods, livestock, energy and biological diversity, among others, however, across Africa these dryland forests are threatened. The status of dryland forest by region are described in Table 2 (Haddad et al., 2022).

Table 2: Trends and status of dryland forests at regional levels in Africa (Haddad et al., 2022).

TRENDS AND STATUS OF DRYLAND FORESTS AT REGIONAL LEVELS	
Regions	Status and trends
Northern Africa	Northern Africa is mostly threatened by land degradation and deforestation. The general drivers of degradation include urbanisation, demographic changes, commerce globalisation and agricultural expansion. Policies driving the sedentarisation of nomadic and mobile pastoralists is causing overgrazing and land degradation in some areas of the region.
Western and Central Africa	These regions are mostly affected by climate variability and land-use change, disrupting the amount of water available to vegetation and boosting land degradation, particularly after the expansion of agricultural land and the loss of pastoral lands. Locally, overstocking and increased livestock production have reduced pasture productivity and soil fertility.

Eastern Africa	Eastern Africa has suffered severe degradation of dryland forests and woodlands with high losses of biological diversity and ecosystem services. The high rate of deforestation and degradation of dryland forests is driven by population growth, land-use change towards cropland, excessive harvesting of fuelwood and other products, wildfires, climate change and policy failure. Intensification of grazing livestock is also a cause of degradation and desertification, particularly around water points and in valleys, driven by the shift in pastoralism from traditional to more market orientated production systems. Conservation initiatives banning pastoralists are also reducing the availability of pastures, increasing pressure on dryland ecosystems.
Southern Africa	Southern Africa is also suffering from a decline of forest and woodland, but at a slower pace, with drivers that are similar to other African regions. Pastoralism is still practised, but large-scale industrial livestock farming has spread, causing major land degradation.

Trees outside of forests (TOF). More than 25% of trees in Africa are those found outside of forests. Trees outside of forests play a crucial role in the environment (e.g. climate mitigation, biodiversity, soil protection, micro-climate regulation, water management, drought mitigation), economy (e.g. income generation and livelihood support including fodder, timber, nuts, fruits, firewood, non-timber forest products (NTFPs), among others) and social well-being (e.g. nutrition, cultural and traditional uses). Trees outside of forests are depicted in Figure 18 (Reiner et al., 2023).

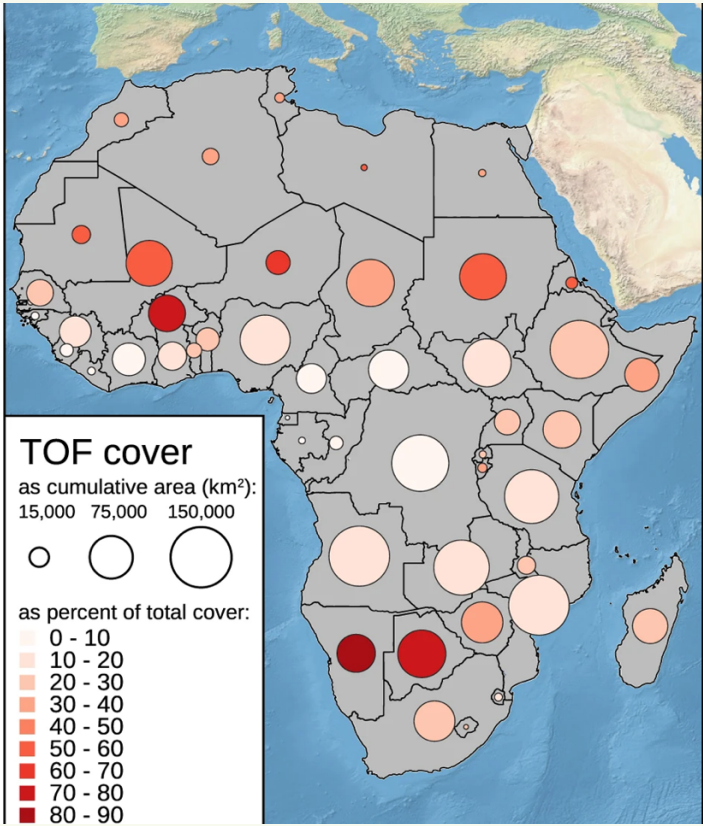


Figure 18: Contribution of trees outside of forests (TOF) to total tree cover at the country scale (Reiner et al., 2023). Trees are grouped in 30 m × 30 m grids and a cell is defined as non-forest if the canopy cover is below 25%, and as forest, if it exceeds 25%. Tree cover is subsequently accumulated for each country.

Rise in the extent and density of trees under farmer-managed natural regeneration (FMNR). FMNR is a sustainable land restoration approach that involves farmers actively managing the growth and re-growth of trees and shrubs from existing root systems and stumps on their lands. Its popularity has increased as a means of restoring degraded landscapes. Key examples in West Africa come from southern Niger spanning across large regions of Maradi and Zinder and the Seno Plain in Mali. In Niger, the dominant tree is *Faidherbia albida* which increases soil fertility and crop production (Figure 19). The mapping methodology by the United States Geological Survey (USGS) is produced manually (which is more accurate than automated mapping), using visual image analysis, field data, and field knowledge.

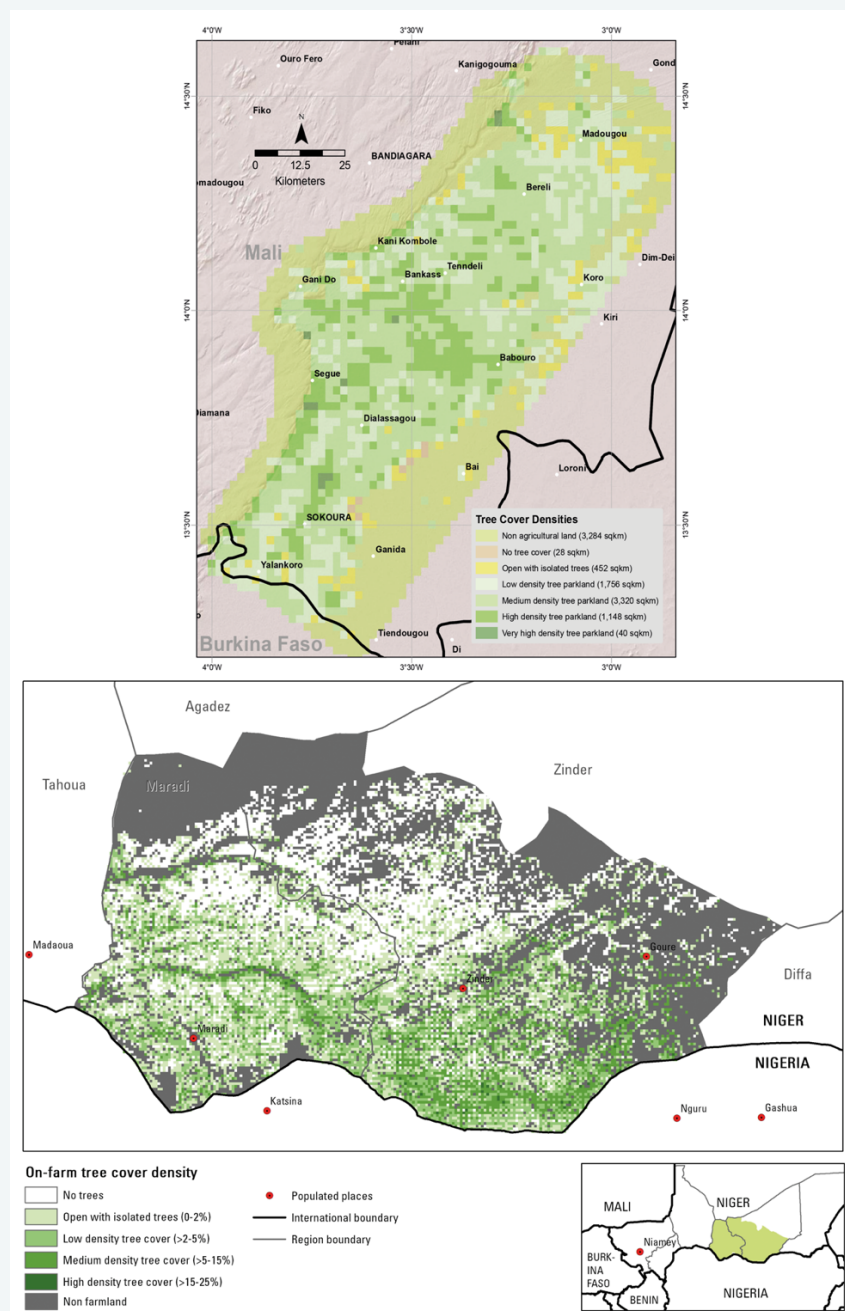


Figure 19: Tree cover extent and density in Niger and Mali (Courtesy of Gray Tappan, U.S. Geological Survey, EROS Center).

Increase in data to inform tree suitability under climate change scenarios. Suitability of different tree species used in land restoration practices such as agroforestry, tree planting and FMNR may change under different climate scenarios. The World Agroforestry Climate Atlas allows users to see the baseline and projected suitability under two different shared socio-economic pathways (SSPs) – 1-2.6 and 3-7.0. Figure 20 shows the changes anticipated for *Faidherbia albida*. In this example, the predications seem to show that *Faidherbia albida* becomes of limited suitability in West Africa under both SSPs. Having this kind of information in hand, allows farmers, scientists and planners to better understand what to expect under different climate scenarios and plan accordingly.

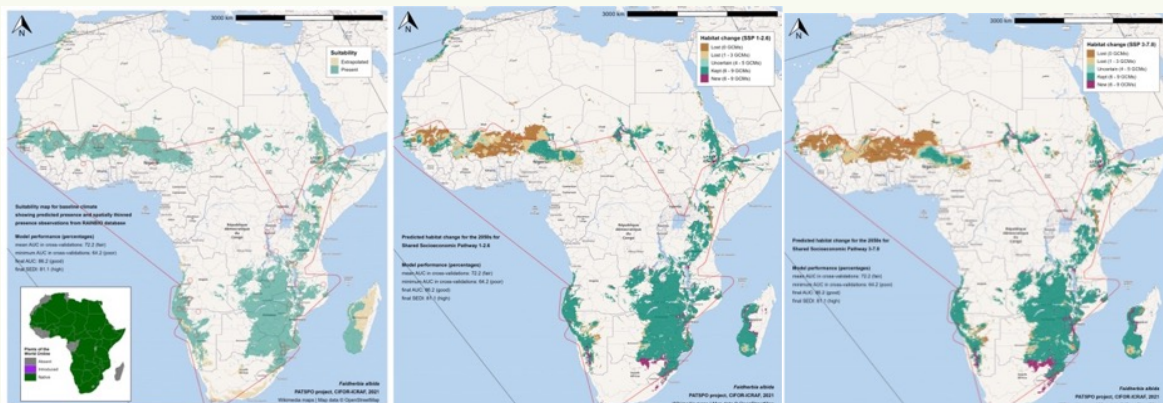





Figure 20: Predictive maps of suitability for *Faidherbia albida* as a baseline and under SSPs of 1-2.6 and 3-7.0 (Kindt et al., 2021).

Increase in research and knowledge on the suitability of restoration practices to reduce carbon emissions. While a myriad of land restoration practices are currently being implemented across Africa, it is important to understand the benefit of these practices to climate mitigation and adaptation. The World Agroforestry Centre Regreening Africa Project worked with World Overview of Conservation Approaches and Technologies (WOCAT) and the Carbon Benefits Project (CBP) to assess the mitigation impact of various land restoration practices. The kinds of results shown in Figure 21 can provide land managers with valuable information about appropriate practices in a changing climate. For example, these preliminary findings suggest that within in a tropical dry climate, FMNR has a higher carbon sequestration potential on a high activity clay soil type compared to a sandy soil. In a warm temperate moist climate on high activity clay soil in Ethiopia, the enclosure technology showed the highest sequestration potential, suggesting it could be the case that in wetter conditions in grasslands, livestock exclusion alone may be enough to encourage regeneration, with the need for management by farmers possibly increasing as rainfall decreases. While these theories need to be tested, they do provide information that should be considered to promote the uptake of SLM practices under different soil-climate combinations and within a changing climate.

	PRACTICE/ TECHNOLOGY	CLIMATE	SOIL TYPE	GHG BALANCE T CO ₂ E HA ⁻¹ YR ⁻¹ (20 YR ANALYSIS)	MAIN SOURCES/ SINKS
<p>NIGER</p>  <p>Regions of Tillabéri, Filingué, Ouallam, Téra and Tahoua</p>	Assisted Natural Regeneration (ANR)	Tropical Dry	Sandy	-2.1	Biomass
<p>GHANA</p>  <p>Widnaba Community in Bawku West district, Upper East, Ghana</p>	Farmer Managed Natural Regeneration (FMNR)	Tropical Dry	HAC*	-5	Biomass
<p>ETHIOPIA</p>  <p>Amhara</p>	Community-based closed area management (natural Acacia and Gravelia sp. enclosure-excluding animals)	Warm Moist Temperate	HAC*	-7.7	Biomass

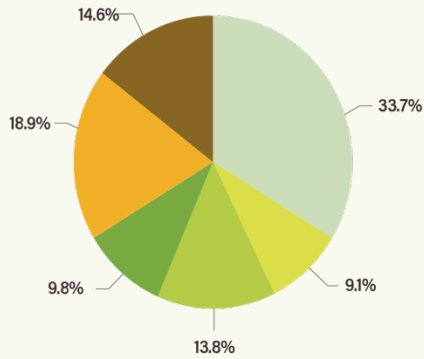
* High Activity Clay

Figure 21: CO₂ emission reduction associated with indicative land restoration practices in Niger, Ghana and Ethiopia (E. Milne, Carbon Benefits Project and WOCAT).

Growth in pastoral and silvopastoral systems. Livestock is one of the fastest growing sectors in Africa, contributing between 30% - 80% of agricultural GDP. Domestic livestock is expanding in response to this economic potential. With an anticipated population increase to 2.2 billion by 2050, it is anticipated that the average consumption per person will be 25kg of meat and 65kg of milk annually (Sunga, 2020 in ILRI, IUCN, FAO, WWF, UNEP and ILC, 2021). While livestock type varies (camels, cattle, sheep, goats, chickens, etc.), as does the type of livestock keeping (zero-grazing, local grazing, extensive or nomadic grazing, etc.), this sector supports millions of livelihoods and is dependent on managing livestock and landscapes to produce crops, grasses, shrubs, trees for grazing and fodder. Figure 22 shows the types of grassland subdivisions including grassland, and grassland with shrubs or trees or both, and shrubland (Sacande et al., 2022). Well-managed livestock can be an effective means for land restoration.

Livestock production, in particular pastoralism, is considered a key activity for food security, sustainable development and resilience in drylands. There is also a renewed interest in silvopastoralism, a form of agroforestry, that combines grazing livestock with forestry, benefiting the ecological relationships between animals and woody plants (Haddad et al., 2022). Agroforestry and silvopastoralism are considered primary pathways for forest restoration in dryland areas.

DISTRIBUTION OF GRASSLAND SUBDIVISIONS 2019



GRASSLAND

- Grassland
- Grassland with shrubs
- Grassland with trees
- Grassland with trees and shrubs
- Lichens and mosses
- Shrubland
- Shrubland with trees

MAP OF GRASSLAND SUBDIVISIONS 2019

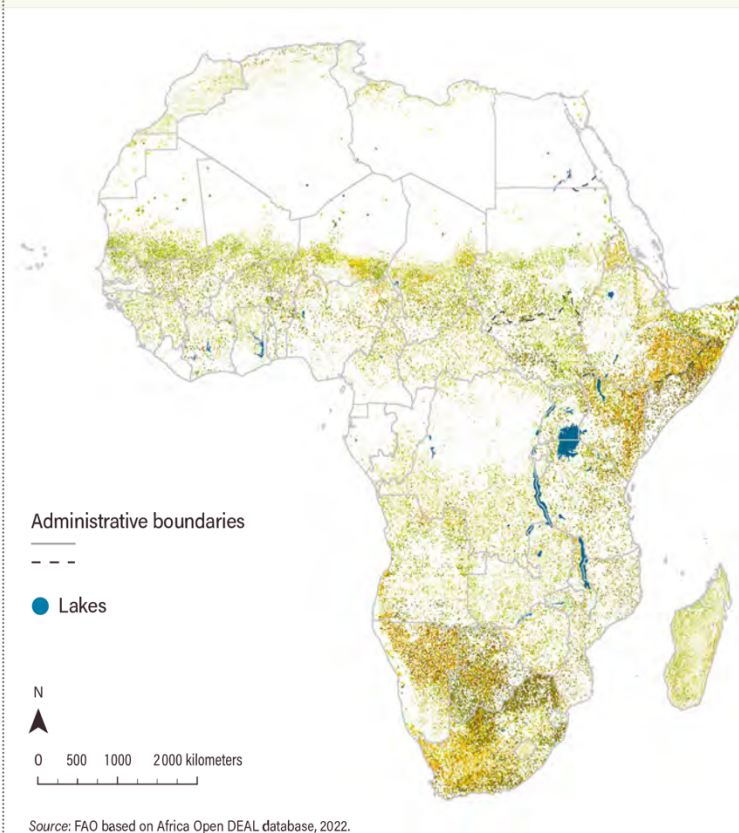


Figure 22: Distribution of grassland types and map of grassland subdivisions in Africa (Sacande et al., 2022).

3.2.2 Social dimensions

Increasing migration and internal displacement. Around 16.5 million internal displacements were recorded in SSA in 2022, an increase of 17% compared with the previous year. This is explained by a near three-fold increase in the number of disaster displacements to 7.4 million, the highest figure ever reported for the region (GRID, 2023). Internal displacements resulting from conflict and violence as well as disasters are shown by country in Figure 23a. Figure 23b also illustrates the growing trends over time (2013-2022) for SSA.

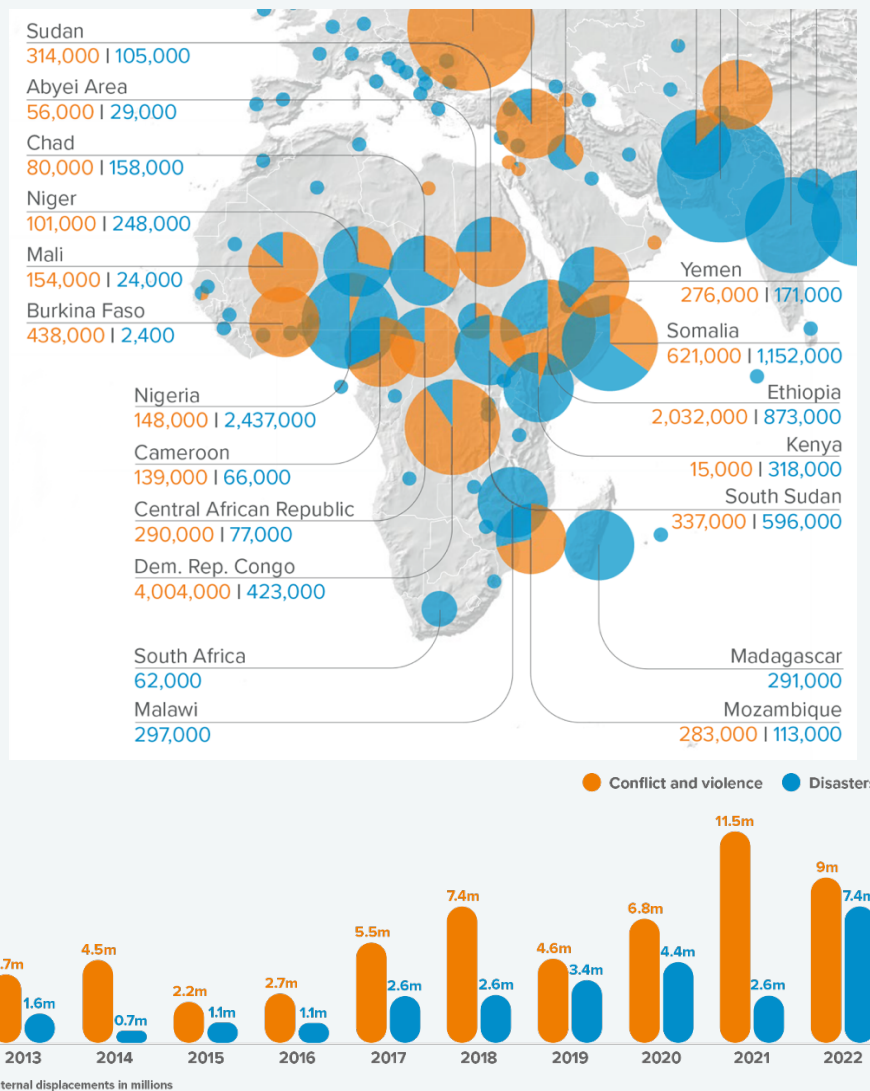


Figure 23: a) Internal displacements resulting from conflict and violence (orange) and disasters (blue) in Sub-Saharan Africa in 2022, and b) the trend in displacements between 2013-2022 (GRID 2023).

Wars and conflicts are concentrated disproportionately in dryland regions, while at the same time countries experiencing armed conflicts are disproportionately affected by climate variability and extremes. Conflict has multiple root causes including competition for resources, ethnic tensions, weak governance, and historical factors including colonialism. The Armed Conflict Location and Event Data Project (ACLED) gives monthly updates on dates, actors, locations, fatalities and types of reported political violence and protests (acleddata.com). The analyses of ACLED can be used to test scenarios for future planning.

Increasing instances of climate and conflict. Climate change and other environmental stresses exacerbate land and water scarcity and food production losses often leading to disturbances and conflict (IDRC, 2021). Conflicts reduce the capacity of people, systems and institutions to adapt in the face of climate change impacts. The conflict and climate change impacts cause people to move and subsequently contribute to new cycles of tension and unsustainable natural resource use in other areas. As the impacts of climate change increase, the potential for forced displacement and migration increases, with more people adding pressure on host

communities and a higher likelihood that tensions rise. Figure 24 shows that temperature anomalies and internal displacement of populations in dryland forests and other wooded areas and agrosilvopastoral areas are interconnected.

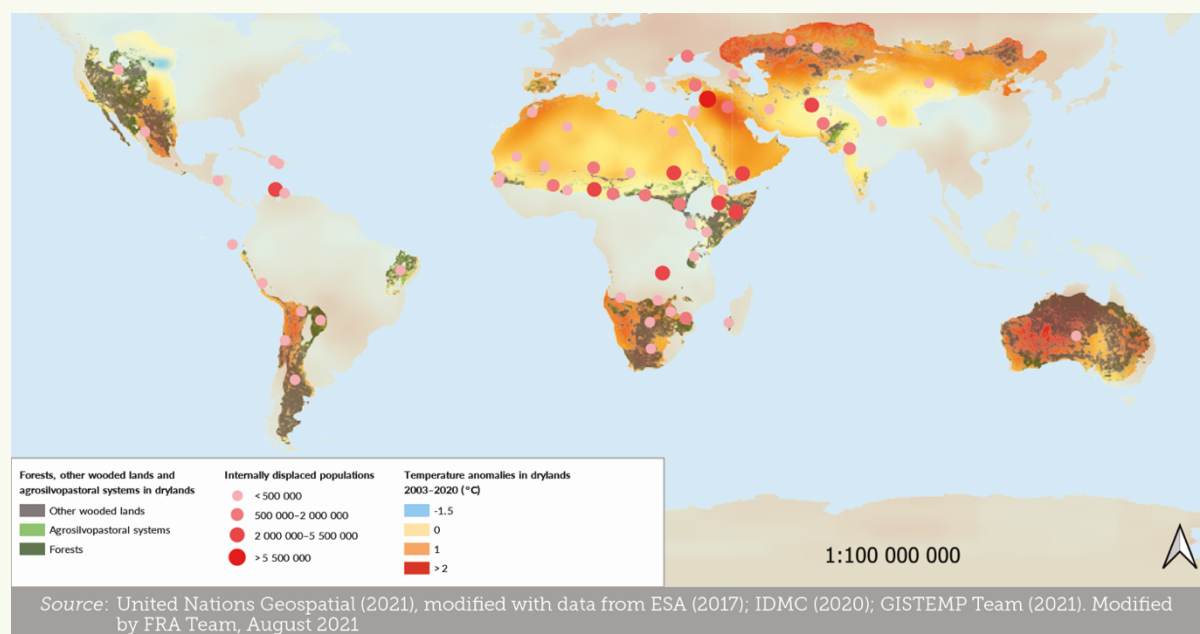


Figure 24: The interconnection between temperature anomalies and internal displacement of populations in dryland forests and other wooded areas and agrosilvopastoral areas (FAO, CGIAR, and CARE, 2021).

Economic growth and the increased competition for Africa's natural resources. Africa has witnessed notable economic growth in recent years, with its vast natural resources playing a pivotal role in this transformation. The continent's wealth in critical minerals, energy reserves, and arable land has attracted significant global attention and investment. However, this rich resource base has also fuelled intense competition among international powers and corporations seeking to secure access and influence in Africa. This competition has raised concerns about the equitable distribution of benefits, environmental sustainability, and the potential for geopolitical tensions. As Africa continues to grow economically, effective governance and sustainable resource management will be crucial to ensure that its natural wealth translates into inclusive development and long-term prosperity for its diverse nations and communities. In addition, disruption to supply chains, caused by geopolitical tensions and the COVID-19 pandemic, is causing a rethink of resourcing and greater competition for resources.

Rising inequality. While Africa has made significant strides in economic growth and development, inequalities persist across and within countries and various groupings. Income inequality remains a critical issue, with a growing divide between the rich and poor in many African countries. Rural-urban disparities persist, as urban centres often enjoy better access to resources and opportunities, exacerbating migration patterns and slum expansion. Gender inequality continues to be a concern, though progress has been made in some areas, such as women's political representation. Moreover, inequalities in access to education, healthcare, and basic services persist, with marginalised groups, including ethnic minorities and refugees, facing

disproportionate challenges. Addressing these multifaceted inequalities remains a central challenge for African governments and international organisations striving to promote inclusive and sustainable development on the continent.

Food insecurity and undernourishment. In dryland regions across Africa, the majority of the population (85%) relies on subsistence rainfed agriculture and pastoralism. The main staple subsistence crops are wheat, rice, maize, sorghum, and millet. An increase of multiple climatic extreme events, including rainfall variability, high temperatures, erratic droughts, and changing agro-ecological conditions, has significantly affected dryland agriculture with high uncertainties since the 1980s. The State of Food Security and Nutrition in the World 2023, reports the prevalence of undernutrition between 2005-2022. The data in Table 3 shows an overall increase in undernourishment in most regions in that time period with the greatest increase in percentage being in Southern Africa. While middle Africa showed decreases, those decreases are diminishing.

Prevalence of undernourishment (%)										
	2005	2010	2015	2016	2017	2018	2019	2020*	2021*	2022*
WORLD	12.1	8.6	7.9	7.8	7.5	7.6	7.9	8.9	9.3	9.2
AFRICA	19.2	15.1	15.8	16.6	16.5	16.6	17.0	18.7	19.4	19.7
Northern Africa	6.2	4.7	5.4	5.7	6.0	6.0	5.8	6.0	6.9	7.5
Sub-Saharan Africa	22.5	17.6	18.2	19.1	18.9	19.1	19.5	21.6	22.2	22.5
Eastern Africa	31.7	23.8	24.6	26.2	26.2	26.0	26.7	28.1	28.4	28.5
Middle Africa	31.9	22.5	23.3	24.7	23.7	24.4	24.8	27.6	28.5	29.1
Southern Africa	5.1	7.2	9.3	8.3	7.8	7.7	8.3	9.5	10.0	11.1
Western Africa	12.2	10.8	10.6	10.7	10.6	11.1	11.0	13.7	14.5	14.6

Table 3: Prevalence of undernourishment in African regions, 2005-2022 (FAO, IFAD, UNICEF, WFP and WHO, 2023).

The impact of disasters on food and agriculture. The FAO (2023c) presented groundbreaking evidence on the impact of the interactions of hazards and other elements of disaster risk by underlying risk drivers and shocks that have cascading impacts upon agriculture and food security. These drivers affect different systems and sectors and are transboundary, they include climate change, poverty and inequality, population growth, but also the occurrence of pandemics, practices such as unsustainable land use and management, armed conflicts and environmental degradation. The negative impacts affect value chains, and agri-food systems and subsequently exacerbate food insecurity and undernourishment. This understanding underscores the need to develop and mainstream multi-sectoral and multi-hazard disaster risk reduction into policy and programming.

An increasing African population. During 2015-2020, Africa's population grew by 1% - 4% (Figure 25). Africa's population is estimated to reach 1.71 billion by 2030 and 2.49 billion by 2050 (worldometer.com). While offering numerous advantages and opportunities, the significant growth in the continent's population will result in expanding infrastructure, increasing resource consumption, the conversion of wild spaces into agricultural and urban land, and excess waste. This will in turn place additional pressure on Africa's drylands.

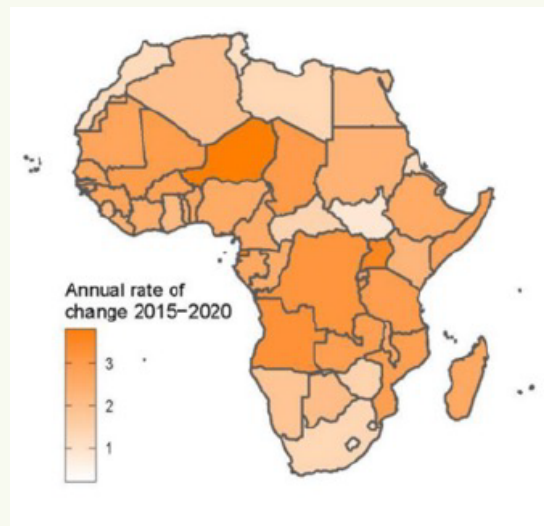


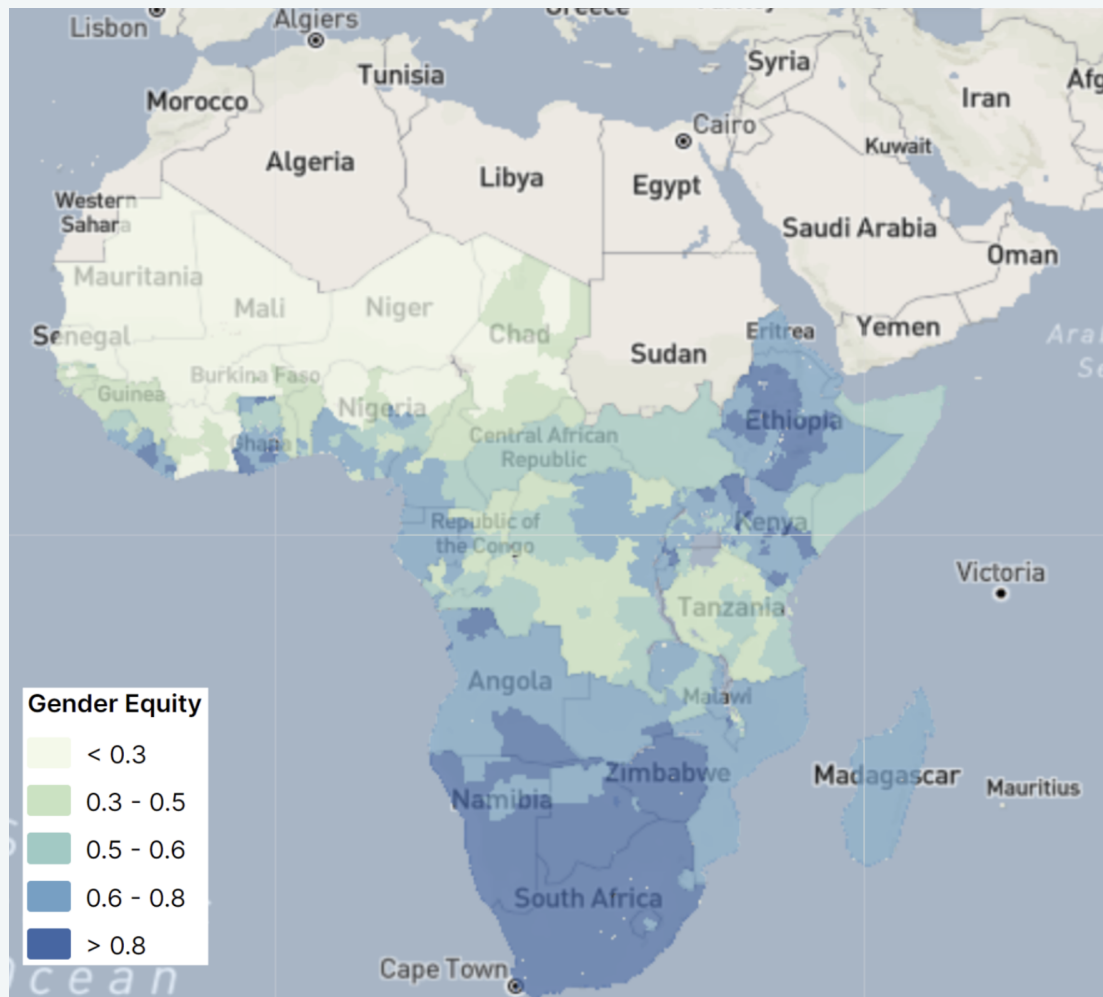
Figure 25: Annual rate of change in population during 2015-2020.

Rising youth population. Africa is considered the youngest continent in the world. In 2022, 40% of the population was aged 15 years or younger. While the growing percentage of youth population can be viewed as representing a valuable resource for economic growth and innovation, this is dependent on education, skills development, entrepreneurial and employment opportunities, to transform this potential into a demographic dividend. Planning actions that address unemployment and underemployment is critical. Such innovations will depend upon education and skill development, entrepreneurship, technology and innovation, youth empowerment, accessible healthcare, and engagement in decision-making processes.

Increasing gender gap and challenges related to women's land rights. The Maputo Protocol on women's rights, a landmark treaty adopted in 2003 by the AU (AUC, 2003), has helped to advance women's rights in Africa in various areas such as the right to health and reproduction, inheritance, economic and social welfare, education and training, access to justice and equal protection before the law, and elimination of harmful practices. However, the Protocol faced challenges regarding its implementation and enforcement at national levels (WEF, 2023). Ownership of land by women positively contributes to women's absolute employment (Wamboye, 2021). Despite these findings, the proportion of women who own land in SSA is 40% lower than that of men, whereby about 30% of women own land in SSA, compared to 70% of men. Moreover, women usually acquire this land either through purchase from the market system or marriage. Beyond land ownership rights, Slavcheska and others (2016) suggest considering land management rights and economic rights which present various investment and empowerment opportunities for women and girls.

It is well-acknowledged that while women play a central role in forest resource use in dryland forests of SSA, local patriarchal traditions continue to hinder their effective participation in land and tree resource management and benefit sharing (Marin and Kuriakose, 2017). There is an urgent need to address the gender gap in natural resources and landscape restoration programmes where innovations are needed to effectively foster actionable gender transformative processes that can change

restrictive norms that disempower women (Cronkleton et al., 2021) It is important for policies and interventions that seek to promote gender equity to recognise and consider the diversity of women (age, income, education or ethnic origin) and how this may create differentiated relationships to land and natural resources (Chigbu et al., 2019). Figure 26 highlights this need as the areas with the highest levels of human heat stress and agricultural drought also have the lowest female empowerment, limiting the ability of those regions to adapt.



a)



b)

Figure 26: a) Average gender equity across Africa; b) Women's agency in relation to areas of heat and drought stress. (CGIAR, 2022).

Rapid urbanisation. African cities are projected to accommodate two-thirds of the continent's overall population by 2050 (OECD and Sahel and West Africa Club, 2020) equating to an additional 950 million inhabitants. Although megacities get most of the attention, much of Africa's urban growth takes place in small and medium-sized towns (OECD/UNECA/AfDB, 2022).

Urban land is therefore being developed at an uncontrolled pace that surpasses the Member States' ability to provide basic services and shelter, according to the research analysing trends performed by centres such as the African Research Centre (Watson and Agbola, 2013) and the African Centre for Cities. As a result, planning experts have concluded that much of the urban development happening in Africa is unregulated, non-planned and non-transparent (Watson and Agbola, 2013). Finding nature-based solutions (NbSs) for this accelerating urbanisation trend, that are both inclusive and transparent is particularly challenging in this context. Data from Africapolis (Figure 27) shows the distribution and size of urban areas in 2020.

Broadening and deepening planning processes for resilience and democratic, equitable outcomes also implies linking these with the rural landscapes that feed and nurture cities in multiple ways (Forster and Getz-Escudero, 2014). An urgent policy and research imperative is to have this prioritised in connection with other spatially explicit, data-intensive demands for LDN, biodiversity conservation, and climate-friendly development at territorial and landscape scales. Particular efforts to integrate urban planning with these related policy objectives include enhancing NDCs through urban climate action (Urban Leds, 2020) and work to integrate NBSAPs into urban and regional planning (Oliveira, 2014).

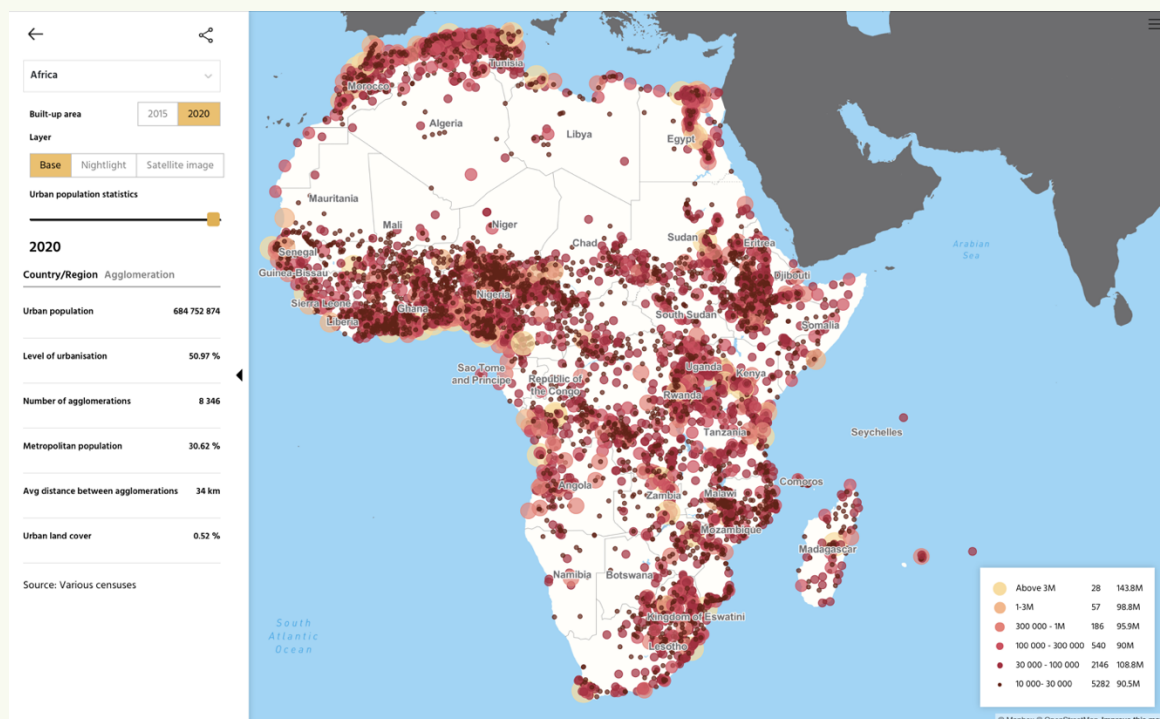


Figure 27: Size and location of urban populations in Africa in 2020 (Africapolis, 2020).

The increase of disinformation campaigns. Disinformation (the intentional dissemination of false information) has become rampant globally and in Africa. These campaigns are increasingly sophisticated and harder to detect. These efforts are often intended to sow distrust and enhance the likelihood of political destabilisation. In an era fraught with multiple crises, dependable and fact-based information flows are an important aspect of massive scaling of resilience building. The greatest numbers of disinformation campaigns are located in Mali, Nigeria, Libya, Sudan, South Africa and Mozambique, however, there have, to date, been very few countries with no discovered disinformation campaigns, including Morocco, Western Sahara, Bissau, Conakry, Liberia, Equatorial Guinea, Gabon, Congo, Namibia, Botswana, Zambia, Malawi, Chad, South Sudan, Rwanda and Burundi at the time of the Africa Centre for Strategic Studies documentation (2022).

The acceleration of technological innovation. Technological advances have been driving changes in efficient food production, processing, distribution, energy production, availability and use. In addition, they bring new opportunities and changing dynamics, including a digital revolution and significant new biotechnology opportunities. This includes, for example, advances in the fields of remote sensors (e.g. the Internet of Things), big-data analysis and machine learning. Agricultural applications of biotechnology also offer massive opportunities for African farmers and the agricultural industry, improving resistance to drought, heat and pests – for example.

In addition, technologies in climate, dryland and forestry ecosystems, and water monitoring have advanced. For example, methods to detect and quantify the relative dryland expansion, land degradation and water levels have been developed. Remote sensing techniques and spatial modelling are commonly used tools for quantifying spatio-temporal trends of land use change in drylands. Over the last four decades, the advent of earth observations has been highly relevant for enhancing data availability in drylands globally. This includes advances in satellite imagery and multi-spectral remote sensing.

Robotics equipped with advanced sensors can monitor and manage fragile ecosystems with unprecedented precision, detecting early signs of degradation, invasive species, or climate-induced stress. Artificial intelligence, through data analysis and predictive modelling, enables us to optimise resource allocation and develop resilient land management strategies. Genetic barcoding aids in biodiversity conservation by identifying and preserving unique genetic traits in indigenous species, promoting ecosystem resilience. These cutting-edge technologies can help Africa address the challenges posed by climate change and human activities, ensuring the long-term vitality and sustainability of our dryland ecosystems.

The rise of digital financing tools: Fintech is a breakthrough in the financial industry and focuses on improving services using technology within existing regulatory structures. For Africa, FinTech includes payments and remittances, lending and financing, insurance, InvesTec, personal finance, block chain and open banking. According to Tamasiga et al. (2022) there are five future research trajectories that include: technology and instruments in digital finance; regulation, policies, and green FinTech; climate risk mitigation through FinTech; FinTech and environmental quality; green finance and climate change mitigation. These are further elaborated in section 5.3.1.

Increased investment in Africa from African diaspora. Many Africans living abroad provide technical assistance and transfer money to their home countries to support trade, social impact and sustainable development. Venture financing by the African diaspora grew to USD 6.5 billion in 2022. The diaspora plays a significant role in achieving the SDGs and harnessing the AfCFTA while supporting and bolstering African economies and buffering against the shocks and uncertainties encountered by African countries. The African diaspora is seen as an important stakeholder in development however members of the diaspora are seldom seen as impact and social investors. To actualise diaspora-led investment on the African continent, the wider impact investing market must acknowledge, trust, and collaborate with those investors to change the perceptions of risk and value in investing in emerging markets (Simmonds and Gueye, 2023).

3.2.3 Summary

Africa is undergoing tremendous change and will continue to develop and evolve during the lifespan of this GGW Strategy. The GGW is uniquely placed to respond to the above-mentioned crises, emerging trends and growing economic and security-related opportunities taking place across Africa. In addition, the GGW Strategy will respond to the current and anticipated trends of social and environmental changes happening across the continent through a robust plan and coordination framework that can assist African countries to achieve an inclusive, multi-scale and transformative development trajectory that serves the goals and aspirations of the African continent at large. Furthermore, it can help to coordinate the actions of African countries to enhance their contribution to the overall achievement of multiple local and international goals, commitments, and strategies, including climate-resilient development.



CHAPTER 4. LESSONS LEARNED TOWARD A NEW PARADIGM

4.1 Challenges to address

While the GGWI remains one of the most inspiring initiatives by Africa for Africa, it has been unable to meet its ambitious targets to restore millions of hectares of land. Over the past few years, the GGWI has undergone several evaluations, including:

- The Great Green Wall Implementation Status and Way Ahead to 2030 (UNCCD, 2020);
- The Independent Assessment of the Great Green Wall Accelerator (UNCCD, 2023);
- Transparency International Governance Mapping and Assessment for the Sahara and the Sahel Initiative (2023); and
- In 2022, there was a virtual consultation series undertaken by the CGIAR Initiative on Climate Resilience (ClimBeR) to take stock of key issues of the GGW within areas such as institutional relationships and partnerships, research and academia, promoting practice and capacity development, funding mechanisms and alignment, and policy and enabling environment (Neely, 2023).

In addition, a Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis was conducted through multiple consultations and a survey (Annex 3). A summary of key findings across the evaluations and assessments is described within this chapter. To reach the ambitious vision and objectives outlined in this GGW Strategy, the identified challenges must be addressed and tackled head-on. These barriers, which are described in more detail below, can be broadly grouped under the following categories:

- Governance and institutional relationship concerns;
- Participation and partnerships challenges;
- Technical difficulties;
- Monitoring, reporting and verification (MRV) concerns;
- Policy environment and political support difficulties; and
- Funding and funding mechanism hurdles.

The challenges and lessons learned through the SWOT process, and through the analysis of past assessments have been used to inform the development of this GGW Strategy. In addition, this GGW Strategy highlights key areas for attention and focus in considering a new paradigm or GGW 2.0.

4.1.1 Governance and institutional relationship challenges

Coordination among GGW entities. The weak coordination among the AUC, the PAAGGW, RECs, national focal points, and non-state coalitions was emphasised as one of the greatest barriers to achieving the goals and objectives of the GGWI. A lack of sufficient coordination has resulted in unclear and inconsistent lines of communication, monitoring and reporting, technical support, and funding allocations. In addition, coordination challenges within organisational structures and processes have hampered implementation capacities at all scales and hindered the exchange and flow of information at regional and national levels.

Roles and responsibilities. The policy, coordination, technical support and implementation roles and responsibilities of the AUC, the RECs, the PAAGGW and other GGW influencing bodies, remain unclear. Clarifying the roles of various players will be of particular importance as more countries and regions join the GGWI.

Transparency. Despite certain policies being put in place to ensure transparency, many of these remain unpublished or lack the necessary detail. Disclosure of procedures remains a challenge, as does the mechanisms to access information, including limited information on official websites. The information available on the UNCCD's GGWI website, as well as the websites of the PAAGGW and national agencies, is very limited.

Accountability and integrity. The GGWI lacks an appropriate accountability framework that governs decision-making and there are few enforceable accountability and integrity mechanisms. For example, the GGWI representatives are not formally required to explain their decisions or account for their results to external actors. In this regard, insufficient reporting to bilateral and multilateral donors has in

the past resulted in reduced funding to support GGW activities. The PAAGGW has a Governance and Ethics Charter (PAAGGW, 2018), however, it does not reference conflict of interest policies, codes of conduct nor mechanisms for enforcement.

Monitoring progress, impact and returns on investment. There is no clear and agreed upon mechanisms for monitoring progress in meeting the goals and objectives of the GGW. Therefore, it is difficult to articulate the returns on impact investment of GGW projects and programmes. The GGW Accelerator has demonstrated a commitment to areas of monitoring and impact measurement through the development of an annual impact monitoring table and the appointment of an M&E expert in each of the 11 Member States. The planned UN Environment and African Development Bank's institutional and organisational audit of the PAAGGW will support this priority.

Collaboration across sectors and ministries. The GGWI's effective implementation requires close collaboration in programme design, funding and delivery between line ministries responsible for agriculture, environment, climate change, rural development, education, finance and planning departments. In practice, its implementation has often been entrusted to newly founded national entities, whose institutional home, mandates, financial and human resources, and policy-formulating powers, vary. In many countries, the mandate of these agencies has been unclear and their capacity has been limited, resulting in difficulties related to coordinating the work of line ministries. National coalitions, as promoted by the GGW Accelerator, are intended to support the development of GGWI strategies integrated into Member States' national development strategies.

Environmental priorities. In some instances, national environmental concerns have been sufficiently prioritised and there has been difficulty in mainstreaming environmental change into sectoral or cross-sectoral strategies, policies and action plans.

Necessary human and financial resources for the GGWI coordination. The remit of the PAAGGW was not clearly demarcated from that of the AU, which has been maintaining a Secretariat for the GGW. The Coordination Unit created by the AUC does not have sufficient resources – both human and financial - to provide coordination oversight of the GGWI.

Stocktaking of GGW associated projects. While there are a myriad of projects and programmes that are contributing to the GGW, there has not been a stocktaking exercise to fully assess the magnitude of past and on-going activities, as well as to assess where there are gaps in project allocation or overlaps/ duplication between projects.

GGW labelled projects. The GGWI lacks a clear set of criteria for what can be labelled as a GGW project.

Membership in the GGWI. While the PAAGGW has a format for Member State applications, there is no formalised registration process for joining the GGW by countries or regions outside of the PAAGGW.

4.1.2 Participation and partnership challenges

Collaborative approaches. There is on-going tension between top-down and collaborative approaches, at multiple scales, in GGW countries. Since, land degradation and its restoration largely depend on the behaviour of people living on the land, including communities in processes, in a meaningful way, is essential. This is most effective by collaborating closely with, and investing decision-making powers and resources in, district authorities, chieftainships, communities, and local CSOs. Local communities, farmers and pastoralists are critical partners, leaders and custodians, yet in many cases they have not been adequately consulted. This is particularly true for climate vulnerable groupings, such as women and young people.

Ensuring participation. Despite the value placed on the importance of participation, the GGWI's framework and mechanisms to ensure participation are, in reality, not well defined and mostly informal. GGWI statutes do not require the initiative to consult with nor ensure the meaningful participation of civil society. At the regional level, consultation relies largely on the support of a set of specialised consultative bodies, with a focus on awareness raising, advocacy and resource mobilisation, rather than on the broader and substantive participation of non-state actors.

Long-term engagement. Engagement of CSOs is mostly informal and non-systematic. There is a lack of long-term engagement with other implementing partners and communities, underscoring the need for more formal partnerships driven by the priorities of the GGWI to massively scale landscape restoration. Inclusive policy mechanisms can be set up where various constituencies can formally present their views and priorities.

Community ownership and commitment. Commitment by communities to scaling-up is key and commitment is predicated on communities seeing the benefits of engagement in land restoration. Leveraging and incentivising the mobilisation capacity of local communities and farmers organisation in support of landscape restoration is necessary. Community ownership and involvement require more sophisticated engagement strategies to be understood, accepted, supported, and carried by local communities who will benefit from the projects. Training and empowering communities to implement and maintain land restoration activities is therefore as essential as creating a sense of community ownership of a project. The PAAGGW has developed the concept of Community and Integrated Sustainable Development Units as a tool for consultation with grassroots communities, however it is not known if these are operating in the countries. In addition, sufficient resources should be channelled to communities to support related actions.

4.1.3 Technical challenges

Appropriate technologies and capacity. To ensure that local populations and governments have full ownership of projects over a long period of time, appropriate technologies and mechanisms that provide long-term support to capacity and adaptation need to be in place. The importance of setting up a follow-up or monitoring system for GGW projects has been recognised – one that lasts at least five to ten years and includes an exit and sustainability strategy. These mechanisms must take into account project lifetimes and related crediting periods for the delivery of environmental services such as carbon sequestration for up to several decades and

to ensure the real viability of the projects beyond the implementation period. The vast heterogeneity of the GGW area means that a uniform response is not valid, and that responses are context and location specific. This offers difficulties in ensuring that appropriate practices are adopted. While this heterogeneity means that one-size-fits-all practices and approaches are inappropriate, it supports the hypothesis that devolving decision-making and management to communities and local authorities often optimises the allocation of resources and the delivery of results.

Role of scientific research. The place and role of science and research in the implementation of the Initiative is not well emphasised and there is a lack of an overarching research agenda. A dedicated demand-driven and collaborative research programme to support the effective scaling of landscape restoration and resilience building will inform efforts to accelerate impact. For example, there is little information on the outcome and cost-effectiveness for different scaling options or how restoration practices will fare under increasing climate change impacts. There are opportunities to enhance the linkages across science, practice and policy for more effective outcomes. Partnerships in this area are key and offer many opportunities.

Availability of data, data sharing and use of evidence and experience. In general, evidence and the use of data is often not effectively integrated in the design of projects, in decision-making and in the adaptive management of programmes. Data is often lacking within government institutions, and it is difficult to foster synergy across data bases or around best practices. A systematic approach to building on indigenous knowledge and leveraging sustainable practices at the community level is also often lacking. The trickle down of information to the ground level needs to be strengthened, as does sharing information in an accessible way so it can be readily used and acted upon. The rapid spread of simple Android phones across the GGW landscapes offers new opportunities to engage people in the gathering and sharing of data, and the provision of tailored information and capacity-development tools. An example is citizen science demonstrated by near-exponential growth of the Regreening App being used in African landscapes. The FAO has developed an in-depth open data effort to show the status of different land use, land health and related dimensions (Sacande et al., 2022). Decision-support tools, such as the Agricultural Adaptation Atlas, offer an accessible platform to leverage data from models and meta-analyses (CGIAR, 2022).

Lack of investment in capacity development, knowledge management, cross-learning and communications. While training at the local level exists, it has been viewed as insufficient and should be tied to incentives and what is needed for behaviour change. Capacities need to be built both in terms of technical skills but also soft skills to support local facilitation, organisation and governance. Effective cross-learning among implementation partners, communities, and farmers holds an important opportunity for sharing experiences and joint problem solving. A standardised and harmonised knowledge management system is needed for effective and efficient knowledge exchange, evaluation and verification, data analysis, monitoring, reporting and evidence supported decision-making.

Incentives matter. The interplay between incentives and land management is visible everywhere and at all scales. It sometimes leads to degradation (e.g. making

charcoal out of fruit trees), and sometimes to restoration (e.g. cooperative-level marketing of NTFPs). Land users will follow strategies that maximise revenues and minimise risks, so will private sector actors upstream and downstream of rural value chains. Importantly, incentives are needed for young people to be agripreneurs and entrepreneurs working on NbS.

4.1.4 Addressing monitoring, reporting and verification concerns

Coherent monitoring, evaluation, learning and reporting. The GGWI has not yet developed a common and cohesive monitoring, evaluation, learning and reporting framework to guide the GGW entities. To date, every agency reports its progress using different metrics, measured in different ways. This makes it challenging to understand what progress is being made. There are wide-ranging figures in many GGW reports - ranging from 4% to 18% of the target area restored to date. The development of a coherent and systematic approach is essential to allow for a factual understanding of what works and what does not, and to give confidence to donors that their resources are being well spent. The development of an indicator framework has been a focus of the UNCCD's GGW Accelerator.

Capacity to enhance MRV. A lack of expertise and capacity in MRV has hampered the adherence to comparable standards. There must be a concerted effort to build the capacity for MRV within the various institutions, at the needed scales, and ensure that its continuity is funded.

Comparable data and sharing. The need for a dashboard to capture the findings of M&E efforts and to provide decision-makers with needed, near real time information for reporting, reflection and adaptive management was highlighted.

4.1.5 Policy environment and political support challenges

The vision of the GGW. To disseminate the key messages of the GGWI, and to gain political support for its vision, awareness raising will be needed at both the technocratic and local levels. This requires large-scale awareness-raising and dissemination campaigns, with key messages translated into the findings of relevant and specific audiences. This includes non-technical language for a general audience not well versed in scientific language, as well as findings translated into local languages and dialects.

Political support for the GGW. Despite the political support and international attention, the GGW faces significant challenges including funding gaps, logistical hurdles and sustained community engagement. In many countries activities lack substantial funding from national budgets. The long-term commitment both politically and financially by national governments will be needed for realising the GGWI long-term goals.

Cross-sectoral approach. Most policies are sector based and do not stress complementarity and synergies that can be capitalised upon from integrated and cross-sectoral approaches. Furthermore, finance remains at the level of sectoral departments and does not incentivise cross-sectoral coordination and technical design.

Evidence based policy development. A review of the policies of many countries governing land use in the GGW areas suggest they were developed with little reference to the conclusions arrived at by scientific research, little engagement with research, and little recognition of effective, pragmatically evolved traditional practices.

Lack of land and tree rights policies. Clear tenure rules, for both land and trees, is essential for the careful management, regeneration, and sustainable exploitation of natural resources (Abasse et al., 2023). In many contexts, tenure systems are multi-layered compositions, with different elements of the biomass produced on a given plot of land belonging to different people, or to different cohorts defined by age, gender or ethnicity. The management of some of the biomass, most typically trees, is often tightly circumscribed by complex administrative measures (for example, pruning permits). Effective tenure can take the form of private property, communal management, or hybrid systems, but must be clearly defined, and recognised by customary and formal legal authorities.

4.1.6 Funding and funding mechanisms

Investment timelines and a programme approach. Funding from technical and financial partners is typically focused on specific projects with short timelines. They are not coherently nor collaboratively funding comprehensive and integrated programmes. Project-level funding often creates resource competition among different GGW entities and an inability to secure long-term financing /funding.

African based funding. The inability of African governments to provide the necessary funding for GGWI is considered a threat. There is often inadequate prioritisation and investments in dryland agriculture. The GGWI is, by definition, a long-term and ambitious initiative. It may take decades for some of the benefits of the actions in drylands to become apparent.

Funding flows. Countries identified funding flows as a challenge and support is needed to locate and overcome bottlenecks across multiple levels.

Scale, coordination and new finance mechanisms. The GGWI is an ambitious undertaking within an extremely vast geography that requires coordination between multiple countries, involves numerous levels of governance and covers millions of hectares. Without addressing and constantly improving the governance and institutional issues as well as the MRV challenges, an increase in new finance sources (including innovative and private sources) and financial instruments and mechanisms at scale beyond the traditional, grant-based finance, will be seriously hampered. Mechanisms to get resources to local authorities and local leadership along with capacities is viewed as critical to achieving scaling goals.

Funding pledges versus funding realised on the ground. It was reported that vast sums of money have been pledged since the 15th session of the Conference of the Parties (COP15) but very little of that money has reached on-the-ground implementation.

Taking on the lessons learned over the course of the last 15 years in a robust and substantial way should ensure that the growing geographic scope and ambition of the GGWI is very much within reach.

Over the past couple of years, the Initiative has grown. The 11 Saharan and Sahelian countries associated with the PAAGGW have inspired over 30 others, drawn from across the continent and including island states like the Seychelles and Madagascar, to develop their own GGW-inspired initiatives using AU processes. The GGWI has become a pan-continental initiative to encourage an integrated, holistic approach to rural development, land rehabilitation, and the building of resilience to the climate crisis. The GGWI's natural focus on landscapes and their inhabitants, including tens of millions of smallholder farmers, pastoralists, and the residents of rural market towns, makes it a radically new approach for many of the participating governments, typically more attuned to the developmental needs of the capital and major cities than to those of distant, difficult-to-reach rural communities.

Today, the GGWI stands at a crossroads. Its rising popularity with African Member States and international partners, exemplified by commitments to the GGWI made at the One Planet Summit in January 2020 gives it the mandate to transform the fate of much of the African continent.

4.2 Towards a new paradigm: Great Green Wall 2.0

The challenges itemised above have been recognised by almost all observers and the GGWI entities themselves. The recognition that the fate of the GGWI rests with local communities, that technical assistance and capacity development is often more important than capital investments, that the decentralisation and delegation of authority is crucial to success, and that harnessing ecosystem processes to boost the net primary productivity of landscapes (and so provide a basis to increase livelihoods, nutrition, incomes, resilience, the protection of biodiversity and the boosting of soil carbon) is spreading, and is beginning to be translated into strategies, protocols and projects.

The GGW Strategy provides an avenue for influencing fundamental systems change, shifting the different aspects and parts of the existing system and the current patterns of interactions among these parts – to ultimately form parts and patterns that form new systems that will effect change and increase the likelihood of achieving the desired outcome of landscape and livelihood resilience. A system change in landscape and livelihood resilience focuses on a transition to resilient, NbSs, policy and governance reforms, behavioural changes, community-led engagement, connectivity, adaptive management and economic transformations tied to the health of ecosystem functions and services.

This GGW Strategy thus offers a valuable opportunity to inform and strengthen decision-making, build resilience and incorporate the most successful approaches and lessons learned, to i) implement scaled landscape restoration; ii) adopt multi-stakeholder, multi-sector and multi-scale, participatory approaches and leadership; iii) integrate science and expert knowledge from researchers, citizen scientists and indigenous/ traditional knowledge; iv) include monitoring, reflection, learning and adaptive management frameworks and indicators; v) prioritise and explore new financial avenues and incentives through land restoration-based value chains and other innovative finance mechanisms; vi) strengthen policy alignment and cohesion; and vii) take into account uncertainty and adopt foresight planning.

A few indicative norms follow that can inform the formulation of the political framework and the interventions promoted under the GGWI across its over 30 member countries. They can guide the development of this second iteration of the GGWI and facilitate the changes needed to massively scale up land restoration efforts and build resilience for the people these landscapes support.

Engaging all stakeholders. Engagement and inclusion are critical to achieving the desired outcomes and aspirations of diverse stakeholders, institutions, disciplines and sectors across scales. This means effectively promoting inclusivity across i) science, practice and policy; ii) market, public and civil sectors; iii) women, men and youth farmers and pastoralists; iv) the wide range of relevant ministries; and v) nested decision-making bodies, inclusive of local authorities and leaders. Projects and programmes can be co-designed and co-implemented in partnerships with scientific and technical communities, civil society actors, farming and pastoral community members, and policymakers. It is important to ensure that all restoration efforts and local policies are supportive of local leadership and the well-being of women, men and youth, and reinforce the reach, effectiveness and synergies of their organisations through horizontal and vertical integration and linkages with other local stakeholders.

Ensuring effective coordination. The successful implementation of the GGW Strategy requires structured and effective coordination across the different GGW associated bodies, including clear roles and responsibilities associated with policy making, coordination and management, technical support and implementation, communications and knowledge sharing, and monitoring and reporting. Coordination also extends to various partners, sectors and stakeholders within and across different governance levels (local, national, regional and continental).

Taking a systems approach. Systems change requires a systems approach. The economic, environmental, social, cultural, institutional and political dimensions associated with landscape restoration and resilience are both complex and interconnected. There is a greater understanding that practices and approaches which promote landscape restoration and resilience can simultaneously enhance biological diversity, increase adaptation to and mitigation of the impacts of climate change and build more effective water cycles yielding increasing water quantity and quality. Greater cohesion and integration among sectors, policies, commitments and reporting can increase effectiveness, impact and return on investment.

Employing structured evidence- and experience-based approaches. The next phase of policy making, planning, design, decision-making, implementation and adaptive management will require a sustained effort to ensure these are underpinned in evidence and experience. Supporting continuous learning and reflection based on experiences and evidence at regular intervals allows flexibility to make necessary changes for more impactful outcomes.

Developing capacities, shifting behaviours, sharing knowledge and scaling practices that work. Since the last strategy was developed, there have been advances in scalable, proof-positive practices that enhance ecosystem functions and services and build livelihoods resilience. Capacity development and skills building efforts have also benefited from the integration of behavioural science to support longer term change and increase practice uptake. New technologies, apps and the wider reach of mobile phones are facilitating knowledge and experiences exchanges within and

across stakeholder groups. Structured scaling techniques have also made advances to the GGWI's advantage.

Attracting and deploying capital. There are growing opportunities to capture and channel resources from diverse funding streams and models that incentivise and support landscape restoration. These can include green finance investment platforms and marketplaces that incentivise and reward activities that contribute to the regeneration and resilience of natural systems by land managers. Increasingly, private sector partners are investing in value chains based in nature positive practices, which are considered an avenue for enhancing local wealth while building land restoration. Village Savings and Loan Associations (VSLA), primarily operated by women, have for decades successfully implemented self-sustaining models of endogenous financing for private and collective activities, including pasture restoration and management (for which they are primary beneficiaries). VSLA can both leverage external sources of financing with their own funding, and provide a source of competent and trustworthy leadership, governance, and management skills.

Scanning the horizon with foresight analysis. Structured engagement, evidence-based planning and human-centred design are critical to ensuring that the GGWI is working with all stakeholders, is working toward a collective desired future, and is building on current evidence, experience and projections. To do so well, it should employ co-design, co-planning, co-implementation and co-monitoring and accountability processes. These must recognise that the future is unknown, and that it must be factored in as much as possible to improve long-term resilience. Foresight analysis provides a framework and a set of interactive tools to plan for high levels of uncertainty and complexity and get comfortable with the strategic direction, roadmap and the ability to be resilient, agile and adapt to an ever-changing world.

Indicative approaches and practices to support landscape restoration and resilience building, collaborative and evidence-based decision-making, and monitoring change are described in Box 1.

Box 3. Indicative approaches to support restoration and resilience building in the new paradigm

Landscape restoration and resilience building approaches

Landscape approaches recognise the interconnections between people and nature in places where productive land uses – such as agriculture, livestock and mining – compete with environmental and biodiversity goals (Landscapes for Our Future, 2023).

Natural resources management refers to the sustainable utilisation of major natural resources, such as land, water, air, minerals, forests, fisheries, and wild flora and fauna (Muralikrishna and Manickam, 2017).

Integrated watershed management refers to the use, management, and investment in multiple interrelated resources within a watershed and takes into account sustainable management and protection of all the ecological resources in a watershed, the natural forests and other land uses, as well as groundwater (Tang and Adesina, 2022).

Sustainable land management is the use of land resources, including soils, water, animals and plants, for the production of goods to meet human needs, while simultaneously ensuring the long-term productive potential of these resources and the maintenance of their environmental functions (UN Earth Summit, 1992).

Ecosystem-based approaches focus on ecosystem restoration and enhancement of ecosystem services to protect society against negative impacts of climate change. Ecosystem-based approaches address crucial links between climate change, biodiversity and sustainable resource management (Nautman et al., 2011).

Ecosystem-based disaster risk reduction is the sustainable management, conservation and restoration of ecosystems to reduce disaster risk, with the aim of achieving sustainable and resilient development (Estrella and Saalis-maa, 2013)².

Agroecology is a holistic and integrated approach that simultaneously applies ecological and social concepts and principles to the design and management of sustainable agriculture and food systems (FAO, 2023).

Nature-based approaches involve working with nature to address societal challenges, providing benefits for both human well-being and biological diversity (NbS Initiative, 2023).

Nature-positive approaches include system-based conservation agriculture, agroforestry, river basin management, bio-inputs, integrated soil fertility management, soil and water conservation and nutrient recycling. In particular, maintaining trees in landscapes, avoiding deforestation and promoting landscape restoration are critically important for preventing soil erosion, regulating water resources, and protecting environmental services

² A report by (Walz et al., 2021) clarifies the characteristics, similarities and differences and opportunities to leverage across sustainable land management, ecosystem-based approaches and ecosystem-based disaster risk reduction.

essential for sustaining production at multiple scales, from the regional to the global level (Jaramillo et al., 2023).

Regenerative agriculture describes farming and grazing practices that, among other benefits, reverse climate change by rebuilding soil organic matter and restoring degraded soil biological diversity resulting in carbon drawdown and improving the water cycle (Regeneration International, 2019).

Regreening approaches uses proven agroforestry techniques adapted to suit the needs of farmers under varying socio-ecological contexts (Regreening Africa, 2019).

Evergreen agriculture integrates trees with food crops and livestock to create more sustainable and productive agricultural systems for smallholder farming families (EverGreen Agriculture Partnership, 2017).

Organic agriculture is a holistic production management system which promotes and enhances agro-ecosystem health, including biodiversity, biological cycles, and soil biological activity. It emphasises the use of management practices in preference to the use of off-farm inputs, considering that regional conditions require locally adapted systems. This is accomplished by using, where possible, agronomic, biological, and mechanical methods, as opposed to using synthetic materials (FAO/WHO Codex Alimentarius Commission, 1999).

Community-based natural resource management is the management of natural resources under a detailed plan developed and agreed to by all concerned stakeholders. Communities manage the resources and have the legal rights, the local institutions, and the economic incentives to take substantial responsibility for sustained use of these resources. Under a natural resource management plan, communities become the primary implementers, assisted and monitored by technical services. (Sources: CBNRM Net (2001), Soeftestad (1999), USAID (2000)).

Permaculture is an approach to land management and settlement design that adopts arrangements observed in flourishing natural ecosystems. It includes a set of design principles derived using whole systems thinking. Permaculture integrates land, resources, people and the environment through mutually beneficial synergies (Permaculture Research Institute, 2023; Topa, 2020).

EcoAgriculture refers to an approach to managing landscapes specifically to meet three goals simultaneously and sustainably, namely to conserve biodiversity and ecosystem services, provide agricultural products, and support viable livelihoods for local people (EcoAgriculture Partners, 2023).

Integrated farming systems take account of innovation in farming for maximising production through optimal use of local resources, effective recycling of farm waste for productive purposes, community-led local systems for water conservation, organic farming, and developing a judicious mix of income-generating activities such as dairy, poultry, fishery, goat rearing, vermicomposting, and others (Behera and France, 2023).

Conservation agriculture uses cover crops, crop rotation, and minimal tilling to produce annual crops. It protects soil, avoids emissions, and sequesters carbon (Project Drawdown, 2023).

Water-smart agriculture is a proven practice of managing soil to manage water and increase yields (Catholic Relief Services, 2023).

Climate-smart agriculture is an integrated approach to managing landscapes—cropland, livestock, forests and fisheries—that address the interlinked challenges of food security and climate change (The World Bank, 2021).

Nutrition-smart agriculture is a set of agriculture and agro-processing technologies and practices that contribute to the improvement of nutrition and increase off-farm and agribusiness-level productivity and revenue (The World Bank, 2020).

Forest landscape restoration is the ongoing process of regaining ecological functionality and enhancing human well-being across deforested or degraded forest landscapes. This approach restores a whole landscape to meet present and future needs and to offer multiple benefits and land uses over time (IUCN, n.d.).

Agroforestry is the collective name for land-use systems and technologies where woody perennials (trees, shrubs, palms, bamboos, etc.) are deliberately used on the same land-management units as agricultural crops and/or animals, in some form of spatial arrangement or temporal sequence.

Agrisilvicultural systems are a combination of crops and trees, such as alley cropping or home gardens.

Silvopastoral systems combine forestry and grazing of domesticated animals on pastures, rangelands or on-farm. The three elements, namely trees, animals and crops, can be integrated in what are called **agrosilvopastoral** systems and are illustrated by home gardens involving animals as well as scattered trees on croplands used for grazing after harvests (FAO, 2015).

Integration of trees and shrubs

Farmer-managed natural regeneration is the selective management of naturally regenerating trees and shrubs from stumps, seeds or roots. This practice also involves adapting local knowledge on managing tree species that regenerate and is generally practised in farming areas (see Box 4 for more detail).

Assisted natural regeneration is a term used mostly for the regeneration of degraded forest in communal areas, but it is also used in the Sahel interchangeably with FMNR. The method aims to accelerate or reduce barriers to natural forest regeneration such as soil degradation, competition with weeds, and disturbances (e.g. fire, grazing, and wood harvesting).

Pastoral-managed natural regeneration involves building livestock production resilience and carrying capacity through special attention to diverse livestock forages under

silvopastoral management plans, to rehabilitate degraded areas through tree and shrub regeneration and management.

Home gardening with trees involves a garden near the home that includes trees and or shrubs.

Tree planting and growing is the deliberate growing of trees matched to sites to provide environmental and/or livelihood values.

Grafting is a vegetative propagation technique to rapidly obtain desired qualities in terms of fruit size, taste, colour/texture, and disease resistance, from improved varieties of the same species.

Rural resource centres are peer-learning hubs on tree planting, material production, growing, and management. They serve as a local point for advisory/ education and outreach to harness tree and other farm enterprise goals. Where land is available, they can provide sources of improved scions and seeds through mother blocks, vegetable gardening and other input support.

Silvopastoral systems combine forestry and grazing of domesticated animals on pastures, rangelands or on-farm (FAO, 2015).

(Definitions sourced from Regreening Africa (2023) unless indicated to the contrary.)

Managing livestock and grazing

Participatory rangeland management works with customary institutions in dryland pastoral settings to strengthen communities' abilities to manage their rangelands. The process includes the creation of management committees that develop plans to manage resources that support resilience to climate change, such as the restoration of grazing areas (Bullock et al., 2022; Flintan et al., 2022).

Holistic planned grazing is a planning process for dealing simply with the great complexity livestock managers face daily in integrating livestock production with crop, wildlife and forest production while working to ensure continued land regeneration, animal health and welfare, and profitability (Savory, 2015).

Adaptive multi-paddock grazing uses high livestock densities for short durations between long periods of forage rest to catalyse accelerated grass growth. The system is not scheduled or prescriptive but a highly observant and adaptive approach that moves the animals in response to how the land responds (Standard Soil, 2023).

Regenerative grazing is a principle-driven agricultural practice of building soil health by managing livestock on perennial and annual forages, and in a way that supports human and ecosystem health, farm profitability, and community and food system resilience (Pasture Project, 2023).

Controlled grazing refers to any system in which the producer controls the grazing pattern of the livestock and may involve seasonal grazing, enclosures, physical or social fencing, rotations, grazing reserves, regulation of grazing and mobility (Liniger and Studer, 2019).

Exclosures involve excluding livestock from degraded sites to allow native vegetation to regenerate as a means of providing fodder and woody biomass, to reduce soil erosion and to increase rainwater infiltration (Aerts et al., 2008).

Wildlife and nature tourism involves the use and management of the value of nature and wildlife in parks, reserves, protected areas and conservancies by managing and collecting revenues from tourists and protecting the land and animals against poaching or interference by land uses and users (Liniger and Studer, 2019).

Indigenous and native plant species

Promotion and use of native plant species. Indigenous food crops and native species of trees, shrubs and grasses promote healthy and nutrient dense foods, provide the genetic diversity to support ecosystem resilience and withstand the impacts of climate change, and provide social value within the context of land restoration and resilience (Akinola et al., 2020; Chomba et al., 2020).

Soil and water conservation practices

Soil and water conservation practices cover a number of practices that are intended to conserve and enhance soil health and to enhance water infiltration and water holding capacity in landscapes. Practices may involve the integration of zai pits, stone bunds, trenches, water storage ponds, contour farming, ridges and furrow farming, mulching, cover crops, planting of crops, grass strips and trees on the same plot, among many others (Regreening Africa, 2023; wocat.org).

Inclusive and collaborative decision-making, planning and management

Adaptive management is defined in ADS 201.6 as “an intentional approach to making decisions and adjustments in response to new information and changes in context”. Adaptive management is not about changing goals during implementation, it is about changing the path being used to achieve the goals in response to changes (USAID, 2018).

The stakeholder approach to risk-informed and evidence-based decision-making (SHARED). The SHARED process is a tailored method for stakeholder engagement, managing relationships and brokering multi-stakeholder and cross-sectoral partnerships. The SHARED process is founded on a principle of fostering systems approaches and inclusive, evidence-based decision-making (Neely et al., 2021).

Participatory planning is a process by which a community undertakes to reach a given socio-economic goal by consciously diagnosing its problems and charting a course of action to resolve those problems (FAO, 2003).

Land use planning is the systemic assessment of land and water potential, alternatives for land use and economic and social conditions to select and adopt land use options (IFAD, 2014).

Participatory land use planning brings stakeholders together to develop a common vision and to agree upon a way forward – as part of this, land use conflicts could be resolved. In particular, it provides an opportunity for marginalised groups to take part, including women, young people, pastoralists, fishers and hunter-gatherers (IFAD, 2014).

Landscape governance. The integrated landscape approach to governance, known as landscape governance, provides a promising alternative to conventional, sector-based models for governing multiple land uses within rural landscapes.

Human-centred design and development is a problem-solving technique that puts real people at the centre of the development process, enabling the creation of products and services that resonate and are tailored to specific audiences (Landry, 2020).

Serious games, including role-playing games. Serious games are an activity-oriented method in which complex economic or social-political relationships are simulated within an illustrative gaming scenario. They offer a space where communities, authorities and government can generate consensus around the management, use, sharing and conservation of natural resources. They provide a safe environment that encourages openness around otherwise delicate or contentious issues – and prompt stakeholders to see the trade-offs of different decisions and look for the ones that would achieve their desired outcomes (Madani et al., 2017).

Monitoring land restoration change

Land degradation surveillance framework is a comprehensive method for assessing soil and land health, from the field to the use of new and advanced data analytics. Land health generally refers to the degree to which the integrity of the soil, vegetation, water and air, as well as ecological processes, are balanced and sustained.

TerraFund/TerraMatch MRV AFR100 connects local land restoration champions to capital and technical assistance through a trusted online system that vets their work, supports their growth, and monitors their progress (AFR100, 2023).

Vital Signs provides near real-time data and diagnostic tools to leaders around the world to help inform agricultural decisions and monitor their outcomes (Conservation International, 2023).

Ecological outcome verification is an outcome-based monitoring protocol for grassland environments. It is a practical and scalable soil and landscape assessment methodology

that tracks outcomes in biodiversity, water, soil health, and ecosystem function (i.e. water cycle, mineral cycle, energy flow, and community dynamics) (Savory, 2023).

Restoration opportunities assessment methodology provides a flexible and affordable framework for countries to rapidly identify and analyse forest landscape restoration potential and locate specific areas of opportunity at a national or subnational level (IUCN and WRI, 2014).

Regreening App engages farmers and implementers to track restoration practices on the ground through assisted citizen science data collection (European Commission, n.d.).

AfriScout equips pastoralists across East Africa with the digital insights and training needed to practice regenerative grazing at a landscape scale to restore degraded grasslands, preserve traditional livelihoods and fight climate change (Global Communities, 2022).

Box 4. Farmer-managed natural regeneration: A great land restoration success in the GGW countries

What works well on a huge scale that can be deployed to meet GW targets? There is one land restoration practice that has proven to be extremely popular and inexpensive and has spread across tens of millions of hectares in the GGW countries. With modest additional investment, and an enabling policy environment, it has the potential to expand to scores of millions more hectares across the GGW countries. This is the story of FMNR. Many examples of large-scale creation of new agroforestry parklands have emerged in the West African Sahel. Farmers in many parts of Africa (e.g. Niger, Burkina Faso, Mali, Senegal, Ethiopia, and Malawi) protect and manage the natural regeneration of trees on their farms to create new agroforestry parklands. In some cases, they also promote natural regeneration off-farm on common land to create new second growth forests (for instance the Humbo forest in southern Ethiopia).



Figure 28: FMNR of trees has been massively upscaled in the croplands of Niger.

Since the middle of the 1980s, smallholder farmers in densely populated parts of southern Niger (rainfall 400–600 mm per year) have been protecting and managing trees and shrubs that regenerate spontaneously on their farmlands. Whereas, they previously had only 2 or 3 trees per hectare in the 1980s, they now have 20, 40, 60 trees per hectare, or more. In the process, farmers began claiming ownership of the trees that they had established on their own fields.

External intervention initially played a catalytic role, but the spontaneous spread of the practice from farmer-to-farmer and village-to-village soon reached exponential proportions. The total extent of FMNR in Niger was conservatively estimated to be 7 million hectares a few years ago. The Government of Niger claims that it has now exceeded 10 million hectares and has recently updated its forestry regulations to further support FMNR expansion.

FMNR is also expanding in major parts of Mali, Senegal, Ethiopia, Malawi, and other GW countries. FMNR exploded on the Seno Plains of Mali some years ago, when farmers were informed that their rights to manage trees on their farmland would be protected. Estimates indicate that FMNR now covers some 21 million hectares of farmland in the Sahel.

The key to the success of FMNR is the range of benefits that are enjoyed by the households that deploy the practice. The soil becomes more fertile. Water is stored in the soil more effectively. Crop yields are increased and stabilised. The tree fodder that is produced increases livestock production. Fruits, nuts, and leaves are harvested for consumption or sale and can be harvested for the market.

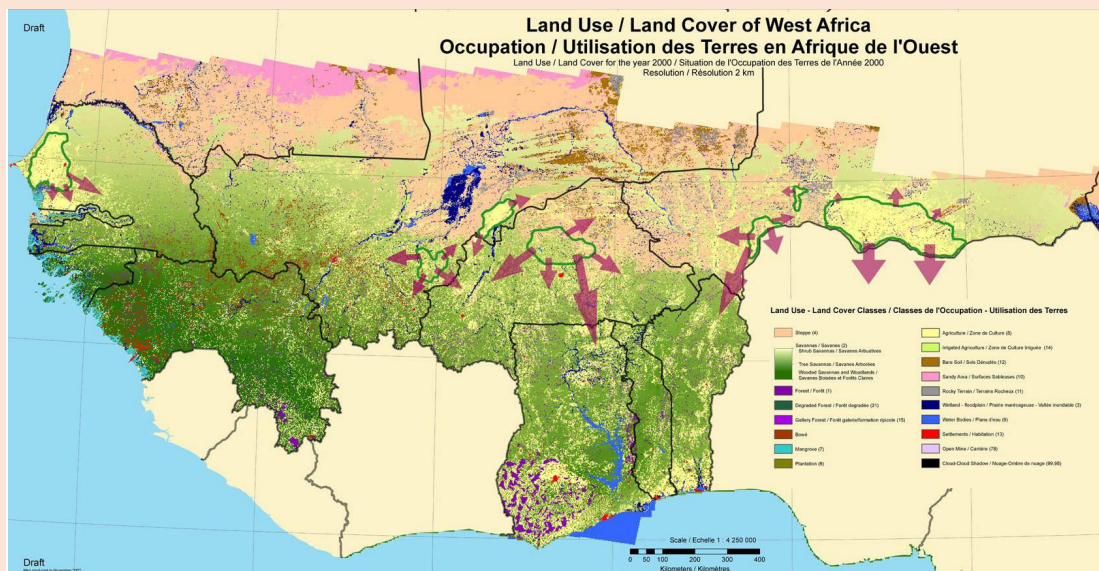


Figure 29: Directions of major expansion of FMNR in West Africa (Gray Tappan, US Geological Survey).

The costs of supporting the expansion of FMNR are very modest. In Niger, it was estimated to be less than USD 20 per hectare. How, therefore, can future GGW investments stimulate the vast additional scaling-up of FMNR?

Six simple steps have been identified:

1. Identify and understand the FMNR successes already achieved in each country.
2. Build a grassroots movement for spreading the practice.
3. Make sure that policies support and incentivise FMNR.
4. Spread the word through effective rural communications efforts.
5. Strengthen value chains for marketing the products from FMNR.
6. Investigate any gaps in knowledge that could assist the scaling-up process.

These are the key to continuing and expanding the FMNR land restoration success story. Deploying them will enable FMNR to be a shining example of the very best impacts that can be achieved in the future - across the entire GGW.

Box 5. Scaling climate-smart agriculture

There is a large evidence base, and many country case examples, that highlight the key benefits that CSA approaches and innovations can bring to the continent. Through enhanced planning, integration, ownership, implementation and scaling, CSA offers African countries practical solutions to realise the multiple goals set out in countries national agricultural and development plans, the CAADP Agenda, and more broadly within the continent's Agenda 2063. CSA practices and technologies can simultaneously increase Africa's agricultural productivity, promote its climate adaptation, reduce carbon emissions, and enhance the resilience of landscapes.

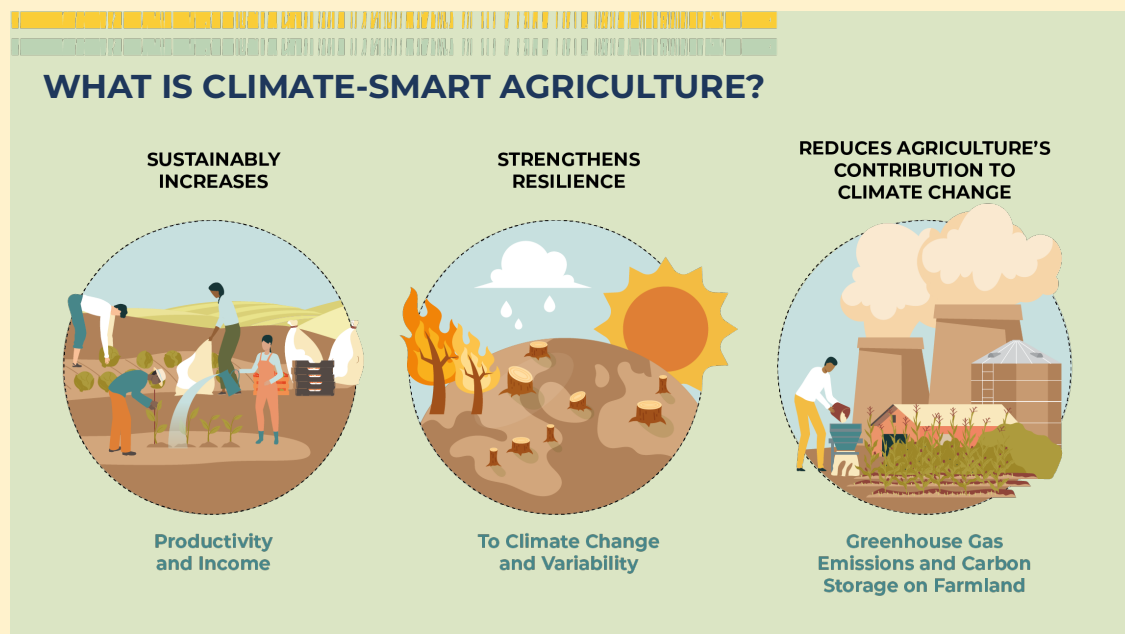


Figure 30: Climate-smart agriculture offers a 'triple win' solution.

CSA is not just a set of practices, but an approach to develop the technical policy and investment conditions to achieve sustainable agricultural development for food security under climate change (FAO, 2013). Therefore, CSA entry points vary from the development of technologies and practices to climate change models and scenarios, information technologies, insurance schemes, and processes to strengthen the institutional and political enabling environment, with a focus on marginalised groups. Some diverse approaches to scaling CSA in African countries include:

Bundled CSA technologies for rehabilitating degraded landscapes in Ethiopia

In Ethiopia, the Doyogena, Kacha bira, Hadero and Duna areas of the Southern Nations, Nationalities, and Peoples' (SNNP) region are known for their steep slopes and high rainfall, which make them highly susceptible to soil erosion. Climate change is leading to higher variability in rainfall intensity, water stress, deforestation, soil erosion, severe land degradation and fragmentation, declining soil fertility, shortage of livestock feed, and increased incidence of crop and livestock diseases and pests. A collaboration between Inter Aide, Accelerating Impacts of CGIAR Climate Research for Africa (AICCRA), Ethiopia's Meteorology Institute, the National Disaster Risk Management Commission, the Ministry of Agriculture, the Ministry of Health, the Fana and Ethiopian broadcasting corporations, and the Alliance of Bioversity & CIAT is supporting over 37,000 farmers and livestock keepers to anticipate climate-related events better and take preventative actions by bundling CSA practices for rehabilitating degraded landscapes. The practices include integrated soil and water conservation, soil fertility management, crop residue management, row planting, crop rotation, cereal-legume rotation and intensification, and stratified climate-smart agroforestry systems which connect to major Ethiopian priorities such as the Sustainable Land Management Program (SLMP), Resilient Landscapes and Livelihoods Project (RLLP) and its linkage with a significant World Bank project Food Systems Resilience Program for Eastern and Southern Africa (FSRP-ESA).

Successful adoption of RiceAdvice App to sustainably increase yields in Mali

RiceAdvice is a free Android app that provides farm-specific advice for optimal nutrient management, weed management and other good agricultural practices to enhance sustainability and yields. It can be used by smallholder farmers, extension workers, private sector, and development agencies who have access to an android device (smartphone or tablet). RiceAdvice also facilitates farmers' access to finance, particularly loans, as an insurance for good yields in the face of climate change. In Mali about 16,225 farmers, including 4,957 women, have benefited from personalised recommendations using RiceAdvice. Women farmers have achieved remarkable results with average yield increases (1.0 t/ha) higher than those of the men farmers (0.8 t/ha).

Munda Makeover promotes best farming practices in Zambia

In Zambia, Munda Makeover, a reality television show for farmers focuses on CSA. The show promotes best farming practices for crop, tree, and livestock production and marketing; market information services and farmer cooperation; and enhances the consumption of nutritious foods and clean cooking practices to assist farmers in adapting to climate change. Focus is placed on the needs of the farming family, with particular

attention to women. Agri-business small- and medium-sized (SMEs) are promoted in the show as essential actors. SMEs provide farmers with cost-effective and well-packaged technologies, as well as the necessary services, to improve farms and mobilise their farming potential. The objective of Munda Makeover is to increase farm productivity in a sustainable way, improve profits, and enhance adaptation to climate change, with the overarching goal of delivering a climate-smart African future driven by science and innovation in agriculture.

(For further information on the benefits of scaling CSA in Africa visit <https://aiccra.cgiar.org/>.)



CHAPTER 5. STRATEGIC INTERVENTION AXES

There are **four strategic intervention axes** to support the achievement of the GGW vision and objectives:

- **Strategic Intervention Axis 1.** Enhancing leadership, governance and political commitment.
- **Strategic Intervention Axis 2.** Adopting approaches toward transformative restoration and resilient ecosystem management and sustainable development.
- **Strategic Intervention Axis 3.** Enhancing the implementation of resilient landscape restoration through resource mobilisation, partnerships, inclusion, knowledge exchange and capacity development.
- **Strategic Intervention Axis 4.** Leveraging existing efforts and knowledge systems.

Within each Strategic Intervention Axis, there are key intervention areas and suggested actions.

5.1 Strategic Intervention Axis 1. Enhancing leadership, governance and political commitment

Strategic Intervention Axis 1 improves the necessary leadership, coordination, cooperation, governance and political commitment that is necessary to effectively support and enable landscape restoration and resilience efforts across all scales.

Intervention Area 5.1.1 Raise and secure the political commitment to achieve the Great Green Wall objectives

SUGGESTED ACTIONS

1. Member States and policy institutions should **collaborate to prepare, deliver and adopt policy documents that analyse the cost/benefit-ratios of various hard and soft intervention landscape restoration measures** aimed at achieving resilience while improving the living conditions of people in the GGW rural areas. The analyses will focus on improving the understanding of how agroecosystems and rural economies in drylands operate and ensure a common understanding of what is likely to deliver the biggest return for the lowest investments for specific user groups and especially women; and do this across state institutions, ministries, and implementing agencies.
2. **Ensure that, across scales, leadership understands and highlights the primacy of landscape restoration and resilience** through policy and investments as an approach to boost the resilience and increase benefits of transboundary water cycles, improve rural nutrition and incomes, increase water quality and access for domestic and productive uses, reduce conflict and mitigate displacement.
3. **Raise the political profile of the GGW** to the highest level, based on this understanding, by making it a multisectoral, multiagency and multi-scale initiative that maximises the likelihood that rural poverty, land degradation, climate resilience and the loss of biodiversity are effectively addressed across the GGW intervention areas and the broader national territories.
4. Boost Member State prospects of achieving the livelihood, rural development and ecosystem objectives of the GGW by **aligning their national policies and commitments and activating, supporting and empowering multi-stakeholder and multi-scale coalitions** that include a broad range of civil society actors, particularly community-level organisations and those representing women, small-scale farmers and marginalised groups.
5. Organise a **series of exposure, reflection and dialogue events** at the regional and national levels, throughout the entire implementation period. These will involve multiple stakeholders, national and regional decision-makers, particularly women, and local farmers and pastoralists that are leading restoration efforts. These events will review land restoration and resilience successes, ground-truth policy decisions, and iteratively adapt them to updated sources of evidence.
6. Incentivise the RECS to **carry out natural capital or triple-bottom-line accounting at the regional and national level** that link to medium- and long-term trade valuation around land-based enterprises and system vulnerabilities.

7. **Share experience and political commitments** that take stock of progress through meetings of the Special Committee of Heads of States, the Champions for the GGWI, and senior analysts and researchers.
8. **Report gender disaggregated transformational progress indicators** to the AU General Assembly and secure resources to allow the effective follow-up of AU decisions on the implementation of the GGWI.

Intervention Area 5.1.2 Strengthen the leadership, governance, efficiency and transparency of the Great Green Wall Initiative and its agencies

SUGGESTED ACTIONS

- **Review the capacities for systems thinking, risk management and dealing with uncertainty in planning for complex integrated challenges** among the GGW entities, relevant line ministries and subnational authorities.
- **Create and agree upon mechanisms and support for countries joining the GGW.**
- **Create clear criteria to underpin the efforts that are considered to contribute to the GGW.**
- **Clearly agree and articulate the relationships** among organisations influencing the delivery of GGW objectives including the AU Directorates and Departments, GGWI, RECS, Pan African Agency, GGW Accelerator, SADC GGW, Pioneer or Stand-Alone Countries and others.
- **Review and, if necessary, adapt the mandates and reporting protocols** of the key organisations involved in, or having an influence on, the delivery of GGW objectives.
- **Catalyse robust national coordination mechanisms** between the GGW national entity and the relevant line ministries (Finance, Planning, Agriculture, Environment, Education, Health, etc.), supported by the national Rio Conventions Focal Points and in-country representatives of the UN and donor agencies (FAO, GEF, GCF, UNEP, IFAD, WFP, EU etc.).
- **Create regular consultation mechanisms** with diverse stakeholders from civil society, the scientific community, private sector, local authorities, and community members including farming, pastoral, youth and women's groups.
- **Create an advisory council of non-state representation to include different stakeholder groups** to take part in and support inclusive decision-making.
- **GGW interventions must be managed through the principles of adaptive management** which demands rigorous monitoring and the rapid adaptation of plans, protocols, procedures, and funding of these findings.
- **Articulate robust indicators and means of measuring cross-sectoral integration in planning, evidence review and decision-making.**
- **Develop and adopt clear, common reporting and communication protocols** for the AUC, PAAGGW, GGW bodies and national GGW agencies.
- **Create opportunities to enhance leadership and responsibility for landscape restoration and ecosystem and livelihoods resilience** at regional, national,

subnational and local levels with particular attention to women as both key actors and beneficiaries.

Intervention Area 5.1.3 Position, align and integrate Great Green Wall efforts within inter-related policies, mandates and commitments across nested scales.

SUGGESTED ACTIONS

- **At the global and continental levels, map the ecosystem and livelihood resilience leverage points of the GGW** to i) multilateral environmental agreements and the SDGs; ii) Agenda 2063; iii) African Common Platform on Food System; and iv) other related policies and strategies of AU agencies, such as the AU Climate Change and Resilient Development Strategy and Action Plan and AFRI00.
- **At national levels, map the ecosystem restoration and livelihood resilience leverage points associated with national-level commitments** within the UNCCD, UNCBD and UNFCCC and its actions as contributions to Long Term Emission Reduction Plans, NDCs, NAPs, National LDN plans, the Bonn Challenge, and National Action Plans to Halt Biodiversity Loss, NBSAPs, National Development Plans and other relevant national policies.
- **At the national, subnational and local levels, communicate the inter-relationships among commitments and targets, and support integrated actions** that are mutually supportive to achieve local aspirations for landscape and livelihoods resilience.

Intervention Area 5.1.4 Deepen and broaden collaboration among diverse partnerships for resilience within and across different scales

SUGGESTED ACTIONS

- Where they exist, **continue to support strong and inclusive national-level GGW coalitions** that include private sector and civil society and work across scales.
- The GGW entities and relevant line ministries should **cooperate to create functional partnerships between representatives of communities, practice, science, research, academia and policy, across scales - from the community to the nation.**
- The GGW entities, relevant line ministries and local authorities should **coordinate their work to design and facilitate public services that help pursue GGW objectives**, with a particular stress on bodies affecting agricultural, pastoral and forestry activities, water resources as well as schools.
- The GGW entities, relevant line ministries and local authorities should **enhance and incentivise the capacities of local actors** with an emphasis on women and youth, and give them a central role and the necessary resources to mobilise local stakeholders and to plan and monitor local implementation of the GGW.
- The GGW entities, relevant line ministries and local authorities should **encourage the growth of locally rooted and locally led entrepreneurial**

agribusinesses with an emphasis on women and youth, including nature-positive local, national and international value chains, by facilitating their formalisation, ensuring they have access to training and support, and by promoting partnerships with national or international private sector bodies.

- **Identify and support champions at different scales** to intentionally work across local, subnational, national and regional levels to solidify and leverage opportunities and synergies.
- **Advocacy support to promote national land restoration and resilience campaigns and the mobilisation of local level groups** to accelerate the scaling of landscape restoration and resilience building practices.
- **Celebrate and highlight best practices by creating attribution and acknowledgement processes** that reward collective action and spur lesson sharing and innovation.

Intervention Area 5.1.5 Analyse barriers and incentives for creating a more favourable economic and institutional framework for effective governance, resilience, stability, and security

SUGGESTED ACTIONS

- **Carry out a rigorous review of the barriers and underlying causes of impasse around governance, coordination and leadership** across the policy cascade (continental, regional, national, subnational, and local levels including formal and informal structures).
- **Elaborate and track mutually reinforcing mechanisms and establish measurable targets** for transition toward linked goals of effective governance, resilience, political stability and human security.
- **Use MRV tracking tools for enhanced accountability and reporting of finance and related actions.**
- **Undertake an analysis of the frameworks needed to attract domestic and foreign green investment**, to stimulate nature-based investment, and create green job opportunities that lead to improved living standards and SLM.
- **Develop a framework for effective international cooperation and support including South–South and North–South collaboration** to boost knowledge management and mobilisation of resources.

5.2 Strategic Intervention Axis 2. Co-design and deliver pathways toward transformative restoration, resilience and development

This strategic intervention axis articulates the strategies and actions that will directly contribute to landscape and livelihoods resilience, including increased land and soil health, biological diversity, effective water cycles, income from nature-positive farming, pastoral and forest endeavours and related entrepreneurial activities, and food security and nutrition at subnational and local levels.

Intervention Area 5.2.1 Bundle administrative, scientific and implementation and engagement capacities to tailor and scale landscape restoration and the management of ecosystems

SUGGESTED ACTIONS

To promote greater coherence and improve mutually reinforcing linkages among agriculture, forestland health as well as ecosystem management at different scales:

- **Focus on land and soil health and productivity to build resilience** to enhance food security and raise rural incomes, in compliance with the principles for responsible investment in agriculture and food systems.
- **Bundle agroecological, nature-based practices based on harmonised knowledge management systems** which are aligned with resource user values and cultural norms without exacerbating unequal power dynamics and that support soil and land health, effective water cycles and biological diversity within agricultural, pastoral and forest landscapes.
- Ensure the **empowerment of land users and communities, especially the disenfranchised by providing the skills, tools and resources** needed to carry out nature-based practices.
- **Develop core competencies in engagement and facilitation skills at the local level** to support good governance and innovation development.
- Build upon existing or create mechanisms for **nested participatory landscape, watershed and land use resilience planning across scales**.
- **Promote integrated natural resource management**, enhanced ecosystem functions and the rising sustainable delivery of ecosystems services.
- **Secure mechanisms for inclusive land, tree, water and other resources governance**.
- **Build forward-looking locally led climate resilience and disaster preparedness plans**, practices and accessible resources taking into account evidence and predictions under different scenarios.
- **Adopt governance principles of adaptive management** built upon structured stakeholder reviews of experience and evidence for constant learning and improved decision-making.

Intervention Area 5.2.2 Promote inclusive leadership and resilient land-based economic enterprises and entrepreneurial activities for men, women and youth

SUGGESTED ACTIONS

- **Promote governance structures that recognise and support women as leaders of land restoration initiatives and comprehensive risk management**, and support interventions that promote a more equitable balance in workloads and in the sharing of economic and social benefits between women and men.
- **Strongly encourage the participation and leadership of women and youth in rural development, ecosystem restoration activities and entrepreneurial activities.**
- Analyse the current state of women's rights, constraints and opportunities in the GGW area, at multiple scales, in order **to facilitate and secure women's access/control over natural resources, their participation in economic activities, and their participation and leadership in natural resource and economic governance structures.**
- **Promote green jobs** in rural areas through the development of bioenergy such as bio-charcoals, and solar- and wind-based energy.
- **Optimise the employment potential for young people and women.**
- **Maximise the number of people empowered** by the GGW vision and beneficially engaged in restoration objectives in rural areas.
- The **GGW entities and relevant line ministries should encourage the co-development and co-management of targeted gender interventions with local women's cooperatives.**
- **Develop and support an active Youth Advisory Board** for the GGW.
- **Promote economic empowerment to enable rural women and youth** to participate in and benefit from profitable economic activities.
- **Co-develop incentive structures with representatives of differently abled people to facilitate their access to rural jobs and entrepreneurial support systems.**
- **Promote a more equitable balance in workloads and in the sharing of economic and social benefits between women and men.** The decision to promote particular value chains should be taken following a participatory gendered analysis of rural work and incomes, and shift to those likely to most directly benefit women.
- **Simplify the registration, formalisation, and other rules governing company creation** in the GGW areas to provide incentives, particularly for young people to gain income sources.
- **Build on the entrepreneurial drive of young rural people to enhance their engagement and leadership in agricultural, pastoral and natural product-based businesses and value chains.** They should be encouraged through access to innovative technology, business, financial and other advice, and the facilitation of the formalisation of their (and other's) businesses.

Intervention Area 5.2.3 Invest in integrated value chains and employment that promote land health, effective water cycles and biological diversity

SUGGESTED ACTIONS

- **Promote and fortify capacities and competencies for integrated landscape and farming systems management** based on agroecological, nature positive, greening and smart practices that contribute to sustainable nutrient, water, soil health, productivity, and above and below ground biological diversity. This includes holistic grazing management, composting, soil and water conservation practices, agroforestry, silvopastoral systems, crop rotations, and seedbanks, among others).
- Adopt, roll out and **strengthen mobile advisory and counselling services** that are demand driven in coordination with civil society, NGOs and other technical advisors.
- **Support farmer-to-farmer and farmer led innovation.**
- **Undertake market analysis and market development processes that encourage the growth of locally rooted entrepreneurial nature-positive agribusinesses and value chains**, by facilitating their formalisation, ensure they have access to training and support, business and financial skills, and promote partnerships with national or international private sector bodies. These enterprises could include **NTFPs, tree food products, pastoral value addition, etc.**
- **Promote nature-based (tree, crop, plant) value chains** to support livelihoods, as well as nutrition, soil health and ecosystem health.
- **Enhance the markets for NTFPs** to strengthen the commitment of populations to protect their natural resources.
- **Promote livestock value chains, including the development of high value addition products that contribute to enhanced landscape management systems.** Focus on developing diversified tree and grass forage production systems, that are based on grazing management approaches that restore land cover, biological diversity and water cycling, such as adaptive, multi-paddock grazing.
- **Create the capacity of local land users to engage with and benefit from strengthened value chains.**
- **Create self-sustaining mechanisms including fee-based training/learning for directly supporting farmers and land managers** to implement practices that steward and protect ecosystem functions and services.
- **Deploy remote sensing, land health surveillance, fintech and other technologies** to estimate the value of, and offer payments for the environmental services provided, and reward farmers, pastoralists, forest managers and local communities for stewarding and protecting ecosystems – ensuring that these payment for environmental services schemes do not exacerbate existing inequalities and power differentials, and that all incentive structures consider short- and long-term benefits for small-farmers, and are transparently negotiated with all community members.

Intervention Area 5.2.4 Invest in climate resilient infrastructure and access to renewable energy

SUGGESTED ACTIONS

- **Promote and popularise the large-scale use of renewable energies**, including solar energy and biomass-based energy, by adopting policies to encourage investments in renewable energies at local scales. This could include such interventions as VAT relief on solar panels or ethanol cookers, cheap loans through microcredit institutions to facilitate investments in village scale photovoltaic systems, and the promotion of live fences of trees and shrubs that are pruned or coppiced to supply cooking firewood.
- **Encourage rural energy entrepreneurship** by facilitating the adoption of fintech payment systems, offering tax relief to renewable energy investments, and by facilitating the formalisation of small rural energy businesses.
- **Build necessary infrastructure to ensure communication connectivity** and incubations for small- and medium-sized enterprises (SMEs).

Intervention Area 5.2.5 Promote community-led land restoration and resilience by expanding socio-ecological and political approaches, tools, and contextualised options

SUGGESTED ACTIONS

- The GGW entities and the relevant line ministries and local authorities, **should collaborate to strengthen them to ensure women, households and communities have clear ownership and usage rights** to their natural resources, and can manage them as they best see fit. This may require changes to maladapted rules and regulations, capacity development for principles and approaches for effective community-based natural resources management (CBNRM) and the development and provision of new community-based enforcement mechanisms.
- **Promote local governance mechanisms for natural resources** that are locally led, evolved or adapted, and locally enforced by a combination of local authorities, village chief and local users of natural resources including men and women farmers, agropastoralists, transhuman pastoralists and their leaders or locally formed natural resource committees who agree upon community-developed and enforced rules such as bylaws and local conventions.
- **Develop financial capacity of local councils** to support community-led restoration initiatives.
- **Catalyse behaviour change regarding the organisation and management of natural resources** by understanding how to influence

through incentives, competencies, and socio-cultural frameworks in each context.

- **Develop and disseminate through a training-of-trainers programme on an iterative behaviour-change toolkit that takes into account the heterogeneity of contexts across the GGW areas.** The toolkit would help in understanding exactly which factors prevent people from practicing the promoted behaviours while also addressing the identified barriers.
- Share experience and **knowledge of bylaws that enable more successful landscape restoration and resilience** among and between countries, communities, wards and districts.
- **Facilitate cross-learning between communities** by using mobile/digital communications and citizen-science tools and cross-visits. These are powerful ways to publicise successful land, forest, and grazing land management, and facilitate the rapid adoption of innovative, high-performance practices.
- Financial transactions should whenever possible be carried out through **mobile payment systems, which facilitate transparent accounting** and offer diminished transaction costs for small payments.
- Primary, secondary schools and universities **should incorporate an understanding of agroecological and nature-based principles and practices** into course materials and emphasise hands-on exercises.
- Collaborate to **strengthen land tenure and property rights** to ensure women, households and communities have clear ownership and usage rights to their natural resources, employ a system of transparent benefit sharing and can manage them as they best see fit.
- **Analyse cultural and other barriers** to local level land restoration.
- Encourage the development and provision of **new community-based enforcement mechanisms.**
- **Support the co-development of local natural resource governance rules, bylaws and conventions** by local authorities, municipalities, village chiefs, local farmers and pastoral leaders.
- Roll out a programme of **community future-casting**, local governance reviews, and co-imagination of practices and investments.
- **Promote digital linkages to create 'homegrown' and connected restored landscapes.**
- **Catalyse and support local level restoration campaigns and movements.**

Intervention Area 5.2.6 Promote community-led land restoration and resilience building by expanding the nature based, agroecological and greening approaches, tools, practices and options

Decades of research findings, and the lessons from indigenous and traditional management practices, are unequivocal: by working with natural processes, rather

than seeking to supplant them through hard infrastructure and inputs, rapid progress can be made in the total factor productivity of landscapes. In addition to better nutrition and higher incomes, these deliver many additional social and ecosystem benefits, ranging from higher biodiversity to more resilience and better carbon capture in soils. Best of all, these approaches almost always end up less expensive to roll out than those requiring higher capital investments.

SUGGESTED ACTIONS

- **Urgently promote the uptake of adaptation plans including a range of greening practices for restoration** and preservation of vulnerable natural resources threatened by degradation, climate change and biological diversity loss.
 - **Foster tree regeneration** through simple, highly cost-effective practices such as FMNR, assisted natural regeneration (ANR) and the like, that have already been effectively spread across tens of millions of hectares by millions of farm families.
 - **Promote tree planting with carefully selected species** desired by local communities that provide high financial and nutritional benefits to households, planted in specific niches (e.g. homestead, riverbanks).
 - **Promote simple and widely proven land and water cycle restoration interventions** within an integrated watershed approach including practices such as zaïis, demilunes, bunds, and keylines where they best fit in the landscape.
 - **Capitalise on using compost from animal manure, mulching, and other inputs** from conservation agricultural practices to increase soil fertility.
 - **Promote simple permacultural approaches** focused on the efficient use and reuse of water and wastewater, the mixing of compatible cropping species, and crop rotations in arable fields.
 - **Encourage communities to save, exchange and trade seeds**, since these are adapted to the unique biophysical conditions prevalent locally.
 - **Optimise the management of livestock grazing systems** by encouraging adaptive multi-paddock grazing to enhance the productivity of grazing lands. Enhance the beneficial impact of manure and the breaking up by animal hooves of solid soil crusts.
 - **Encourage the regeneration of trees in grazing lands** to attain restored and more productive tree-grass systems, such as silvopastoral approaches.
 - **Encourage the regeneration and planting of trees along degraded streams** to help reduce soil erosion, restore and increase water flows, and increase biodiversity.
 - **Integrate nomadic pastoralists in landscape-scale natural resource management plans** and be given clear incentives to participate in them; for example, by regenerating or planting fodder tree species along corridors that are reserved for their use.
 - **Apply measures for preventing the spread of invasive plant species.**

- **Make improvements in resource efficiency**, including sustainable food systems that restore natural resources and sustain livelihoods.
- **Incentivise community coherence for landscape restoration** and resilience by facilitating the expansion of incomes from NTFPs, including fruits, nuts, fodder, honey, medicinal medicines and firewood.

Intervention Area 5.2.7 Invest in coordinated scientific and experience-based support and the creation of a common monitoring framework

SUGGESTED ACTIONS

- **Agree on a common list of social, economic and ecosystem health indicators for process, impact and behaviour change** and a monitoring framework and commit to their regular measurement over the long-term building upon the GGW Accelerator Indicator Definition Guide (2021) including indicators such as:
 - **Social:** childhood stunting, school attendance trends, insecurity trends, in- and out-migration from the community, food availability and diversity, youth and women's barriers and opportunities.
 - **Economic:** household incomes, women's incomes, youth incomes, rate of creation of formally recognised rural enterprises, changes in the quantity and the variety of goods bought and sold by community members, evolution of village shop densities and *taxi brousse* frequencies.
 - **Biophysical:** above- and below-ground carbon, soil pH, soil rooting depth, soil biodiversity, rainwater infiltration, net primary productivity, vegetative land cover and diversity (tree, shrub, grasslands, crops).
- **Develop and agree upon mechanisms for displaying data** through easily accessible mobile device-based dashboards to support decision-making and adaptive management.
- **Make use of scientifically backed community-based monitoring** mechanisms and frameworks.
- **Build human, institutional, and social capital** for representatives of research, development, education, extension, and support specific to sustainable soil, land, water, nutrient and biodiversity to build landscape resilience and sustainable livelihoods.
- **Carry out foresight analyses at regional and national levels** to understand the underlying causes and key drivers of land degradation and land regeneration and to analyse uncertainties and how to best address them.
- **Encourage incentivised trans-disciplinary or multi-disciplinary scientific teams** to more effectively address systems dimensions and promote systems change.
- **Create intentional links between transdisciplinary African researchers and citizen scientists** to collaboratively monitor progress related to land health, water cycles, land cover and diversity as input to continental data bases.
- **Build in evidence and experience-based dialogues at the local level to support local adaptive management.**

- **Incorporate accessible evidence- and experience-based planning, decision-making and implementation**, monitoring, learning, evaluation and adaptive management.
- **Facilitate cross-learning between communities** through the use of mobile communications and citizen-science tools, and cross-visits to facilitate the rapid adoption of innovative, high-performance practices.

5.3 Strategic Intervention Axis 3. Enhancing the implementation of resilient landscape restoration through resource mobilisation, partnerships, inclusion, knowledge exchange and capacity development

This axis focuses on the means and mechanisms that underpin the actions outlined in 5.1 and 5.2.

Intervention Area 5.3.1 Enhance finance flows and resource mobilisation

Throughout the history of the GGW, resource mobilisation and flows of financial resources have proven to be a critical dimension in contributing to, delaying or denying the success of implementation. While resources have been made available from different donors and through different mechanisms, there are resources that have been promised and not made available. With the GGW serving as an integrator across multi-lateral environmental agreements and AU strategies, there is an opportunity to evaluate how resources have been made available and allocated, ensure cohesive and long-term donor and Africa-based investments, unlock resource streams that have not been tapped for implementation, ensure resources flow to subnational and community levels, and create a re-enforcing accountability and transparency mechanism around funding flows and results.

Box 6. Why invest in restoring landscapes?

There is a wealth of information on the costs of inaction to restore land health. These environmental, economic and social costs include, among others, the loss of ecosystem services, increased vulnerability to climate change and disaster risks, reduced agricultural productivity combined with increased input requirements, associated health risks, social and community impacts such as loss of livelihoods, migration and displacement and conflict over resources. The land and soil degradation costs in Africa are estimated at USD 65 billion in Africa and these are projected to increase into the trillions by 2050 if no action is taken (European Commission, 2020 and UNCCD, 2018 in Raes et al., 2023).

These are staggering numbers in terms of costs of inaction and when combined with the cost of current investments that work against land restoration, nature-harming/negative finance flows (Deutz et al., 2020) the numbers are even higher. Negative financial flows, those that have a direct negative impact on nature are estimated at USD 7 trillion per year (UNEP, 2023).

While the risks of doing nothing and how to eliminate damaging investments are important to stress, studies demonstrate the solid economic return for investing in land restoration. Globally, the economic benefits of SLM have been estimated to be up to USD 75.6 trillion (ELD, 2015). Ding et al. (2017) found that for every USD 1 investment be it public or private “on net-zero and nature positive actions, including ecosystem conservation and restoration, could generate USD 7-30 more in the broader economy”. De Groot et al. (2013) reported that restoring grasslands can return up to USD 35 per USD 1 invested. The investments in land restoration interventions have enormous return potential economically, socially and environmentally and must be viewed as such when making investment allocations.

Currently, investments globally in NbSs are USD 200 billion with an annual investment requirement expected to triple by 2030 to USD 542 billion (UNEP, 2023) with a focus on protection, SLM and restoration (UNEP, 2023). In Africa, the estimated investment need is USD 21 billion per year (UNEP, 2023) however, other scenarios (Roe et al., 2021) show that finance needs in Africa may be higher.

Box 7. Green finance for landscape restoration

Mobilising public and private sector capital towards nature-positive initiatives offers the opportunity to accelerate innovative and scalable solutions toward addressing biodiversity and climate crises while promoting SLM and generating financial and social returns on investment (Gómez et al., 2023; UNEP, 2023).

The **FinTech business model** which focuses on improving services using technology within existing regulatory structures, is considered a major

breakthrough in the financial industry. The disruptive innovation is borne of the new sharing economy, favourable government environment and, of course, digital information technology (Tamasiga et al., 2022) and it is viewed as revolutionary for the industry because it can reduce costs, enhance service quality and enhance resilience of the financial system to absorb a range of shocks (OECD, 2009 in Tamasiga et al., 2022). This is advantageous given the risks involved, particularly for financing NbSs (UNEP, 2023). In Africa, the FinTech ecosystem includes payments and remittances, lending and financing, insurance, InvesTec, personal finance, block chain and open banking.

While different from FinTech, there is also a domain that focuses on meeting environmental and ecological goals associated with, for example, land health, climate adaptation and mitigation, and biological diversity. Within the context of what is referred to as **Web 3.0**, the emphasis in the next generation of the internet is toward decentralisation, interoperability and user control of data. Emerging technologies are providing opportunities to develop and engage with open-source platforms where grassroots communities can align their values with local culture, and demonstrate nature positive outcomes, leveraging data and reporting tools at low cost, while attracting investment from outside sources.

As an example, the Regen Network is a block-chain based platform and ecosystem that is focused on environmental and ecological conservation, sustainability and regenerative agriculture, creating a marketplace for ecosystem services to track sustainable practices in agriculture and land management. **Regen Network** incentivises and rewards activities that contribute to regeneration and sustainability of natural systems (e.g. soil sequestration, biodiversity enhancement, and soil health improvement) by enabling farmers and land managers to identify, value and trade verified ecosystem services credits.

Integrated landscape finance is a developing approach and set of tools to help finance multi-project, multi-sector investment portfolios aligned with locally agreed objectives across the landscapes. Integrated landscape finance uses the lens of landscapes to enable place-based investments that together sustain and restore the natural resources that livelihoods and economies depend on in the long term. At the landscape level, new financial models are emerging to coordinate various finance streams to align with landscape goals and target multiple outcomes. These include landscape-specific funds, landscape funds that invest in multiple landscapes, place-based investor collaboratives and foundations, landscape-focused development finance institutions and landscape bonds.

Most landscape partnerships will benefit from financial support services, as they share the need for access and timely information. These service providers may work with partners, business developers, government agencies or CSOs to develop investment opportunities that support implementation of the agreed landscape plans. They may also steer existing financing to activities aligned with the plan or aggregate investment opportunities. The approach includes accessing new funding flows, aligning existing flows and mitigating harmful or inappropriate aspects. Landscape finance strategies draw on actors across the finance continuum of public, private and civic-sector institutions. Coordinated planning of these investments can enhance business and project performance and accelerate regenerative transformation at the landscape scale (S. Scherr, personal communication, September 2023).

SUGGESTED ACTIONS

- Ensure the **full responsibility of African institutions to mobilise and leverage financial resources** for the implementation of the GGW.
- The AUC should **develop a resources mobilisation strategy** focused on the principle of “Africa taking full responsibility for financing the Initiative” and tapping into traditional, innovative and carbon resources. This can be linked to other related initiatives such as the Soils Initiative of Africa resource mobilisation strategy.
- AUC Members States in the drylands should **commit to allocate a percentage of their National Budget** to the implementation of the GGW.
- The AUC to **advocate for climate finance funding based on the GGW contribution** to the public goods and global environmental benefits including, unlocking resources that have been promised but not materialised.
- **Synergise the sources of GGW investments** from international donors and development agencies, climate finance, multi-lateral and bilateral agreements, private sector investments, philanthropic organisations, and national budgets.
- **Synergise national and local capacities to mobilise domestic and international financial resources.**
- **Integrate subnational authorities in funding initiatives** and ensure land restoration is an integral part of development plans.
- **Encourage private sector actors in natural resources-based activities** like ecotourism, renewable energy, and the processing of natural resources, to expand their CSR and shared value investments, as a means of ensuring sustainable financing – ensuring financing is equally available to men, women and all community groups facing different access to capital.
- **Encourage the application of ESG frameworks** to undertake evaluation of business-level carbon and social footprints. ESG criteria should be applied to assess the long-term sustainability and ethical impacts of business investments.

Environmental factors refer to CO₂ emissions, waste management, resource usage etc. Social factors include labour practices, human rights, community engagements, among others.

Intervention Area 5.3.2 Develop creative partnerships and effective coordination

SUB-STRATEGIES AND SUGGESTED ACTIONS

Coordination among existing partners. The lack of coordination among existing GGW continental, regional and national agencies, institutions, and coalitions has been shown to be a critical obstacle to achieving the ambitious targets. Better coordination will require an institutional analysis and review of the GGW existing agencies and institutions, and the development of coordination mechanisms that address critical roles and responsibilities, communication and knowledge exchange strategies, clear relationships across science, practice and policy bodies, fundraising and policy coherence and political will. Effective coordination ensures that efforts are aligned, resources are efficiently utilised, and the Initiative's goals are met.

- **Carry out institutional analysis and mapping to clarify the respective roles and responsibilities** of the different GGW agencies and institutions, RECs, national coalitions and cross-sectoral arrangements.
- **Test coordination arrangements under different drivers and uncertainties** to ensure capacities for institutional coordination and functioning are in place.
- **Clarify and ensure agreement on resource flows, use and accountability mechanisms** among institutions and agencies.

Integrating community, practice, science and policy partnerships. A dynamic partnership between communities, development actors, government, and research institutions enables extensive scaling of contextually adapted practices. It also generates essential evidence, and facilitates the exchange of knowledge to enhance impact, and effectively influence policy. Land restoration efforts have little chance of achieving enduring results if they do not involve landowners, land managers, and local communities.

- At regional, national and subnational levels, **map the stakeholder groups and representative institutions from community, science, practice and policy** that are and can support the massive upscaling of landscape restoration and resilience.
- **Create mechanisms to link scientists, practitioners, and policymakers** to solidify a joint understanding of the barriers to scaling-up landscape restoration and resilience.
- **Co-design measures to implement strategies** and practices and monitoring frameworks.
- **Design mechanisms to provide evidence and experience to inform policy and investment shifts** to enable scaling-up of landscape restoration and resilience.
- **Design mechanisms to provide evidence and experience to practitioners to assist them in adaptively managing landscapes** under changing conditions.

Partnerships among market, public and civil sectors. Partnerships and collaboration across market, public and civil sectors are critical for tackling complex socio-ecological challenges and scaling-up land restoration and resilience. While processes and multi-stakeholder platforms exist to establish better linkages between public/government actors and civil society actors and public-private partnerships, and they are recognised as important, robust partnerships among the market/private, public/government and civil society sectors are typically elusive.

- **Develop formal partnerships between national government entities, land restoration practitioners and community leaders, and private sector companies.**
- **Incentivise partnerships in the development, implementation and benefit sharing of nature-positive value chains and enterprises.**
- **Leverage CSR initiatives and take advantage of impact investing**, green bonds, sustainable agriculture, pastoral and forest investments, and payments for ecosystem services.
- **Develop awareness raising and experience, evidence and capacity sharing** among private sector, civil society, research sector and government technical agents.

Partnerships and coordination among different sectors. Silo-based approaches by government sectors can be a barrier to addressing complex challenges in restoration and resilience building efforts, due to competition for scope and resources, duplication of efforts, weak communications and knowledge sharing. The intentional coordination across government sectors on common and related desired outcomes can lead to effective co-planning, co-decision making, co-implementation, and joint monitoring and reporting. Key sectors include environment, land, water, forest, agriculture, livestock, gender and youth, education, finance, planning, among others.

- **Encourage integrated systems and cross-sectoral approaches among ministries and focal points** at regional and national level to simultaneously promote actions to meet national, regional, continental and international goals and targets related to climate resilient and restored landscapes and development.
- **Use root cause analyses to understand deeper issues and contributions, roles and responsibilities of different sectors.**
- **Create formal mechanisms for knowledge sharing** of evidence and experience among ministries and focal points at national and subnational levels and within regions.
- **Synergise reporting efforts among ministries and focal points that simultaneously contribute to UNCCD, UNCBD, and UNFCCC, Agenda 2063 and SDGs.**
- **Create cross-sectoral platforms at national and subnational levels.**

Partnering with faith-based organisations. Populations across the drylands of Africa invariably hold religious beliefs which play a key part in shaping their life choices. The faith institutions to which they belong are the custodians of ethical and cultural values, including stewarding the natural environment and caring for vulnerable members of

society. These faith institutions often have significant capacity to influence public opinion; they have vast networks ramifying from capital cities into the most remote rural communities. Furthermore, faith leaders in African rural contexts are often well-disposed to advocate for land restoration. It is part of the 'stewardship of the earth' which the Abrahamic traditions encourage. Likewise, the environment is infused with many aspects of traditional religious practice. The church forests in Ethiopia comprise most of the remaining forested land in the Ethiopian Highlands, and the small dense patches of forest visible in satellite images of the Casamance region of Senegal are sacred groves. Working closely with faith leaders and faith communities to implement the GGW will enhance its uptake, support behavioural shifts and ensure that its benefits last long into the future.

- **Directly work with faith leaders** of different faiths, as appropriate, in resilient landscape efforts at national, subnational and community levels.
- **Work directly with CSOs and NGOs that are faith-based** and focused on landscape restoration, resilience, and watershed management.

Partnering with traditional leaders and guardians of indigenous knowledge in Africa.

Traditional African leaders possess deep knowledge of their local ecosystems and have developed sustainable practices over generations. Their partnership can help incorporate this traditional ecological knowledge into restoration and resilience building projects, ensuring that restoration efforts are culturally appropriate and aligned with local ecosystems. As highly respected figures within their communities, traditional leaders play a crucial role in engaging and mobilising community members for restoration initiatives. Their involvement can help build trust, encourage participation, and ensure that restoration efforts are community-led and inclusive. In addition, restoration projects often involve the revitalisation of cultural landscapes and heritage sites, for which these leaders can provide valuable insights on significance and symbolism. In areas where restoration and resilience building efforts may face resistance or conflicts, partnering with traditional leaders can help navigate these challenges and promote peaceful coexistence. They can share their knowledge and expertise with restoration practitioners, researchers, and policymakers.

- **Create intentional and robust partnerships with traditional leaders** to ensure that restoration efforts are designed and implemented with a focus on long-term sustainability, ensuring inter-generational approaches.
- **Create mechanisms for recovery and valorisation of local knowledge** that can assist restoration and adaptation, for the benefit of society.

Intervention Area 5.3.3 Ensure inclusive leadership and participation, especially of women and youth

Inclusive leadership refers to a leadership style that values and promotes the active participation and engagement of individuals from diverse backgrounds, including women and young people. It recognises the importance of diverse perspectives and experiences in decision-making processes and aims to create an environment where everyone feels valued and included.

Actively addressing the engagement of women and youth is important when working at a local scale with diverse farmers, pastoralists, forest-dwellers and other land managers. This will include the leveraging and boosting the capacities of local co-operatives and community-based organisations, while sharing information through women, youth and other networks as well as farmer-to-farmer approaches. Transparency, respect, and continuous, meaningful engagement and empowering the leadership of women, youth, disabled persons, farmers, pastoralist, and local authorities are central to effective and tangible land restoration and resilience building outcomes.

SUGGESTED ACTIONS

- **Increase women's and youth representation in land restoration and resilience building policies and bylaws** notably on access to land and tree resources.
- **Support innovations and social learning that catalyse changes in socio-cultural norms and behaviours** to promote greater gender and youth equity in access to land and natural resources, decision-making power and benefit sharing from interventions.
- **Create an enabling environment including regulatory frameworks, investment programmes and economic norms** for increasing participation of women and youth.
- **Enhance gender and youth participation, capacities and leadership** in the inclusive co-design, co-development processes and co-implementation and monitoring of land restoration and resilience building efforts.
- **Enhance the education, knowledge sharing and sensitisation** of gender and youth transformative approaches.
- **Conduct regular advocacy and awareness programmes** on youth and gender equality, inclusivity and leadership in resilience building policies, programmes, protocols and processes.
- **Ensure greening, regenerative and resilience building practices are gender and youth sensitive**, as appropriate.
- **Ensure community groups with diverse gender and age membership that are managing natural resources, agricultural, pastoral or forested landscapes have the combined technical and planning, management and monitoring skills.**
- **Remove barriers towards accessing the funding for youth and women led land restoration projects and increase the financial incentives and financial and technical support** to youth and gender organisations.
- **Create and support local community campaigns and movements** and cross-learning on landscape restoration and resilience building.
- **Ensure women and youth are engaged in community level monitoring** of and information sharing related to landscape and livelihoods resilience.
- **Promote youth and women in entrepreneurial activities and nature positive value chains'** production, processing and marketing.

Intervention Area 5.3.4 Capacity development and knowledge exchange based on skills building and behavioural change

Capacity development for landscape restoration and livelihoods resilience should be an ongoing and adaptive process, tailored to the specific needs and context of stakeholders and institutions at different scales. Capacity development builds upon the existing diversity of skills sets and capabilities of diverse stakeholders. A capacity development sub-strategy that can be applied at regional, national, subnational, and local levels should be developed and implemented.

Institutional capacity for governance, coordination, transparency and policy development. Institutional skills and capacities are crucial for effectively managing and successfully achieving the massive scaling ambitions of the GGW.

SUGGESTED ACTIONS

- **Develop capacities to implement cross-sectoral, multi-stakeholder and multi-scale approaches**, engagement, consultations, organisation, communications and knowledge sharing.
- Develop **structured, inclusive and evidence-based design, planning, implementation and monitoring capacities and approaches**, allowing for flexibility and learning from data and experiences to support adaptive management.
- **Develop a standardised and harmonised knowledge management initiative** to support effective and efficient knowledge exchange, evaluation and verification, data analysis, monitoring, reporting and evidence supported decision-making.
- Develop **capacities for systems thinking and causal analyses and linkages**.
- Build **capacities for foresight analysis** to support the preparations to address highly uncertain and high impact issues and drivers.
- Develop **skills in the facilitation of human-centred design and people-centred approaches**.
- Build **soft skills for catalysing social movements** for landscape restoration and livelihoods resilience, ensuring that partnerships with social movements are developed equitably and centre their leadership.
- Create **self-directed cross-disciplinary learning modules** with certification on landscape governance and management.
- **Incentivise professional development** related to critical skills.
- **Develop strategic capacity for systemic policy and bylaw design** based on root causal analysis and implementation.
- **Promote the capacity of CBNRM groups to carry out parliamentary procedures** in conducting effective meetings, forming and supporting action committees and recording actions and decisions.

Formal education. The formal education between primary through university is an important avenue for developing capacities in critical and systems thinking, soft and technical skills, human-centred design, and economics, laying the foundation for understanding the dimensions of landscape restoration and livelihoods resilience and how to go about achieving it. At all scales, practical learning and research opportunities can be applied.

SUGGESTED ACTIONS

- **Integrate training in agroecology, ecosystem function and services, landscape management and resilience principles** into primary through university education that promotes the cross-linkage of existing, grade-appropriate classes in environment and water resources, socio-economic development, agriculture, math, writing, arts, physics, chemistry, human health and nutrition, law and governance, etc.
- Develop the **capacities of primary and secondary teachers** to train students in agroecology, landscape management and resilience principles.
- Where applicable, **integrate practicums and exercises** related to home gardens, nurseries, agroforestry, pastoral and silvopastoral systems, and management of forests.
- Create **opportunities for citizen science and research** for students and how to interpret evidence and data.

Local technical skills development. Landscape restoration and resilience happens at the local level, and so the development of skills to restore landscapes must be carried out at the community level, while building cross-learning among and across communities. There are numerous regreening, regenerative, agroecological and related training models developed by government advisory services, civil society and NGO organisations, UN Agencies and in some cases, the private sector. These trainings typically focus on training-of-trainers, farmer-leader training, peer training, and field school approaches. Inter-related natural resources, landscape and watershed management competencies, and smart skills form the basis of the CRS delivery model and highlight the importance of developing core competencies and measuring behavioural shifts by land managers and local decision-makers that lead to landscape restoration and resilience building. Toolkits and menu-based training can offer men, women and youth farmers, pastoralists and forest dwellers opportunities to build on local knowledge, experience and evidence to manage the natural resource base for resilience and enhance household food, nutrition and financial security.

SUGGESTED ACTIONS

- **Carry out an assessment of training approaches and modules** used in Africa for developing core competencies and supporting behaviour changes for land users that support landscape restoration, land, water and biological diversity for agricultural, pastoral, and forest productivity, nature-positive value chains and livelihoods enhancement.
- **Elaborate, as needed, a consolidated menu-based toolkit** for local level capacity development for land restoration and resilience building in different contexts and mechanisms and incentives for carrying out training of farmer, pastoral, and forest dweller leaders and monitoring success.
- **Create a networking platform of trainers** for exchanging lessons learned and readily adapting skills development based on experience and evidence.
- **Carry out training on comparable local level monitoring frameworks** and citizen science tools.
- **Carry out training for the development of locally led advocacy plans.**
- **Promote expos and field days for farmers, pastoralists and other land managers to share their successes, experiences and expertise.**

Intervention Area 5.3.5 Use engagement and planning tools

Numerous engagement and planning tools exist that support the achievement of the GGW vision and objectives. Some of these tools are highlighted here and are recommended to be used according to the context. As appropriate, suggested actions or approaches are included.

Foresight analysis. Foresight analysis is a systematic, participatory process for looking to the past and present to envisage and prepare for alternative futures, which allows us to make strategic decisions today toward the desired future. Foresight analysis provides a framework and a set of interactive tools to plan for high levels of uncertainty and complexity and get comfortable with the strategic direction, roadmap, and the ability to be resilient, agile and adapt to a changing world. To support the 10-year GGW Strategy and elaborate implementation actions, there is an opportunity to build upon past lessons learned while considering the rapidly changing world, growing complexity and critical uncertainties being faced. Foresight analysis serves to prepare for a desired and shifting future and accelerate the pace of achievements of the GGW pillars and objectives.

SUGGESTED ACTIONS

- **Invest in consolidating trends and drivers analysis** across related sectors and conducting regular interval scanning of current data relevant for integration into the GGW Strategy and to inform adaptive management.
- **Use foresight analysis to elaborate unanswered questions** around which practical evidence and models can be developed (e.g. how sustainable are current investments in land restoration practices and what can be put in place to prepare for different climate change outcomes).
- **Conduct an inclusive stakeholder engagement process** building on the SHARED approach to develop a co-shared and robust vision for the GGW Strategy.
- **Conduct participatory foresight analysis processes** for the overall GGW Strategy and its implementation and to tailor it to different scales, and apply it to different intervals and topics. Examples might include: a foresight analysis process that can be used to develop transformative plans at the country level guided by the GGW National Coalitions and engaging community to national level stakeholders; a foresight analysis to design an effective knowledge sharing platform for the GGW; and applying a foresight analysis to characterise effective policy influence and outreach.
- **Apply foresight analysis to jointly plan across scientists, practitioners and policymakers** using a systems perspective to execute integrated land restoration practices for farming and pastoral systems.
- **Develop the capacity of a network of GGW affiliated foresight analysis experts** to facilitate foresight analysis processes for GGW priorities, building a foresight culture to support planning, learning, and adaption processes for the GGW.

Scaling approaches. Scaling restoration approaches involves expanding and adapting successful land restoration strategies and practices to cover larger areas under diverse environmental and socio-economic challenges. The Scaling Community of Practice offers principles and strategies for assessing and planning (e.g. Scaling Scan) for systems change and massive scaling of land restoration and other practices and approaches (Woltering and Jacobs, 2021; Wyss et al., 2023a and b).

Geographic information systems (GISs) and spatial data. Allows for the collection, analysis, and visualisation of spatial data from multiple sectors and can be used to identify areas in need of restoration, assess the impact of restoration activities, and monitor progress over time.

Stakeholder and participatory mapping and power analysis. This approach helps identify, categorise and understand power relationships and structural dynamics of stakeholders involved in land restoration projects, allowing for effective engagement and communication with different groups, such as local communities, government agencies, NGOs, and private landowners. Engage local communities and stakeholders in mapping exercises to identify areas of ecological importance, potential restoration sites, and community priorities (Neely et al., 2020).

Restoration planning frameworks (goal setting, site assessment, restoration design, implementation, and monitoring), provides a structured approach to planning and implementing land restoration projects. For example, the Restoration Opportunity Assessment Methodology (ROAM) and the Restoration Diagnostic (Hanson et al., 2015; Laestadius et al., 2014).

Participatory land use planning (PLUP) is an approach to empower communities to assert their rights to use, own and manage in particular customary and communally managed lands and in practice and local and national policy dialogues (Both Ends). PLUP can be used to prevent or resolve land use conflicts, defend against land grabs, plan for sustainable management of natural resources and landscape and livelihoods resilience, build ownership and provide for inclusive land use decision-making. PLUP is a rights-based approach ensuring inclusive and gender responsive land governance, especially for those whose rights are not fully acknowledged (Both Ends; Girma et al., 2021).

Decision support systems. These tools use models and algorithms to assist in decision-making for land restoration. They can help prioritise restoration sites based on ecological, social, and economic criteria, and optimise resource allocation for maximum impact.

Online collaboration platforms. These platforms facilitate collaboration and information sharing among stakeholders involved in land restoration and resilience building projects, allowing for real-time communication, document sharing, and task management, ensuring effective coordination and engagement. Social apps such as WhatsApp can be used for information sharing within and across scales.

M&E tools. Help track the progress and effectiveness of land restoration activities. Including remote sensing technologies, field data collection apps, and data analysis software to assess ecological indicators, measure carbon sequestration, and evaluate the socio-economic benefits of restoration. This is detailed in Chapter 6.

Intervention Area 5.3.6 Develop effective communications, advocacy approaches and visibility

While the GGW has had a myriad of visibility efforts since its inception, the communications, information, and messaging about the GGW has often been scattered and not easily accessible. Internal communications within and among agencies and institutions and with different stakeholders also hold an opportunity for coordinating and catalysing the systems change needed. An advocacy approach should be directly imbedded in visibility and communications. This GGW Strategy is focused on coalescing the different aspects of the GGW and for that a cohesive visibility and communications strategy, and the human and financial resources to carry it out and sustain it, will be needed. The communications and visibility strategy is a plan that outlines how GGW agencies, institutions, partners and stakeholders will effectively identify and communicate key messages, and increase its visibility within and across multiple scales to its diverse target audiences. It involves identifying key messages, selecting appropriate communication channels, and implementing tactics to reach and engage the target audience at all levels, including local, national and global campaigns for landscape restoration and increasing ecosystem and livelihoods resilience. For the purposes of the overall GGW Strategy, the media should be considered a stakeholder group and partner.

SUGGESTED ACTIONS

- **Assess the historical GGW visibility and communications efforts** and their impacts.
- **Develop a cohesive visibility and communications plan** that:
 - Defines key messages tailored to the goals and objectives of the GGW Strategy at different scales.
 - Clarifies target audiences among stakeholder groups, partners and the general public.
 - Includes a flexible content plan and deploys the key messages, and communications pathways, media form and timelines.
 - Articulates methods for measuring communications impact.
- **Develop an advocacy plan** that includes, for example:
 - Urgent action to scale landscape restoration and resilient agrosilvopastoral systems.
 - Investments in the mobilisation of local, subnational and national movements and campaigns that can support the massive scaling of land restoration and resilience building efforts.
 - Bringing policymakers from regional, national and subnational levels into dialogue with farmers, pastoralists and forest-dwellers to understand their successful efforts and to underscore why enabling policies and bylaws are needed.
 - Create specific opportunities for sharing evidence of successful landscape restoration and resilience building to inform policy design and development.
- Based on the institutional arrangements, **develop an internal communications and knowledge sharing approach** that supports the coordination and adaptive management of the GGW Strategy implementation.

5.4 Strategic Axis 4. Leveraging existing efforts

This axis focuses on existing and upcoming efforts, initiatives and strategies that can be capitalised upon and that can readily contribute to GGW goals and objectives and with which the GGW should work closely for effective coordination and synergies.

5.4.1 Landscape restoration, watershed management and resilience building

- The **UN Decade on Ecosystem Restoration** is a rallying call for the protection and revival of ecosystems all around the world, for the benefit of people and nature. It aims to halt the degradation of ecosystems and restore them to achieve global goals. Only with healthy ecosystems can we enhance people's livelihoods, counteract climate change, and stop the collapse of biodiversity. The UN Decade runs from 2021 through 2030, which is also the deadline for the SDGs and is the timeline scientists have identified as the last chance to prevent catastrophic climate change. The UN General Assembly has proclaimed the UN Decade following a proposal for action by over 70 countries from all latitudes. **The World Restoration Flagship Programme** of the UN Decade for Ecosystem Restoration (2021-2030) entitled *The Great Green Wall for Ecosystem Restoration and Peace (GGW Flagship)* will work in the transboundary landscape crossing Burkina Faso and Niger where forest and landscape restoration is fundamental to sustaining the livelihoods of agro-pastoralist communities and building their resilience to the effects of climate change and variability. The Flagship will i) contribute to the restoration of degraded watersheds and agricultural land; ii) strengthen the integrated management of forest ecosystems of importance for mitigation and adaptation; and iii) support the implementation of micro-projects for income-generating activities and poverty alleviation.
- The **EverGreening the Earth Campaign** is now mobilising massive efforts to restore degraded forestland, agricultural land and grazing land, that use what we have already learned about successfully implementing restoration, but on a much bigger scale. The initiative seeks to draw down vast amounts of carbon into regenerated landscapes, while ensuring synergistic benefits to the livelihoods of rural people, particularly the least well-off inhabitants of the African drylands. The goal of the campaign is to capture 20 billion tonnes of CO₂ annually from the atmosphere by the year 2050 through landscape restoration processes that care for the land. It focuses on achieving six targets that emphasise CO₂ capture by scaling-up highly cost-effective evergreening solutions. These include ANR of forestlands, FMNR of trees on farmlands, the incorporation of leguminous shrubs into agricultural systems, and the regeneration of pastoral systems through silvopastoral practices. These practices have already been scaled across tens of millions of hectares, and they have been effective in improving the livelihoods and resilience of the poorest people in the developing world.
- The Campaign is being spearheaded by the **Global EverGreening Alliance**, whose 92 members include major development and conservation NGOs from around the world, who have pledged their joint capacity to restoring degraded lands through the spread of tree-based systems. The alliance has

spearheaded several large multi-country evergreening programmes being implemented in Africa's drylands. It also launched, in 2022, **Restore Africa**, which aims to restore 1.9 million hectares of land and directly support 1.5 million smallholder farming families across 6 countries in Africa (or 9 million people in Kenya, Ethiopia, Malawi, Tanzania, Uganda, and Zambia).

- The first phase (2017-2023) of the **Reversing Land Degradation by Scaling-up Evergreen Agriculture (Regreening Africa)** Programme, funded by the EU, played a decisive role in catalysing the realisation of global, regional, and national commitments in eight African countries. By scaling SLM practices, Regreening Africa has supported over 600,000 households, covering nearly one million hectares of land. The cost of implementing regreening practices ranged from EUR 30 to EUR 100 per hectare, depending on the specific context. The programme's impact has also stimulated a broader effort to restore tens of millions of hectares of degraded land throughout Africa. A second phase of Regreening Africa will be launched in 2024.
- **Knowledge for Great Green Wall Action (K4GGWA) Programme** seeks to enable SLM and livelihoods in support of the GGWI and to accelerate progress towards its objectives. The regional programme will focus primarily on the 11 countries that are members of the PAAGGW. Where possible and appropriate, its regional action will also offer support to the additional seven countries implementing GGW-related activities with EU support. Together, this forms the broader area of the GGW. K4GGWA is designed to complement and strengthen action by a diversity of stakeholders at the country and regional level. It will do so by addressing three specific objectives i) Enhanced uptake and effectiveness of SLM, land restoration and integrated landscape management practices within the broader GGW area; ii) Improved land health and vegetation monitoring and intervention targeting within the broader GGW area; and iii) Enhanced policy and institutional enabling environments for SLM and livelihoods within the broader GGW area.
- The **Sahel Mosaic** aims to prime the pump of economic development by creating green jobs, improving livelihoods, and strengthening resilience to climate change through the large-scale restoration of degraded agroecosystems. The vision is to co-develop up to 100 regenerating landscapes of up to 100,000 hectares each, called Special Regeneration Zones, through a community-centric approach to land management. These combine the governance systems, technical knowledge and community vision needed to restore degraded ecosystems. Beyond simply boosting incomes, these zones can give farmers and pastoralists the ability to invest in their future – and the stability to attract external investors.
- The **Bonn Challenge** is a global effort to restore 150 million hectares of the world's degraded and deforested lands by 2020 and 350 million hectares by 2030. It was hosted and launched by Germany and the IUCN in Bonn on 2 September 2011, in collaboration with the Global Partnership on Forest/Landscape Restoration and targets delivery on the Rio Conventions and other outcomes of the 1992 Earth Summit. Since 2016, 14 African countries have endorsed the visionary Kigali Declaration – a Pan-African commitment to accelerate forest landscape restoration interventions in support of the Bonn Challenge.

- The **AFR100**, is an initiative of AUDA-NEPAD in alignment with the UN Decade on Ecosystem Restoration. It aims to bring 100 million hectares of degraded land under restoration by 2030. AFR100 also contributes to the Bonn Challenge, the African Resilient Landscapes Initiative (ARLI), the AU Agenda 2063, the SDGs and other targets. AFR100 applies best practices to ensure restoration efforts are successful.

Within the AFR100 effort, WRI and partners have launched, **Restore Local**, an effort to gain momentum toward this major goal by supporting local Restoration Champions. Locally led restoration projects are 6-20 times more likely to achieve long-term success and bring environmental and economic benefits to their communities. Over four years, Restore Local will help bring forests, rivers and fertile farming soils back to health by delivering the support necessary to the local organisations already working with smallholder farmers on this problem. By helping Restoration Champions amplify their work, Restore Local will not only demonstrate the effectiveness of this approach, but plant the seeds for a movement to restore not just land, but expand livelihoods and opportunity.

- AUDA-NEPAD's **African Resilient Landscape Initiative (ARLI)** is implemented through forest and ecosystem restoration, biodiversity conservation, climate-smart agriculture, and rangeland management. The World Bank Group and WRI support the mobilisation of financial and technical resources from multiple sources to design and implement country-specific strategies. The ARLI mobilises African countries and partners to leverage sectorial interventions and collectively ensure the integrity, resilience, restoration and sustainable management of landscapes across regions.
- The **WFP Sahelian Integrated Resilience Programme and Scale up (2023-2028)** builds upon results from the 2018-2022 period during which 3 million people were assisted and 220,300 acres of land were restored, the next phase will i) Continue to focus on quality implementation, consolidate resilience gains and adapt support packages in existing sites to pave the way for resilient local food systems before phasing-out; ii) Expand activities to new sites, ensuring landscape continuity to restore ecosystems and contribute to the GGWI, and ensuring a deliberate nexus approach in contingent buffer zones; iii) Further strengthen programme integration, in particular insisting on linkages with shock-responsive social protection, value chain programming and disaster risk financing; and iv) Reinforce complementarity with partners to facilitate access to land, enhance investments in local food systems (food processing, transformation, innovative agricultural production technologies, post-harvest losses, etc.), reinforce linkages with local energy and water investments, and strengthen social cohesion. WFP has also set up a **Sahel University Network for Resilience (REUNIR)** to facilitate knowledge sharing, advance institutionalisation of resilience tools, and to help build the future generation of resilience experts.
- **The African Development Bank.** The AfDB mobilises and allocates resources for investment in African countries. It also provides policy advice and technical assistance to support African development efforts. In 2021, the Bank committed to contributing USD 6.5 billion to the GGW Accelerator through

projects in support of key pillars including **Desert to Power, Africa Adaptation Acceleration Program, Technologies for African Agricultural Transformation, Adaptation Benefit Mechanisms**, and other initiatives and mechanisms. Biodiversity and the restoration of degraded land also underpin the Bank's five top priorities that include providing climate-resilient crops for food security; facilitating access to renewable energy; supporting conservation and the promotion of agro-biodiversity; protecting ecosystems; improving livelihoods and lifting millions of people out of poverty.

- The **Global Environmental Facility (GEF)** has long supported the GGW and continues to develop programmes and projects to further its restoration and SLM objectives and support implementation.
 - **GEF's Integrated Approach Programme on Fostering Sustainability and Resilience for Food Security in SSA (FS-IAP)** is a multi-agency effort to promote sustainability and resilience through the management of land, water, soils, trees, and genetic resources that underpin Africa's food and nutrition security. The programme, launched in GEF-6 (2014), covers 12 countries across the drylands of SSA, including Burkina Faso, Ghana, Niger, Nigeria, Senegal, and Ethiopia which are in the Sahel and West Africa region.
 - The **Impact Programmes in the 7th GEF Replenishment Cycle** (GEF-7, 2018) provide opportunities for Sahelian countries to programme resources to support objectives of the GGWI. This is especially the case for the **Food Systems, Land Use, and Restoration Impact Programme (FOLUR)** led by the World Bank; and the **Dryland Sustainable Landscapes**, led by the FAO. Both programmes employ an integrated approach to implementing SLM and delivering on voluntary LDN targets set by countries. Restoration of productive landscapes features as an important element, especially in degraded agroforestry systems. Also, many GGWI countries, such as Ethiopia (USD 600 million) and Nigeria (USD 250 million), have already initiated follow-up SLM operations at a large-scale using World Bank financing. This illustrates the leveraging effect of previous programmes over time. **Sustainable Forest Management Impact Programme on Dryland Sustainable Landscapes**. With USD 104 million funding under the Global Environment Facility (GEF)-7 funding cycle, along with over USD 800 million co-financing, the **Sustainable Forest Management Impact Programme on Dryland Sustainable Landscapes** builds on lessons learned and aims to move the needle on Global Environmental Benefits (GEBs), and is assisting African countries in i) fostering resilience of production systems in drylands; ii) promoting restoration and rehabilitation; and iii) improving livelihoods through a comprehensive landscape approach. The programme is fostering resilience of agro-ecological systems and forests in three geographic clusters of drylands: miombo/mopane of Southern Africa, savannahs of East and West Africa, and temperate grasslands, savannahs and shrublands of Central Asia. The project takes a one-country one-champion approach and underscores the importance of prioritising interventions and needs for effective South-South collaboration by leveraging existing regional country networks such as the SADC-GGWI. Designed to deliver scalability beyond the boundaries of the 11 targeted countries, this intervention places a particular

emphasis on common management challenges, recognising the importance of transboundary commitments towards dryland restoration, landscape management at scale, and biodiversity conservation. A USD 2 million project entitled “**Harnessing the GGWI for a Sustainable and Resilient Sahel**” is being implemented with the support of the UNEP. The project provides an opportunity to engage with all GGWI stakeholders to foster meaningful dialogue with countries and flesh out a longer-term vision. Ultimately, it will serve as the vehicle for a programme that could mobilise larger investments. In addition to directly linking with other on-going efforts, the GEF considers this initiative as crucial for generating valuable information and knowledge. This fed into the strategic planning process for the 8th replenishment cycle (GEF-8) that started in July 2022. The initiative will also ensure the inclusion of interests and commitments from Sahelian countries and diverse international partners (GEF, 2023).

- **The Green Climate Fund (GCF)** collaborates with the GEF to strengthen and scale the impact of the GCF investments in the GGW through harnessing linkages with the previous/ongoing/future GEF projects, including the **GGW Climate Change Adaptation Regional Support Project** supported by the Least Developed Country Fund (LDCF) and Harnessing the GGWI for a Sustainable and Resilient Sahel project under the GEF-8, including LDCF and Special Climate Change Fund (SCCF), among others. The GCF contributes support to Burkina Faso, Chad, Djibouti, Eritrea, Ethiopia, Mali, Mauritania, Niger, Nigeria, Senegal, and Sudan and considers this as support to the GGWI. This includes GCF funding proposals, simplified approval proposals and readiness across 11 GGW countries as integral support for the countries to achieve their climate ambition and SDG objectives. Specifically, the effort aims to i) enhance knowledge management and exchanges accelerating the uptake of best practices and learning and informing policy and investments across projects of the GCF and others; ii) map innovation and digital transformation technologies and build ecosystem; and iii) establish a GGW RSP Support Unit and governance structure. The RSP is being implemented for a period of six years with total financing of USD 12 million. The RSP is not a grant making facility but will focus on the sharing of knowledge and complementarity between GCF and GEF programmes and projects to maximise impacts.
- The **GCF Scaling-Up Resilience in Africa's GGW (SURAGGWA)** implemented by, and building upon, the FAO's long-term commitment to the GGW, proposes to carry out an urgent and major paradigm shift in six countries vulnerable to climate change (Burkina Faso, Chad, Mali, Niger, Nigeria and Senegal) within the AU GGW. The project will remove barriers to heightened resilience and greater mitigation, through (i) scaling-up of successful restoration practices with native species; (ii) supporting the development of climate-resilient, low emission value chains of NTFPs in support of vulnerable communities' livelihoods; and (iii) strengthening the GGW's regional and national institutions.
- **Palladium's Regeneration** received the Bezos Earth Fund Grant for locally led restoration in Africa. It is a partnership between Palladium and Systemiq that works across East and West Africa supporting sustainable cocoa and coffee businesses. The project will support and scale up 14 small- and medium-sized

local African companies that are already involved in land restoration activities as restoration champions. The companies will manage 6,500 hectares of land and funding will support the building and refining of business plans and the facilitation of negotiations with international and local companies to buy their goods. The project is in Kenya, the Democratic Republic of Congo (DRC), Rwanda and Burundi. The Palladium teams work closely with the AFR100.

- **The Economics of Land Degradation (ELD) Initiative** was established in 2011 by the UNCCD, the German Federal Ministry for Economic Cooperation and Development (BMZ), and the European Commission. The initiative is coordinated and supported by the ELD Secretariat, which is hosted by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ). The Initiative makes the values of land count to inform, promote, and scale land solutions for transformative change. ELD is a global initiative that builds bridges between science, policy, and practice. The ultimate objective of ELD is to boost action and investment for SLM and ecosystem restoration.
- **Futures Agribusiness (FAGRIB)** is leading an international partnership committed to scaling the GGW, called **African Regenerative Carbon Stewardship (ARCS)**. The partnership includes many specialised organisations and local groups. ARCS' mission is to unlock the power of natural carbon capture and storage together with market-based solutions. Combining value chain development and landscape restoration, FAGRIB supports the 'Grown in the GGW' motto, to promote future food systems and ecosystem restoration across Africa. Each country has a set of in-demand products that can be layered vertically on farms and in forests using agroforestry. Together these crop combinations drive the green economy and help farmers optimise production and returns in multiple cash crops. From forest gardens to optimised agroforestry and commercialisation, FAGRIB trains farmers' groups in agroforestry to address the environmental needs of their farms and to fulfil the market opportunities available. FAGRIB has offices in the United States of America (USA), Canada, Haiti, and in Africa in Ivory Coast, Togo, and Guinea.
- **One Billion Trees for Africa** is a frontline and multi-generational response to climate degradation with a mission to plant, grow and nurture one billion trees to revive degraded ecosystems and biodiversity and combat deforestation, while improving the livelihoods and capacity of African communities to mitigate, adapt and build resilience to climate change.
- **Tree Aid** promotes locally led projects that plant trees and make sure that the trees thrive to provide food and incomes and communities that look after the environment into the future. With projects focused on the drylands of Africa, particularly in Burkina Faso, Ghana, Mali, Niger, Ethiopia, and Senegal. Within Tree Aid's new strategy, by 2028, 220,000 hectares of land will be restored, 12 million trees will be grown, effective and representative landscape management committees and management plans will be put in place, communities will apply their knowledge and skills to restore their landscapes, and partnerships will be strengthened between communities, municipal government and traditional leadership structures.
- **1000 Landscapes for 1 billion People (1000L)** is a coalition of organisations that seeks to advance local landscape efforts to sustain and restore ecosystems,

build rural prosperity and community well-being, and confront climate change, catalysing inspiration for collaborative action. By 2030, the landscape partnership aims to deliver sustainable solutions across 1,000 landscapes for 1 billion people—aligning actions to meet global climate, water, food, land and biodiversity targets. From 2019-2023, the 1000L built extensive partner networks to develop learning to strengthen landscape partnerships; to develop a shared understanding of the landscape among stakeholders; to develop an agreed long-term vision and strategy for landscape change; to develop a short-term action plan for implementation; and to finance the action plan and monitor impacts and learnings. 1000L has co-designed and tested its resources with landscape partnerships in Cameroon, DRC, Ethiopia, Ghana, Kenya, Malawi, Namibia, Niger, Tanzania, and South Africa. The 40+ partners of 1000L are actively supporting more than 50 landscapes in Africa, including those supported by EcoAgriculture Partners, Commonland, Conservation International, Rainforest Alliance and UNDP. From 2024, resources, services and networks from 1000L will be available for users across Africa. Together, the coalition will work to advance a thriving collaborative landscape movement, empower landscape partnerships and mobilise and connect the allies of landscape partnerships in finance, policy, research and business.

5.4.2 Healthy soil and water

- The **Soil Initiative for Africa (SIA)** is the AUC's long-term framework to guide investments and efforts to improve the health and resilience of Africa's soil in all agricultural sub-sectors for the simultaneous benefits of increasing agricultural productivity, improving water availability, increasing agricultural resilience to the effects of climate change and other shocks. The SIA is coordinated under the leadership of a Technical Committee established by the AUC and led by AUDA-NEPAD as chair and FARA as co-chair. The SIA will be a priority flagship of the CAADP. The SIA Framework document has a 40-year horizon corresponding to Agenda 2063. Similar to Agenda 2063 and CAADP, the SIA will be implemented in consecutive 10-year phases. The Africa Fertilizer and Soil Health Action Plan (AFSH-AP) (2024-2034) provides the implementation plan for the first ten years of the SIA Framework. The AFSH-AP will be presented at the upcoming Africa Fertilizer and Soil Health Summit proposed to take place in March 2024. If the SIA is combined with other initiatives that support the development of improved access to attractive markets, this will turn smallholder and emerging farming systems into profitable rural businesses for sustained livelihoods, supporting commercial farming systems to practice sustainable soil management and contribute their knowledge through technology transfer. The SIA Framework puts particular emphasis on the importance of Africa's farmers and communities as champions of change and agents of Africa's agricultural transformation in alignment with national priorities.
- The **Coalition for Action on Soil Health (CA4SH)** was established to ensure broad implementation of the outcomes of the UN Food Systems Summit (2021). The main objective of the CA4SH is to improve soil health globally by addressing critical implementation, monitoring, policy, and investment barriers that constrain farmers from adopting and scaling healthy soil practices. CA4SH

aligns with and leverages the work of the UNCCD. The CA4SH is a multi-stakeholder approach to strengthen, facilitate and accelerate the adoption and scaling of soil health restoration practices with outcomes for productivity and economic growth, rural livelihoods, biodiversity protection, mitigation and adaptation to climate change and natural resource management. It works to enhance soil health across landscapes through: integrating soil health considerations in policy across the development, environment, and climate change domains, and along value chains; significantly increasing the number of hectares of land under improved practices for soil health; expanding on research in development into soil health practices, M&E, and financial tools and mechanisms; and significantly increasing investments in soil health, by a margin of 5-10 fold above current financing commitments.

- **WOCAT** is a longstanding global network on SLM that promotes the documentation, sharing and use of knowledge to support adaptation, innovation and decision-making in SLM. WOCAT is a pioneer in transformative action for SLM. The network establishes an innovative space for sharing and scaling good practices to address land degradation, climate change, and biodiversity loss. WOCAT hosts the standardised Global WOCAT SLM Database, which is the UNCCD-designated Database for reporting on best SLM practices. WOCAT is formalised through a Framework Agreement among seven Consortium Partners, including FAO, GIZ, International Center for Agricultural Research in the Dry Areas (ICARDA), International Centre for Integrated Mountain Development (ICIMOD), International Soil Reference and Information Centre (ISRIC), Alliance Bioversity and CIAT, Centre for Development and Environment (CDE). The database and secretariat are hosted by the CDE, University of Bern. Several Regional Clusters anchor WOCAT in different regions around the globe. They serve as catalysts for mainstreaming SLM and LDN in strategic agendas and for enhancing capacities through South-South Cooperation (SSC) with other Clusters and partners to implement and scale up SLM. The SSA Regional Cluster is the first Cluster being set up. It is led by the WOCAT Consortium Partner Alliance Bioversity and CIAT in collaboration with LandDev and AUDA-NEPAD.
- **Global Soil Partnership (GSP)** was established in 2012 as a mechanism to develop a strong interactive partnership and enhanced collaboration and synergy of efforts between all stakeholders. From land users through to policymakers, one of the key objectives of the GSP is to improve the governance and promote sustainable management of soils. Since its creation, the GSP has become an important partnership where global soil issues are discussed and addressed by multiple stakeholders. Key outputs demonstrate that the partnership was needed to fill an existing gap in the promotion of sustainable soil management. Among many outputs, the GSP has established Regional Soil Partnerships, developed capacities in developing countries on digital soil mapping; developed Voluntary Guidelines for Sustainable Soil Management and established national soil information systems.

5.4.3 Pastoral and silvopastoral systems

- The **AU Policy Framework for Pastoralism in Africa** contains guiding and cross-cutting principles, two main objectives, and a set of strategies for each objective. The two objectives of the framework are as follows: i) Secure and protect the lives, livelihoods and rights of pastoral peoples and ensure continent-wide commitment to political, social and economic development of pastoral communities and pastoral areas; and ii) Reinforce the contribution of pastoral livestock to national, regional and continent-wide economies. Objective 1 includes the need to recognise the rights, existing economic contributions and potential future contributions of pastoralists to development, with related political and policy processes needed to develop appropriate pastoral policies and fully integrate pastoralism into national and regional development programmes and plans. Objective 2 focuses on the core assets of pastoral areas viz. pastoral rangelands and livestock. It emphasises the need to improve the governance of pastoral rangelands and thereby secure access to rangelands for pastoralists. The involvement of traditional pastoral institutions is seen as central to this process. Strategies under Objective 2 also include the protection and development of pastoral livestock, risk-based drought management, and support to the marketing of pastoral livestock and livestock products in domestic, regional and international markets.
- **International Year of Rangelands and Pastoralists (2026)**. The UN has declared 2026 the International Year of Rangelands and Pastoralists, reflecting the important role healthy rangelands play in creating a sustainable environment, economic growth and resilient livelihoods for communities across the world. This will raise awareness and advocate for the value of healthy rangelands and sustainable pastoralism, as well as for the need to further build the capacity of and increase responsible investment in the pastoral livestock sector. This includes SLM practices, improved or restored ecosystems, and equitable access to markets, livestock health and breeding. The International Year of Rangelands and Pastoralists will be implemented by the FAO as the lead agency.
- **Sustainable Investments for Large-Scale Rangeland Restoration (STELARR)** is a GEF project, executed by the International Livestock Research Institute (ILRI) that aims to reverse degradation and improve productivity of rangelands globally through sustainable livestock value chains, thereby reducing poverty and securing livelihoods, with inclusive benefits to women and youth. In Africa, the project will take place in North Africa. The two outcomes include: i) increased investment in rangeland restoration; and ii) strengthened national and international commitments to rangeland restoration and investments.
- **The Resilience and Intensive Reforestation Project for the Safeguarding of Territories and Ecosystems in Senegal (RIPOSTES)**. The Senegalese Ministry of Environment, Sustainable Development and Ecological Transition, the EU and the FAO launched RIPOSTES in November 2022. The objective of the project is to contribute to the strengthening of communities' capacities to adapt to climate change and to mitigate its effects through SLM. It targets the scaling-

up and saturation of 50,000 hectares with forest cover enhancing restoration options for the benefit of 10,000 Senegalese households from 13 communes (35,000 hectares directly facilitated including 5,000 hectares of community woodlots and 15,000 hectares through adoption by influence).

- **Savory Institute Holistic Management** is a human and nature centred design and decision-making framework with associated strategic planning procedures that result in socially sound, financially viable and ecologically regenerative outcomes. One of its core procedures is Holistic Planned Grazing which establishes grazing regimes that allow for adequate plant recovery times, maintenance of perennial plant communities and increases in soil cover and soil fertility that balance social, economic and ecological complexity. Holistic Planned Grazing has been proven to be a viable action pathway within Africa's communal land tenure and ecological systems. Its capacity to restore landscapes at scale is based on its reliance on local resources in the form of livestock, pastoral communities, traditional knowledge and Holistic Planned Grazing procedures to ensure that livestock are in the right place, at the right time, and with the right behaviour. By respecting plant recovery times, native seed banks lying dormant in the soil find the right conditions to germinate and grow without continuous grazing pressures. These local seed varieties are often the best adapted to local conditions and are more resilient to climate change, climate variability and extreme weather events. This action pathway formally recognises the contribution of Africa's diverse grazing areas, from native pastures, rangelands, savannahs, open woodlands, riparian corridors, transhumance areas, dry and wet sclerophyll forests and velds to African economies, cultural heritage, biodiversity, habitat maintenance and ecosystem services. Holistic Planned Grazing is therefore a vital and necessary action pathway for the success of the GGWI. With Savory Institute training hubs in Kenya, Zimbabwe, and South Africa, there are ample opportunities to share grazing management practices and local monitoring frameworks that increase landscape resilience through livestock keeping.
- **World Bank Regional Sahel Pastoralism Support project (PRAPS-2)**, in its second phase (2021), will invest in more robust animal health systems; build, rehabilitate or upgrade critical infrastructure like veterinary units, border inspection posts, vaccination pens, livestock markets and rest areas along transhumance and trade routes; improve access to better secured and managed natural resources, including new grazing areas and water points. Investments to improve livestock value chains will create more opportunities for earning income, from production to marketing. Early warning systems and pastoral crisis prevention activities will also be strengthened.

5.4.4 Renewable energy

- The **Africa Renewable Energy Initiative (AREI)** is an inclusive, transformative, Africa-owned and Africa-led effort to accelerate and scale up the harnessing of the continent's renewable energy potential. A flagship initiative of the AU, AREI aims to achieve at least 300 gigawatts (GW) of renewable energy by 2030. The AREI has two over-arching goals: i) to help achieve sustainable development, enhanced well-being, and sound economic development by

ensuring universal access to sufficient amounts of clean, appropriate and affordable energy; and ii) to help African countries move towards renewable energy systems that support their low-carbon development strategies while enhancing economic and energy security, including in the agricultural sector.

- The **Desert to Power (DtP Initiative)** aims to harness solar energy to generate 10 GW of additional capacity to provide clean electricity for 250 million people via public, private, grid and off-grid projects by 2030. The distinctive strategic values of the DtP initiative are that it brings together: i) countries with similar degrees of energy poverty, facing severe climate change risks yet with great opportunities; and ii) an international coalition of donors to tackle climate change by overcoming policy and regulatory barriers in order to attract the massive private sector investments required for solar energy development. The DtP Initiative is set to mobilise USD 30 billion by 2030 for the deployment of 10 GW of additional solar energy capacity in the 11 Sahel countries, of which USD 3 billion is for the G5 Sahel countries (Burkina Faso, Chad, Mali, Mauritania, and Niger). The AfDB has pledged USD 2 billion.

5.4.5 Climate change and climate resilient agriculture

- **The AU Climate Change and Resilient Development Strategy and Action Plan (2022-2032)** supports the realisation of the AU's 2063 vision by setting out principles, priorities and action areas for enhanced climate cooperation and long term, climate- resilient development. The Strategy provides an outline for harmonised and coordinated actions to respond to the impacts of climate change, thereby supporting planning for the continent's low-emission future. The Strategy defines the main parameters and priorities in building African resilient capacities for adaptation and exploiting the benefits of the mitigation potential of the continent. It seeks to ensure that institutions, strategies, and decisions for climate risk management and climate-resilient development are integrated and implemented as a central aspect of achieving sustainable development, as framed by Agenda 2063 and the UN's Agenda 2030. The Strategy builds on the continent's commitment to ensuring an effective multilateral approach to addressing climate change through the UNFCCC and the Paris Agreement adopted thereunder, while emphasising equitable access to sustainable development and the eradication of poverty and recognising the specific needs and special circumstances of African countries.
- The **African Climate Summit** held in Nairobi from 4-6 September 2023 prepared, agreed to, and adopted the Nairobi Declaration and call to action to serve as a basis for Africa's common position in the global climate change process to COP 28 and beyond and requested the AUC to develop an implementation framework and roadmap to support the Declaration. One of the priorities of the Declaration was enhancing sustainable food systems for Africa, leveraging new and innovative financing, and buffering the response capacity of vulnerable people through EbA and the sustainable management of its natural resources.
- The **GCF Inclusive Green Financing Initiative (IGREENFIN Phase I): Greening Agricultural Banks and the Financial Sector to Foster Climate Resilient Low Emission Smallholder Agriculture in the GGW countries.** This GCF cross-cutting

programme, implemented by IFAD, is enhancing access to credit and technical assistance for local farmers, farmers' organisations, cooperatives and micro- and small-sized enterprises for implementing climate-resilient and low-emission agriculture and agroforestry. The programme covers the 11 countries in the GGW along with Ivory Coast and Ghana.

- The **GCF Africa Integrated Climate Risk Program: Building the resilience of smallholder farmers to climate change impacts in seven Sahelian countries of the GGW**, implemented by IFAD, will build, strengthen, and scale up the resilience and adaptive capacities of smallholder farmers and rural communities of seven LDCs in the region. The effort will provide capacity building and institutional development on integrated climate risk management. Key will be the reduction of obstacles to access agricultural insurance for governments and smallholder farmers to enhance resilience building and strengthening climate weather and information systems.
- The **Conservation International Exponential Roadmap for Natural Climate Solutions** is a roadmap for rapidly accelerating the reduction of greenhouse gas emissions and boosting natural carbon sinks through better stewardship of our natural and working landscapes. The first step towards charting the path and milestones that the world needs to follow to accelerate nature's contributions to climate mitigation in line with the Carbon Law for Nature. The second key innovation is that the routes to action are organised around changes in the ways people interact with the land rather than changes in the amount of carbon in different types of land cover. This involves a necessary focus on people living and working on the land, primarily farmers, ranchers, foresters, Indigenous people and local communities, and public land managers. The ability of these groups to steward land is supported by other groups of people who we call enabling actors: policymakers, the finance sector, businesses, and social movements. The roadmap anticipates that to remove and sequester nearly 5 Gt of CO₂ annually by 2050 requires a new global restoration sector to emerge, restoring at least 350 million hectares of forests and wetlands by 2050.
- The **CGIAR Agricultural Adaptation Atlas** is a decision support tool that facilitates informed decision-making around interventions related to smallholder farmers in SSA. The atlas provides high-resolution spatial insights into climate hazards, exposure, and adaptive capacity while providing adaptation solutions tailored to specific regions and aims, be that increasing crop resilience under drought conditions or advancing gender equity while reducing agricultural greenhouse gas emissions. Supported by the Evidence for Resilient Agriculture (ERA) meta-analysis, these solutions are built on robust scientific evidence regarding their positive and negative impacts, suitability across diverse regions and climate scenarios, and effective combinations.

5.4.6 Biological diversity

- The WHO, through its Department of Environment, Climate Change and Health, the IUCN, and the Friends of Ecosystem-based Adaptation (FEBA) network are establishing a new **expert working group (EWG) on Biodiversity, Climate, One Health and NbS**. Leading experts engaged in the science-policy

interface of public health, biodiversity, and climate change will collaborate in an innovative initiative led by the WHO and IUCN to help guide decision-makers toward a healthier, greener, and more sustainable future as they navigate the challenges of the post-COVID-19 era. Based on the strong premise that many of the solutions to the common environmental and public health threats that we face can only be found through iterative, cross-sectoral and interdisciplinary knowledge exchange, the working group will catalyse the development of coherent and inclusive, evidence-based policies that promote a healthy recovery, help prevent future health risks associated with ecosystem degradation, biodiversity loss and climate change, and chart a common path toward the achievement of the SDGs.

5.4.7 Green cities

- **The Green Cities for the Restoration of the GGW Ecosystems project** aims to improve the climate and food resilience of secondary cities in the GGW and reduce their environmental footprint. The project aims to adopt and implement local policies, strengthen functional links between town and country, build green infrastructure, and foster the emergence of green entrepreneurship rooted in the region. The project works in Burkina Faso, Niger, Senegal with an emphasis on SLM and soil reclamation for adaptation to climate change.

5.4.8 Scientific and academic support

- **The Alliance for Accelerating Excellence in Science in Africa (AESA)** was created in 2015 through a partnership of the African Academy of Sciences (AAS), AUDA-NEPAD, the founding and funding global partners, and through a resolution of the summit of AU Heads of Governments. AESA is to enhance African science for and by Africans through agenda setting, mobilising Research and Development (R&D) funding, and managing continent-wide Science, Technology and Innovation (STI) programmes that promote the brightest minds, strengthening the best possible science environments in Africa, fostering scientific excellence, inspiring and mentoring emerging research leaders, and accelerating and translating research and innovations into products, policies and practices that will improve and transform lives in Africa.
- **Global Monitoring for Environment and Security and Africa (GMES and Africa)** is a joint initiative of the AUC and the EU, geared towards addressing the growing needs of African countries to access and use Earth Observation (EO) data for the implementation of sustainable development policies on the continent. The programme builds on the infrastructure and capacities established by earlier projects such as PUMA (Preparation for the Use of Meteosat Second Generation in Africa), AMESD (African Monitoring of Environment and Sustainable Development), and MESA (Monitoring of the Environment and Security in Africa). The programme enhances the capacity of African policymakers and planners to design, implement, and monitor national, regional and continental policies, whilst promoting the sustainable management of natural resources through the use of EO data and derived information.

- **University of Agricultural Sciences, University of Sassari in Italy** offers a PhD programme in agricultural science with an international curriculum in land degradation and desertification. The University of Sassari, in collaboration with the University "Nazi Boni" - Bobo Dioulasso (Burkina Faso), the University "Aube Nouvelle"- Ouagadougou (Burkina Faso), the Awassa University (Ethiopia) and with the support of Desertnet International (DNI), has recently launched in 2021 a new international PhD programme in desertification and land degradation. The overall objective is to promote the enhancement of the scientific capacities of young researchers, especially from the Global South, in dealing with land degradation and desertification issues. The research topic of this curriculum is dedicated to all the forms of land degradation, intended as "the loss of actual or potential land productivity or utility as a result of natural or anthropic factors which affect food production and safety, livelihoods, and the production and provision of other ecosystem goods and services". In this context, desertification is considered as a form of land degradation occurring in arid, semi-arid and dry sub-humid areas worldwide.

5.4.9 Risk management

- The **African Risk Capacity (ARC)**, a flagship initiative of the AU, builds the capacities of African governments to identify their climate risk, plan for climate disasters, and access capital at critical times. As an African-led and owned catastrophe risk pool created with risk capital from donor partners, the ARC has already disbursed USD 36 million in four years of operations which have helped to support drought-affected countries. The ARC capacity building programme aims to prepare African governments for effective disaster risk management through the introduction of tools and processes that enhance a multidisciplinary response by governments. Through this programme, experts from key government departments undergo training and have to complete milestones in risk modelling, contingency planning and risk transfer which allows them to make informed decisions on insurance uptake.

5.4.10 Scaling approaches and projects

- The **Scaling Scan** is a practical tool for the development of a scaling ambition and to assess the key elements (technical, awareness/demand, business cases, value chains, finance, knowledge and skills, collaboration, leadership, governance, and evidence and learning) for scaling readiness that will support the ambition. In Africa, the approach has been used in the Africa Rising Innovations, for watershed management in Lesotho (CRS), and Ghana and Ethiopia (Triple S), among others
- The **GCF SURWAGWA** project will carry out an urgent and major paradigm shift in six countries which are extremely vulnerable to climate change (Burkina Faso, Chad, Mali, Niger, Nigeria and Senegal) within the AU's GGWI adopted in 2007. The project builds on the FAO Action Against Desertification (AAD) and focuses on removing barriers to heightened resilience and greater mitigation through i) scaling-up successful restoration practices with native species; ii) supporting the development of climate resilient, low emission value chains of NTFPs in support of vulnerable communities; and iii) strengthening the GGW's regional and national institutions.



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CHAPTER 6. MONITORING, EVALUATION, LEARNING AND ADAPTATION

The GGW Strategy covers a 10-year period, during which multiple agencies, institutions, and stakeholders across local, national, regional, continental and international levels will work together in close collaboration to ensure the achievement of the GGW vision, goals and objectives. Monitoring, evaluation, learning and adaptation (MELA) provides the framework and processes by which these components are integrated and support the adaptive design, management, implementation and completion of actions within the GGW Strategy. A MELA plan that supports the system change and massive scaling of landscape restoration and livelihoods resilience required will be developed and budgeted as part of the implementation strategy. Human resources and capacities to carry out an effective MELA approach will need to be imbedded across continental, regional, national and subnational scales. Critical elements to be agreed upon in initiating the GGW Strategy will be i) the development of a multi-scale and comparable scorecard that tracks environmental, social, economic, institutional and policy progress; and ii) a process for biennial reporting.

6.1 Monitoring progress

The MELA plan to be developed will be applied across different dimensions, and where possible include baselines and capture changes in behavioural, institutional, policy, social, biophysical indicators as appropriate around the following:

Institutional shifts. To massively scale ecosystem and human resilience requires institutional arrangements, behaviours and relationships that coordinate and manage adaptively and effectively for impact. Examples of shifts that can underpin the acceleration of impact might include:

- Assessment of institutional capacities including community level structures, knowledge and capacity to support the GW desired outcomes.
- Functioning GW institutional and agency relationships and behaviours.
- Effective adaptive management at the institutional and agency level.
- Effective coordination across institutions and agencies.
- Effective multi-stakeholder, cross-sectoral and multi-scale relationships and engagement.
- Use of evidence and experience-based monitoring, reflection and adaptation in planning, decision-making and management.
- Capacity to deal with risk and uncertainty associated with polycrises.
- Impact investment accountability.
- Capacity for triple bottom line or natural resource accounting.

Political shifts. It has been demonstrated, for example in Niger, that a modest political or legal framework change can unleash the levels at which local communities can apply landscape restoration and resilience building practices (Sendzimir et al., 2011). It is important to assess policies and bylaws to ensure that they address the root causes of the issue they are designed to guide and to determine if they are enabling or disabling landscape restoration and resilience building.

- An analysis of existing policies at regional, national and subnational levels that enable or disable land restoration and resilience building efforts.
- Establishment or modification of policies at national and bylaws at subnational levels that address underlying barriers and create an enabling environment for land restoration and resilience building efforts.
- Development of integrated, cross-sectoral plans that support implementation of scaling efforts to contribute to multiple national and international commitments and goals.
- Integration of land (grazing land, agricultural land and forestland) and tree tenure and security.

Landscape and ecosystem resilience shifts. Drivers of land and soil degradation, loss of biological diversity and ineffective water cycles, include land use conversion, unsustainable agricultural, pastoral and forest management practices, and tenure insecurity, among others. Indicators to assess land health for the GGW have been designed by, for example, a consultative process led by the Decade on Ecosystem Restoration and the UNCCD GGW Accelerator have been published in the GGW Accelerator Indicator Definition Guide (UNCCD, 2021) including a results framework to support PAAGGW Pillars.

The AU GGWSSI (2017) published a results framework document (RFD) to build consensus and ownership on shared objectives, facilitate agreement on expected results and resources, serve as a communications tool, establish the foundation to design M&E systems and serve as a reference for anticipated changes (LDN, sustainable use and management of biological resources, effective governance, and income and decent jobs for women and youth).

A number of tools are being developed and employed to monitor the changes in soil and ecosystem health conditions that can inform the use of greening practices and productivity. This has been viewed, perhaps, as creating a challenge for ensuring consistency and comparability across tools. A few examples being used widely across Africa include those that link remote sensing with field surveys and measurements such as the LDSF that can be used across land uses (LDSF, CIFOR-ICRAF), community-based tools for local land health measures such as Ecological Outcome Verification (EOV) (EOV, Savory Institute), and citizen science applications such as the Regreening App. While restoration is often a slow process, it is crucial to be able to monitor changes over time.

As more countries and regions join the GGW, it will be important to ensure that there are common indicators and tools for measurement and that measured indicators support different goals and objectives associated with NDCs, biodiversity action plans, and LDN (e.g. land and soil health, water cycles, above- and below-ground biological diversity, and carbon sequestration).

Examples of core indicators from the UNCCD LDN include land cover, vegetation productivity, and soil organic carbon. The UNCCD GGW Accelerator Indicator Definition Guide (UNCCD, 2021) includes land cover on various land use types, greenhouse gas sequestered by practices and across value chains, sustainable energy produced, areas under soil and water conservation practices, areas of restored watersheds, areas of stabilised sand dunes, established water points, among others. In the GGWI Results Framework Guidance Note, core indicators that are being tracked in support of the five pillars of the PAAGGW are highlighted and include: land cover change, number of employment opportunities, quantity of greenhouse gas equivalents sequestered, quantity of renewable energy consumed or substituted, and total number of beneficiaries.

Soil and land health indicators associated with the SIA and the LDSF are depicted in Figure 31.



Figure 31: LDSF indicator framework (Vagen and Winowiecki, 2023).

Well-being and livelihoods changes. Key to societal resilience based on landscape resilience are measures of individual, household and community well-being and increases in livelihoods. There are a wide range of indicators that reflect these including food and nutrition security, income from farming, grazing and forestry activities, employment and engagement in entrepreneurial opportunities, access to productive inputs (information, seeds, nutrients, water, land, energy, etc.). Other indicators may represent capacities, skills and behaviours, social networks and safety nets, adaptive and coping capacities, exposure to conflict or natural disasters. Many of these indicators are differentiated by gender and age.

Examples of the GGW Accelerator societal indicators, include cash-for-work opportunities, employment through GGW value chains, persons benefiting from GGW value chains, green restoration and green conservation employment opportunities created, producers using soil and water management practices, communities benefiting from protected lands, and households benefiting from restored lands. The Regreening Africa project measures extent of restoration practice, intensity of

practice, diversity of practices and intra-household equity (Regreening Africa, 2023). CRS considers community level indicators related to watershed management around good governance, transformative participation and leadership, learning and adaptation for good performance, and effective networking, negotiation and advocacy including behaviours and behavioural evidence that can be monitored (CRS, 2021). The CARE Community Scorecard is a method of participatory governance and focuses on improving local government services and processes (CARE, 2013). Oxfam provides a Care Policy Scorecard to assess the care public policy environment (Butt et al., 2021).

SUGGESTED ACTIONS

To develop a coherent set of indicators for the MELA plan that can be readily measured and accurate may entail:

- **Agree upon a critical set of comparable indicators** to form a scorecard that can be measured locally and at scale using harmonised measurement tools.
- **Develop broader capacities** for the use of measurement tools and data analysis.
- **Ensure local level capacity** to assess environmental health and social well-being, monitor changes and keep records.
- **Agree upon methods for communicating evidence** in an accessible way to support adaptive management and decision-making at different scales.

6.2 Learning and evaluation for adaptive management

Overall learning and evaluation are integral components of adaptive management enabling practitioners, leaders, managers, and policymakers to make evidence and experience-based decisions to inform improved processes and practices in a flexible fashion while responding to complexities and uncertainties of dynamic systems and programmes.

In practice, this means that stakeholders including practitioners, land users, scientists and decision-makers work together through regular engagement processes to interrogate and reflect upon evidence and experience and propose changes needed. An example comes from the Joint Reflective Learning approach developed by the SHARED Decision Hub for Regreening Africa (Figure 32).

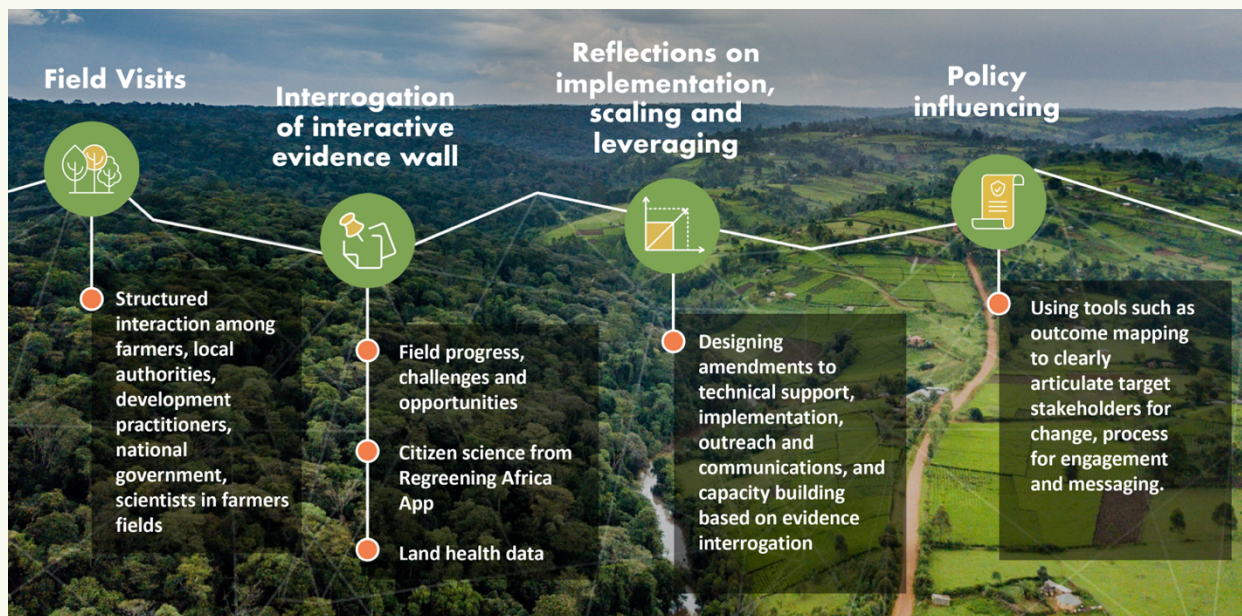


Figure 32: Process for monitoring, reflection, learning and adaptive planning (Regreening Africa, 2023).

Such processes can be designed at different scales such that local and subnational joint reflective learning efforts can be carried out and aggregated to national and regional and continental scales at regular intervals (e.g. annually). Capacities can be built to facilitate these processes at different scales and the findings can be used in cross-country, cross-regional learning exchanges.

6.3 Developing the monitoring, evaluation, learning and adaptation plan

The MELA plan for the GGW Strategy will include the development and use of a scorecard, as well as a biennial reporting structure. These will be used to monitor the progress made in the implementation of the GGW Strategy's axes and activities, allowing the AU, partners and all involved parties to easily track:

- Schedules and timelines;
- Level of success of the landscape restoration and livelihoods resilience across the continent;
- Key indicators to be monitored at different scales;
- Data sources, collection, management, and quality assurance;
- How data will be analysed and made visually accessible;
- Feedback mechanisms for improving interventions at different scales;
- Questions related to the relevance, effectiveness, efficiency, impact and sustainability of proposed interventions; and
- Contribution of different stakeholders, institutions, agencies, and partners to achievements.

The plan will include the MELA processes and flows to ensure it informs local to continental adaptive management to achieve the goals and objectives of the GGW Strategy. It will also support complementary action plans and commitments related to SLM, enhanced biological diversity, effective water cycling, and climate adaptation and mitigation.

SUGGESTED ACTIONS

- **Develop an inclusive MELA plan** for the GGW Strategy.
- **Develop key indicators and a score card.**
- **Develop a readily accessible decision dashboard** for assessing progress at multiple scales.
- **Develop capacities of AUC, partner organisations, agencies and local authorities and stakeholders to carry out MELA approaches.**



CHAPTER 7. COORDINATION AND IMPLEMENTATION ARRANGEMENTS

Agreed arrangements among institutions, agencies, partners and stakeholders are critical to ensuring that implementation efforts associated with the GGW Strategy are directed at and will meet the goals and objectives outlined. The achievement of the goals and objectives of the GGW Strategy are dependent upon the clarity of roles and responsibilities, clear coordination mechanisms, and principles of engagement within and across scales, sectors, and stakeholders. Further flows of information, communications and financial resources will enable effective coordination, implementation, and adaptive management.

To implement this GGW Strategy, taking advantage of the strengths of different agencies, regions, and Member States invites a shift in how the GGWI is governed and situated with respect to the historical contributing institutions and agencies.

As the GGW Strategy is intended to harmonise the efforts of different agencies, institutions, regions, and countries to contribute to the massive scaling-up of landscape restoration and resilience building, this chapter reviews the existing roles of the different organisations, agencies, initiatives, and partners. **The coordination arrangements are to be refined based on future discussions among the GGWI official bodies and other relevant stakeholders.**

Setting more specific criteria for membership to the GGWI is also imperative. These criteria are typically designed to ensure that members or participants not only share the overarching goals of the Initiative but also actively contribute towards achieving them. The specifics of the criteria often depend on the nature and objectives of the Initiative, but the general themes revolve around alignment with the Initiative's principles, a clear demonstration of commitment to landscape restoration and climate change, as well as a commitment to transparency through regular reporting and validation.

7.1 Great Green Wall Initiative bodies and support institutions across various scales

7.1.1 Continental and regional bodies

This section outlines both official bodies associated with the AU and the GGWI at the continental level, as well as partner and support agencies and bodies that have a long-standing relationship with the GGW or are highly relevant to achieving the goals of the GGWI.

Official bodies

AFRICAN UNION COMMISSION

The GGWI is a flagship initiative of the AUC. Within the AUC, the GGWI is housed within the SEBE Directorate within the Department of Agriculture, Rural Development, Blue Economy and Sustainable Environment (ARBE). SEBE is responsible for implementing the agriculture, rural development, blue economy and sustainable environment policies, programmes and strategies of the AUC in line with the aspirations of Agenda 2063, the associated medium-term plans, and other key continental legal and policy frameworks.

In this regard, the AUC seeks to:

- Strengthen the coordinated actions towards implementation of the Initiative.
- Enhance policy advocacy related to the implementation of the GGWI.
- Engage in resource mobilisation to support Member States in the implementation of the Initiative.
- Provide technical support to Member States.
- Ensure upscaling and the extension of best practices among Member States.
- Provide progress reports to the AU Summit.

The AU Semi-Arid Food Grain Research and Development (AU-SAFGRAD) is one of the specialised technical offices of the AUC, under its Department of ARBE. The AU-SAFGRAD contributes to the achievement of agricultural research, technology transfer and marketing as well as natural resources management by facilitating and coordinating the use of the scientific talents national and regional research institutions to enhance food security, promote sustainable agriculture and development of irrigation agriculture both in rural and urban areas of the semi-arid zones of Africa. The

AU-SAFGRAD's goal is to contribute to sustainable food security of smallholder agricultural producers and others chain actors in the semi-arid zone of Africa by helping build their resilience to crises and shocks.

AFRICAN UNION DEVELOPMENT AGENCY - NEW PARTNERSHIP FOR AFRICA'S DEVELOPMENT

AUDA-NEPAD is the implementing agency of the AU and its mandate is two-fold: to coordinate and execute regional and continental priority projects to promote regional integration towards the accelerated realisation of Agenda 2063; and to strengthen the capacity of AU Member States and regional bodies by advancing knowledge-based advisory support, undertaking resource mobilisation and serving as the continent's technical interface with all Africa's development stakeholders and development partners. Under the area of work "Natural Resources Governance and Food Security", key programmes are being coordinated by AUDA-NEPAD, including AFR100 and the SAWAP in support of the GGWI.

PAN AFRICAN AGENCY FOR THE GREAT GREEN WALL

The PAAGGW was created in 2010 through an AU Summit decision calling on Member States to come together and create a structure to enhance the implementation of the 11 countries of the GGW within the PAAGGW. The role of the PAAGGW is to supervise and coordinate the implementation and monitoring across Member States and to provide technical coordination of all GGW activities in these countries with which it is affiliated. While the AMCEN recommended that the PAAGGW be implemented as a subsidiary body of AUC, clarification of the relationship between the AU and the PAAGGW is still needed (Transparency International, 2023). The PAAGGW works with numerous RECs (often with overlapping membership) whose Member States are participating in the programme. These include the COMESA; CEN-SAD; ECCAS; ECOWAS; and the Intergovernmental Authority on Development (IGAD).

THE REGIONAL ECONOMIC COMMUNITIES

The RECs are regional groupings of African states that have developed individually and have differing roles and structures. Generally, the purpose of the RECs is to facilitate regional economic integration between Member States of their individual regions and through the wider African Economic Community. As mandated through the various treaties and memoranda of understanding, the relationship between the RECs and the AU are closely linked, such that the RECs serve as its building blocks. The RECS are increasingly involved in coordinating AU Member States' interests in wider areas such as peace and security, trade and economic integration, development, and governance. The AU recognises eight RECs, namely AMU; COMESA; CEN-SAD; EAC; ECCAS; ECOWAS; IGAD; and SADC. The working relationship between the AU and the RECs is based on pseudo-subsidiarity principles.

SOUTHERN AFRICAN DEVELOPMENT COMMUNITY GREAT GREEN WALL

SADC is one of the AU's recognised RECs. The SADC GGWI was initiated in 2015 after the UNCCD COP 13 through a request from the SADC Conference. The then Head of SADC Ministers of Environment expressed the need to extend the GGW to Southern

Africa, to address the transboundary environmental and climate challenges unique to the region. In May 2022 the AU announced plans to extend the GGW project to SADC, following which, the SADC GGW Strategy was developed in 2022, and officially launched in 2023. The SADC GGW Strategy centres around the following key pillars: Water for all; Access to Renewable Energy; Productive and Resilient Ecosystems; Climate Resilient Green Infrastructure; Strengthened Agricultural Productivity and Resilient Food Systems; and Transformative Economic and Business Development. The SADC GGW is the first REC-initiated GGW regional effort.

AFRICAN UNION MEMBER STATES

The AU is made up of 55 sovereign Member States. Member States are part of the GGWI by virtue of their membership in the AU. Different Member States have different structural relationships with the GGWI either individually (sometimes referred to as pioneers or standalone), or as part of the PAAGGW or through SADC GGW. Member States such as Algeria, Egypt, Cameroon, The Gambia, and Ghana are considered standalone countries as part of the GGWI by the AUC and in 2023, Ivory Coast and the Federal Republic of Somalia expressed their interest to be part of the Initiative and to become Members of the PAAGGW for the GGWI.

THE GREAT GREEN WALL INITIATIVE STEERING COMMITTEE

The GGWI Steering Committee is comprised of core officers nominated by AUC, PAAGGW, participating countries, and others from the RECs, PAFO, representatives of civil society and others. Donors, intergovernmental organisations, the UNCCD, and international finance institutes are invited as observers. The responsibilities of the Steering Committee are to oversee and validate overall direction and provide guidance on coordination, review main documents, reports, and budgets, and identify constraints and opportunities and make recommendations to the coordination on how to overcome constraints and benefit from opportunities to ensure complementarity and visibility with other initiatives.

AFRICAN DEVELOPMENT BANK

The overarching objective of the AfDB Group is to spur sustainable economic development and social progress in its regional member countries, thus contributing to poverty reduction. The AfDB achieves this objective by mobilising and allocating resources for investment in Member States and providing policy advice and technical assistance to support development efforts. In 2021, the AfDB committed to contributing USD 6.5 billion to the GGW Accelerator through projects in support of key pillars. The Bank's five priorities include providing climate-resilient crops for food security; facilitating access to renewable energy; supporting conservation and the promotion of agro-biodiversity; protecting ecosystems; improving livelihoods and lifting millions of people out of poverty.

Indicative supporting bodies

AFRICAN TECHNICAL INSTITUTIONS

Africa has a wide variety of public technical and research institutions that provide support to the AU, RECS, and Member States. Technical institutions linked to regional bodies include CCARDESA, ASARECA and CORAF (with a focus on agricultural development), AGRHYMET Regional Centre (food security), Central African Forestry

Commission (COMIFAC) (forestry), ICPAC, African Climate Policy Centre (ACPC), and ACMAD, among others. There are also many research bodies established to support Member States, including the National Agricultural Research Institutions (NARIs).

AFRICAN TECHNICAL AND RESEARCH AGENCIES

In addition, non-state actors, networks and programmes provide valuable resources and knowledge to support restoration and land management, including the Africa Forest Forum (AFF), FARA, and the African Climate and Development Initiative (University of Cape Town).

AFRICAN-BASED CIVIL SOCIETY ORGANISATIONS AND NON-GOVERNMENTAL ORGANISATIONS

There are many African-based CSOs and NGOs working at the continental and regional scales to provide technical, financial, implementation, and other support to the GGWI and projects. This includes the African Women's Leadership Network (AWLN), the AU Youth Assembly, SOS-Sahel, TREE AID, One Billion TREES FOR AFRICA, and SOS SAHEL INTERNATIONAL, among others. Implementation of the GGWI is also supported by several national and regional networks and platforms, including, DRYNET, RESADs, ASSOCIATION CARI, DANAYA, SPONG Burkina Faso, and many others.

REGIONAL FARMER ORGANISATIONS

Farmers' organisations and networks of agricultural producers sit at the face of climate impacts and are key in the implementation of good land use practices. This includes representative bodies, such as the PAFO and the five regional farmer organisations (including EAFF, ROPPA (West Africa), SACAU (Southern Africa), PROPAC (Central Africa) and UMNAGRI (North Africa)).

7.1.2 International bodies

The international bodies are highlighted as technical support agencies as well as resource mobilisation agencies and include UN Agencies, International NGOs, and International Research Institutes.

UN Convention to Combat Desertification Accelerator

In 2021, during the One Planet Summit, President Macron of France and other world leaders announced the launch of the GGW Accelerator and pledged USD 14.3 billion in new funding. The GGW Accelerator is housed in the UNCCD Secretariat and coordinated through the PAAGGW with support from UNCCD. The key support areas are to: i) facilitate collaboration among donors and stakeholders involved in the GGWI; and ii) help all actors to better coordinate, monitor, and measure the impact of their actions.

Indicative supporting bodies

UN AGENCIES AND IFIS

UN Agencies collaborate with and support the technical efforts of the GGWI through their international, regional and national offices stemming from their respective mandates and include, for example: UNEP, FAO, and UNDP. Others that are increasingly relevant include the International Organisation on Migration (IOM), HABITAT, UNWOMEN, WFP, and UNICEF.

INTERNATIONAL FINANCE ORGANISATIONS

International finance organisations are key to funding the efforts of the GGWI at numerous scales. This includes entities like the World Bank, the IFAD, AfDB, the GEF and the GCF. There are also other entities such as ENDA Energie (Senegal-based) whose members are finance organisations who engage in the investment of a social economy.

INTERNATIONAL RESEARCH AND TECHNICAL CENTRES

The CGIAR, other international research and national institutes and their cross-institute programmes play an important role in providing research for development support and include organisations such as the Alliance of CIAT and Bioversity; ILRI; AICCRA, the International Institute for Tropical Agriculture (IITA); CIFOR-ICRAF, International Research for Development (IRD, France), the Food Systems, Land Use and Restoration (FOLUR) Impact Program, among many others.

INTERNATIONAL NON-GOVERNMENTAL ORGANISATIONS AND CIVIL SOCIETY ORGANISATIONS

A myriad of international NGOs and CSOs provide support either directly or indirectly to the GGW through many programmes that serve multiple countries and/or have representation on the ground in support of communities. Indicative examples include the IUCN, the WRI, Stockholm Environmental Institute (SEI), Conservation International, World Vision, CRS, Oxfam, CARE, Tree Aid, the Global Evergreening Alliance, Sadar Development and Resilience Institute, among many others.

7.1.3 National, subnational and community levels

Great Green Wall Initiative national level implementation and coordination

The organisational structures and institutional arrangements for the coordination and implementation of the GGW vary per Member State. These can take the form of a GGWI national agency, focal points, or national coalitions. Because the GGW takes an integrated approach to landscape restoration and resilience building, it links across different commitments and goals at continental, national and international levels. It is important that these entities are synergised with the focal points and coordination mechanisms of the Rio Conventions, as well as engaged in cross-ministerial (agriculture, environment, finance, health, energy, gender and youth, trade, development planning, land use planning, decentralisation, etc.) and multi-stakeholder efforts linking public, private, and civil sectors.

In previous sections, the role of national research institutions and NGOs have been described and these are key stakeholders supporting national and local level GGWI efforts.

Subnational and local authorities and leaders

The GGW Strategy highlights the critical importance of engaging local authorities and local leaders enhancing their capacities, financial resources, coordination, monitoring, PLUP and adaptive management at subnational and local levels planning to support the massive scaling of landscape restoration and resilience building. The PAAGGW has outlined priorities in its DPIP for 2021-2030. This serves to improve local ownership, in turn fostering collaboration and reducing social conflicts.

Communities, civil society organisations, local movements, and local champions

For large-scale land restoration, the engagement and leadership of community members, women and youth leaders, civil society movements and champions provide impactful implementation and support. Farmers and herders are the main users and managers of land and natural resources. With the help of their organisations, they are the creators of primary wealth and the champions of food security in arid zones. As such, they are key players in the realisation of the GGWI. Their organisations (unions, federations, umbrella organisations) are well structured at all levels, from local to regional, and are already present across the landscape. Moreover, producer organisations work well with local authorities within the framework of decentralisation policies. The role of these actors must be acknowledged and respected in the GGWI in a transparent, organised and democratic way.

It is therefore recommended that at all levels (local, national, regional, continental), the GGWI more directly supports producers' organisations, and integrates them into natural resource management strategies, and involves them in achieving the objectives of the GGWI. Indeed, these actors are those who guarantee implementation on the ground at the most local level and who are the real agents of transformation.

The national agencies can enter into performance contracts with CSOs for them to support GGWI implementation in a more cost-effective way.

7.1.4 Private sector across scales

The private sector covers a lot of different kinds of entities and can represent international, regional, national, subnational and local level companies, cooperatives, and financial agents. There are companies at multiple scales that are supporting nature-based approaches, land restoration and resilience building practices, value chains and businesses. There are a number of organisations that are

...serving as private sector and entrepreneurial catalysers in support of building land health and restoration. Examples of these include: the WRI Land Accelerator (focused on entrepreneurs), FAGRIB (which has a direct relationship with PAAGGW). Many of these initiatives are promoting small- and medium-sized businesses, such as Aerobic Agroforestry, African Honey Products, NovFeed, Africorps International, Agribusiness Solutions, Ltd, Ceriops, BioLife, Herou Alliance, Horizon Business Ventures, Sahara Sahel Foods, Meat Naturally, FAGRIB, and 1T.org, among many others. There are also larger private sector entities which are undertaking resilience efforts around green infrastructure or green financing. As key strategic and implementing partners, the GGW Strategy will require concrete linkages with different private sector entities at different scales.

7.2 Coordination arrangements

To date, the coordination of the GGWI has proven to be complex and more work needs to focus on strengthening the existing relationships; building synergies with different projects, actors, and partners; and improving the channels of communication. The AU, RECs and Member States will need to meet regularly and consider inclusive institutional arrangements to amplify the common goals and objectives outlined in the GGW Strategy. The current relationships among some of the official entities, the lines of coordination, communications and knowledge sharing, reporting, resource mobilisation, investment and allocations, partnering and implementation are not clear and likely not conducive to meeting the objectives of the GGW Strategy. The indicative relationships among institutions and stakeholders associated with the GGW as discussed during the RSC meeting (November 2023) are shown in Figure 33.

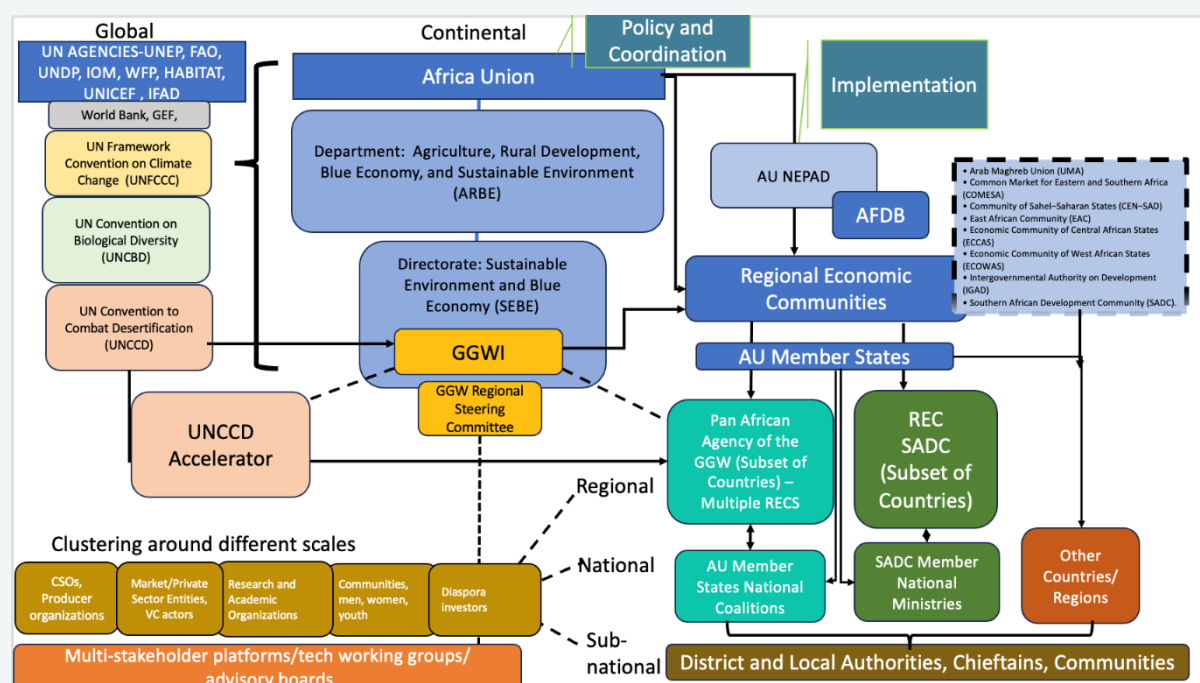


Figure 33: Indicative relationships among institutions and stakeholders of the Great Green Wall.

The GGW Strategy offers an opportunity for these GGW related institutions, agencies, regions and countries to be harmonised and coherent going forward to ensure systems change for Africa. An action area (as identified in section 5.1) is to establish the harmonised policy making, coordination, technical and capacity support, implementation, monitoring and reporting arrangements, roles and responsibilities for the Africa-wide GGWI.

7.3 Criteria to obtain membership to the Great Green Wall Initiative

The criteria for joining the GGWI requires that each Member State aligns with the key objectives and values outlined in the GGWI. The PAAGGWI has set out clear criteria for Member States to follow to be part of the Agency. However, Member States wishing to become part of the AU's GGWI only submit an official request and there are no specific membership criteria that need to be adhered to. Membership to the GGWI is also done on an ad hoc basis for other organisations, including CSOs, the private sector, networks etc. The absence of clear criteria for membership has been a difficult issue, leading to much frustration and to many entities claiming membership without following an agreed process or adhering to certain requirements. The purpose of criteria setting is aimed at making conditions for adherence very clear, inclusive and straightforward from the onset. Entities that wish to be recognised as GGWI partners could go through the criteria and the category to seek partnership with the GGWI. It is important that the principal stakeholders leading the implementation of the GGWI, agree to these criteria and categorisation.

The accession criteria for joining the GGWI would need to be agreed upon by all potential members and strongly aligned with the objectives and values of the GGWI. Below are a proposed set of criteria, broken down by category:

1. Criteria for countries

- Only Member States of the AU are eligible.
- The country should have a significant landscape that is considered as arid, semi-arid or highly degraded and have significant challenges related to land degradation and desertification (current or future).
- The country must demonstrate commitment to SLM, restoration activities, and combating land degradation, desertification, drought, biodiversity loss and climate change.
- The country should agree to the development of an action plan related to landscape restoration and demonstrate the interconnectedness across current climate, biodiversity, agriculture and development plans in line with regional GGWI's objectives.
- The country should have a resource mobilisation plan to support its inter-linked policy frameworks.
- The country should have ratified or endorsed the key GGWI documents and frameworks.
- The country should demonstrate, innovation and impact and progress on resilience.
- The country should demonstrate a commitment to cross-sectoral, multi-stakeholder and multi-scale approaches, imbedding consultation processes in decision-making.

2. International organisations

- The organisation should have a proven track record or mandate aligned with the objectives of the GGWI.
- Preference will be given to organisations that have prior collaborations with Member States, the AU, PAAGGWI, or similar entities.
- Organisations should have relevant operational experience in Africa, including experience with projects or initiatives within the Sahel or in drylands regions.
- Formal endorsement of GGWI's principles and objectives.

3. National and subnational organisations

- Demonstrated history of positive impact at the local level, consistent with GGWI objectives.
- Transparent operations, governance, and financial management.
- Evidence of genuine engagement and partnerships with local communities.
- Official recognition or certification from respective country governments.

4. Networks

- Clear mission and objectives that resonate and align with GGWI goals.
- Represent a diverse group of stakeholders, from grassroots to policy levels.
- Demonstrated track records, impacts or actions taken in line with GGWI objectives.
- Formal endorsement or collaboration with the AU or the PAAGGWI.

5. Private sector actors and business entities

- Formal endorsement or collaboration with the AU or the PAAGGWI.
- Demonstrated ESG criteria. Business entities and Investors should show how they are applying these non-financial factors as part of their analysis process to identify material risks and growth opportunities.
- Demonstrate CSR in line with GGWI's objectives.
- Adherence to ethical business practices, especially in environmentally sensitive sectors.
- Demonstrate financial commitment and willingness to invest in GGWI projects or provide other forms of support.
- A clear statement of support for the principles and objectives of GGWI.

Reference considerations

- Policies and frameworks set by the AU and the PAAGGWI will form the core guidelines.
- For international organisations, adherence to the UN SDGs, especially Goal 15 (Life on Land), can be a benchmark.
- For business entities, alignment with global standards like the UN Global Compact or the Equator Principles can be considered.

- By establishing clear and comprehensive criteria, the GGWI can ensure that all partners and members are dedicated to its mission and contribute positively to its objectives.

Great Green Wall Initiative endorsement principle

Endorsement is a significant step that demonstrates an entity's commitment, alignment, and readiness to engage in the goals and mission of the GGWI. This refers to the formalised act of expressing support, approval, and alignment with the core objectives and principles of the GGWI. The endorsement process might differ depending on the nature of the entity. For countries, it might mean ratifying GGWI-related agreements. For organisations and businesses, it might involve board resolutions, memoranda of understanding, or integrating GGWI principles into corporate strategies. While endorsement is a significant step, it is just the beginning, and it sets the stage for active participation, collaboration, and tangible actions in line with the GGWI.

These proposed set of criteria are designed to ensure that stakeholders, potential members or participants not only share the overarching goals of the GGWI but also actively contribute towards achieving them. The specifics of the criteria often depend on the nature and objectives of the Initiative, but the general themes revolve around alignment with the Initiative's principles, demonstrable commitment, and regular reporting or validation.

Insights on "Endorsement of Great Green Wall Initiative Principles":

1. Nature of endorsement

- Endorsement can come in various forms, including official declarations, signed letters of offer and acceptance, memoranda of understanding, resolutions, public statements, or other forms of official documentation.

2. Reflecting commitment and alignment with GGWI vision and mission

- By endorsing GGWI's principles, entities signify their deep-seated commitment to combat desertification, land degradation, and the resulting socio-economic challenges in the Sahel and other dryland regions, ensure that their strategies, actions, and values align with GGWI's vision of creating a mosaic of green, resilient, and productive landscapes.

3. Accountability mechanism

- Once endorsed, entities will have a moral and, in some cases, formal obligation to act in line with the endorsed principles. This provides a layer of accountability to stakeholders and affected communities.

4. Credibility and reputation

- Formal endorsement lends credibility to entities in the eyes of their stakeholders, the public, and potential donors or partners. It shows proactive involvement in a cause of continental significance.

5. Shared platform and resources

- Endorsement can lead to entities sharing platforms, resources, best practices, and knowledge to synergise efforts and make the collective fight against desertification more effective.

6. Review and renewal

- Endorsement is not a one-time event. As GGWI activities evolve, its principles will be updated or expanded. Periodic review and renewal of endorsement will be necessary to reflect the current objectives and ensure continued alignment.

7. Broader implications

- Endorsement has broader implications beyond GGWI. It signifies a commitment to broader continental global goals, such as Agenda 2063 and the UN SDGs, especially those related to life on land, climate action, and reduced inequalities.

8. Endorsement as a starting point

- Endorsing GGWI principles is a pledge to actively engage, collaborate, and contribute towards building a more resilient and sustainable future for Africa's drylands.

Examples of criteria settings

Various international programmes and initiatives have established criteria for potential members or participants. These criteria serve as a blueprint to ensure alignment, commitment, and effective contribution towards the shared goals. Here are examples from some well-known initiatives:

1. United Nations Global Compact (UNGC)

- Commitment to the 10 principles of the UNGC related to human rights, labour, environment, and anti-corruption.
- Willingness to act in support of UN goals.
- Preparedness to communicate progress on an annual basis.

2. RE100 (a global corporate leadership initiative led by The Climate Group in partnership with CDP)

- Making a public commitment to 100% renewable electricity.

- Reporting annually on electricity consumption and renewable electricity sourcing.
- Achieving 100% renewable electricity within a defined timeline.

3. The Forest Stewardship Council (FSC) Certification

- Adherence of forestry enterprises and organisations to FSC's principles and criteria for forest management.
- Passing third-party certification assessments.
- Commitment to periodic audits to maintain certification status.

4. The Roundtable on Sustainable Palm Oil (RSPO)

- Companies and growers commit to producing or sourcing sustainable palm oil.
- Compliance with the RSPO's principles and criteria.
- Undergoing third-party audits.

5. C40 Cities Climate Leadership Group

- A clear mandate to cities for tackling climate change.
- Population and/or strategic importance thresholds.
- Commitment to certain actions, including data sharing on greenhouse gas emissions.

1. Bonsucro (a global non-profit initiative dedicated to reducing the environmental and social impacts of sugar production)

- Producers and companies.
- Adherence to the Bonsucro Production Standard and Code of Conduct.
- Submitting to third-party verification.

8. The Gold Standard (for carbon markets and climate projects) Projects

- Adherence to rigorous criteria for sustainable development.
- Undergoing third-party validation and verification.

7.4 Criteria for new projects contributing to the Great Green Wall Initiative

This GGW Strategy offers an opportunity to ensure that projects developed by bilateral and multi-lateral donors, philanthropic organisations, intergovernmental organisations, international financing institutes, funding facilities as well as national governments among others to ensure that new projects and programmes are contributing to the priorities and objectives of the GGWI. The AU GGWI coordinating body or steering committee can develop a check list for proposal and project development that spells out how the project or programme, depending on its focus of the effort, contributes to: cross-learning, capacity development and local level scaling of land restoration and resilience building in the country(ies); monitoring, evaluation, learning, accountability and adaptive management in alignment with GGWI; the harmonised approaches; the integration of nature-based practices and



approaches; the support to lives and livelihoods of women and youth; the integration of practice, policy and science in support of landscape restoration; among others.

CHAPTER 8. INITIATING THE GREAT GREEN WALL STRATEGY

To prepare for the robust implementation of the GGW Strategy, this chapter outlines the critical activities during **Year 1** (2024) for solidifying effective inclusivity and responsibilities within the steering committee, coordination among the GGW regional entities, sensitisation and communications at different scales and mobilisation of resources to support regional, country and community level plans. These efforts will build upon the lessons learned, suggested actions and recommendations described in Chapters 4, 5, 6, and 7.

Activity	Time Frame	Responsible Entity	Indicative Cost Items	Estimated Cost USD
Completion and Adoption of Strategy				
Submit Strategy document to AU 44th Executive Council and 37th Ordinary Summit.	Meeting Dates: February 14-18, 2024	SEBE Directorate of the AUC	<ul style="list-style-type: none"> Finalise Strategy Document Translate into AU languages Develop Presentation to Executive Council and Ordinary Summit 	Costs covered by the Catholic Relief Services (CRS) and AU
Virtual launch event of the value of the continental strategy with Regional Economic Commissions, PAAGGW, SADC GGW and North Africa GGW and GGW Regional Steering Committee (RSC).	March, 2024	SEBE Directorate AU GGW Coordinator	<ul style="list-style-type: none"> Event Design Presentation and translation Technical and process facilitation Simultaneous interpretation 	7500
Enhance Inclusivity and Responsibilities of the GGW Regional Steering Committee				
Virtual meeting of the GGW RSC to Review Stakeholder and Regional membership and Update the Terms	April-May 2024	SEBE Directorate AU GGW Coordinator	<ul style="list-style-type: none"> Event Design Draft Revision of Terms of Reference Presentation and translation 	9500

Activity	Time Frame	Responsible Entity	Indicative Cost Items	Estimated Cost USD
<p>of Reference of the expanded GGW Steering Committee.</p> <p>Ensure that the committee represents diversity of implementation actors (e.g. nominations for representatives of Women, Youth, Indigenous Peoples, Local Authorities, Community Leadership, Conflict Management Specialist, RECs, etc.).</p> <p>Revise the Terms of Reference to reflect the duties of the GGW Steering Committee with regard to the implementation of the GGW Strategy.</p> <p>Finalise revision of membership and Terms of Reference.</p>			<ul style="list-style-type: none"> • Technical and process facilitation and note taking • Simultaneous interpretation • Revised Terms of Reference 	
Develop and Agree Upon AU GGW Coordination Mechanism				
<p>Review and Refine Suggested Coordination Approach.</p> <p>Carry out three 1-day face-to-face regional dialogue meetings among</p>	April-July 2024	SEBE Directorate AU GGW Coordinator Regional Economic Commissions	<ul style="list-style-type: none"> • Event Design • Draft Suggested Coordination Mechanism • Presentation and translation • Transport, Lodging, Food, DSA 	65000

Activity	Time Frame	Responsible Entity	Indicative Cost Items	Estimated Cost USD
RECs, Agencies, AU, and RSC: <ul style="list-style-type: none"> • ECOWAS, IGAD, CEN-SAD, EAC and PAAGGW • SADC, EAC and SADC GGW • Arab Maghreb Union (UMA) and North Africa GGW 		PAAGGW, SADC GGW, North Africa GGW, RSC	<ul style="list-style-type: none"> • Facilitation and Note Taking • Simultaneous interpretation • Revised Coordination Mechanism 	
Host a 3-day 9 th Regional Steering Committee Meeting to finalise and agree upon the coordination mechanism; and review revised RSC TOR and Biennial Scorecard and Key Performance Indicators (KPIs) (see below).	November - December 2024	SEBE Directorate AU GGW Coordinator	<ul style="list-style-type: none"> • Event Design • Draft Coordination Mechanism • Presentation and translation • Transport, Lodging and Food • Facilitation and Note Taking • Simultaneous interpretation • Final Revised Coordination Mechanism 	90000
Develop and Agree Upon Biennial Review Process and Progress Scorecard				
Map existing indicators being measured from different GGWs. Review Africa based multi-scale complementary scorecards for economic, social, environmental progress (e.g. CAADP, NGO and	April-July 2024	SEBE Directorate AU GGW Coordinator Regional Economic Commissions PAAGGW, SADC GGW, North Africa GGW, RSC	<ul style="list-style-type: none"> • Review exercise and draft of Scorecard/KPIs • Translation • Consultative virtual review process • Draft for final review 	10000

Activity	Time Frame	Responsible Entity	Indicative Cost Items	Estimated Cost USD
<p>researcher, UN and Multi-lateral environmental agreements, NDCs, Apps, etc.) scorecards to elaborate GGW scorecards/ KPIs to be used for the biennial review assessments.</p> <p>Draft suggested score card/KPIs guide for different scales.</p> <p>Host a virtual meeting with RSC members, RECs and leads of regional GGW groups to review and finalise KPIs, Scorecard and processes for measurement (to be combined with the meeting above).</p>				
Develop and Carry Out Communication and Sensitisation Approach				
Develop Communications Strategy (considering co-development with KAGGWA project efforts).	April-June 2024	SEBE Directorate AU GGW Coordinator	<ul style="list-style-type: none"> • Consultancy for communications strategy • Translation 	12000
Create communications sensitisation, outreach, and domestication materials for RECs,	April-July 2024	SEBE Directorate AU GGW Coordinator RECS RSC	<ul style="list-style-type: none"> • Consultancy for development of materials for regional and national outreach, value of strategy, 	50000

Activity	Time Frame	Responsible Entity	Indicative Cost Items	Estimated Cost USD
Regional GGW Agencies, and national, subnational and community stakeholders.		Regional GGW Groups	<p>domestication process, roles and responsibilities of different stakeholders</p> <ul style="list-style-type: none"> • Design local level awareness campaign • Translation 	
Mapping of implementation partners and projects by region (GEA, CRS, Oxfam, Tree Aid, CARE, etc.).	April-July 2024	AU GGW Coordinator	Consultancy	15000
RECs with regional GGW groups spearhead regional meetings for sensitisation at regional, national and subnational and community levels in alignment with continental and regional vision. This will include the development of an expert group on the Strategy within each of the RECs to be responsible for domestication of the Strategy.	September 2024	SEBE Directorate AU GGW Coordinator RECS RSC Regional GGW Groups	<ul style="list-style-type: none"> • Meeting design • Transport, accommodation, food • Facilitation • Interpretation • Reporting 	10000
Carry out awareness raising campaign for local governments and community leadership to advance community restoration	October 2024	SEBE Directorate AU GGW Coordinator RECS RSC Regional GGW Groups	<ul style="list-style-type: none"> • Review and develop materials for community leadership in restoration with concrete value addition and capacity development 	120000

Activity	Time Frame	Responsible Entity	Indicative Cost Items	Estimated Cost USD
<p>leadership with existing projects and NGO and civil society actors and partners. This can be linked to planned events within SADC GGW, PAAGGW, and North Africa.</p> <p>Further awareness raising can take place during Global and Regional forums (e.g. Africa Climate Week, Africa Environment and Wangari Maathai Day, the UNCCD, UNFCCC and UN CBD COPs) for visibility and advocacy.</p>		<p>NGO and Civil Society Partners Local Government Units</p>	<p>messaging for local implementation</p> <ul style="list-style-type: none"> • Posters/flyers • Translation • Support to local level events 	
<p>Participation in the Regional and Global forums to sensitise stakeholders on the new Strategy to ease uptake. These includes, participation on UNCCD COP 16, UNFCCC COP 29 and CBD COP 16.</p>	<p>As per the dates</p>	<p>Member States, RECS, CSOs,</p>	<ul style="list-style-type: none"> • Pre COPs Planning meetings • Transport , Food, Lodging, DSA 	<p>150000</p>
<p>Organization of a Pan African Ministerial committee on the new strategy, bringing together Ministers from all the GGWI Member</p>	<p>TBD adjacent to the ANCEM or RSC</p>	<p>Ministers from all GGWI Member States, RECS, National Focal Points</p>	<ul style="list-style-type: none"> • Preparation • Transport, lodging, food DSA 	<p>150000</p>

Activity	Time Frame	Responsible Entity	Indicative Cost Items	Estimated Cost USD
State. The objective is to establish an African wide GGWI Ministerial.		and Directors		
Resource Mobilisation				
Host Investment and Implementation Forum to bring together investors and implementing partners.	June-September 2024	SEBE Directorate AU GGW Coordinator RECS RSC Regional GGW Groups Investment and implementation Stakeholders	<ul style="list-style-type: none"> • Plan for interacting with business actors, private sector, donor and investment community • Development/updating of regional investment plans for GGW groups/RECs and for national actions • Transportation, accommodation, food • Facilitation and note taking • Interpretation • Report of event 	175000
Enhancing the engagements of the Director and Commissioner in providing high level support for resources mobilisation and advocacy	January - December 2024	DARBE Commissioner, Director, and Coordinator	<ul style="list-style-type: none"> • Logistical support • DSA • Transportation • Interpretation 	80000

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ANNEX 1.

AFRICAN UNION GREAT GREEN WALL DECISIONS

Assembly/AU/Dec.137 (VIII), 2007

Decision on the Implementation of the Green Wall for the Sahara Initiative
Décision sur la mise en œuvre de l'Initiative Muraille Verte du Sahara

Assembly/AU/Dec.317(XV), 2010

Decision on the report of Heads of State and Government Orientation Committee on NEPAD
Décision sur le rapport du Président du Comité d'Orientation des Chefs d'Etat et de Gouvernement sur le NEPAD

Assembly/AU/Dec.376(XVII), 2011

Decision on the implementation of the Great Green Wall Program
Décision sur la mise en œuvre du Programme Grande Muraille Verte
EX.CL/465(XIV), 2009
Plan d'action sur l'Initiative « La Grande Muraille Verte pour le Sahara et le Sahel »
EX.CL/933(XXVIII), 2016

Report of the first ordinary session of the STC on Agriculture, Rural Development, Water and Environment

Rapport de la première session ordinaire du CTS sur l'agriculture, le développement rural, l'eau et l'environnement
EX.CL/994(XXX), 2017

Annual report of the chairperson of the African Union Commission for the period January to December 2016

Rapport annuel de la Présidente de la Commission de l'Union Africaine pour la période de janvier à décembre 2016
EX.CL/1041(XXXII), 2018

Report of the second ordinary session of the Specialized Technical Committee (STC) on Agriculture, Rural Development, Water and Environment; 02 - 06 October 2017, Addis Ababa, Ethiopia

Rapport de la deuxième session ordinaire du Comité Technique Spécialisé sur l'agriculture, le développement rural, l'eau et l'environnement, 2-6 octobre 2017, Addis Ababa, Ethiopie

Executive Council, Thirty-Third Ordinary Session, 28 – 29 June 2018, Nouakchott, Mauritania

Introductory Note of the Chairperson of the African Union Commission
Note introductive du Président de la Commission de l'Union Africaine

UNCCD, 2021 [Infographic on the Great Green Wall Accelerator](#)

[Infographique de l'Accélérateur de la Grande Muraille Verte](#)

[Regional Harmonized Strategy for the implementation of the Great Green Wall for the Sahara and the Sahel](#) / [La Stratégie Régionale Harmonisée pour la mise en œuvre de la Grande Muraille Verte pour le Sahara et le Sahel](#)

Assembly/AU/Dec.137 (VIII) 2007: Decision on the implementation of the Great Green Wall for the Sahara Initiative

The Assembly

1. TAKES NOTE of the Report of the Commission on the launching of the Green Wall for the Sahara Initiative;
2. ENDORSES the Green Wall for the Sahara Initiative;
3. CALLS UPON the Commission to fast-track implementation of the Green Wall Initiative through development of a Master Plan in collaboration with the concerned Member States, RECs, Private Sector, CSOs and NGOs;
4. CALLS UPON Member States and RECs to put in place necessary institutional arrangements that are required at national, sub-regional and regional levels to guide the programme implementation process;
5. MANDATES the Commission to facilitate and coordinate the implementation of the Initiative by Member States and RECs;
6. CALLS UPON the development partners to support the affected Member States, RECs and the Commission to ensure the effective implementation of the Initiative at national, regional and continental levels.

EX.CL/Dec.465 (XIV) 2009: Decision on the Plan of Action for the Implementation of the Great Green Wall for the Sahara and Sahel Initiative – Doc.EX.CL/465

The Executive Council

1. TAKES NOTE of the Plan of Action for the Implementation of the Great Green Wall for the Sahara and Sahel Initiative;
2. ENDORSES the Plan of Action including the indicative budget for the implementation of the Great Green Wall for the Sahara and Sahel Initiative;
3. REQUESTS the Commission to coordinate and facilitate the implementation of the Plan of Action for the Great Green Wall for the Sahara and Sahel Initiative in collaboration with the concerned Member States and RECs;
4. CALLS UPON the concerned Member States and their respective RECs to put in place the necessary financial and institutional arrangements, when necessary, that are required at national, sub-regional and regional levels to guide the programme implementation process;
5. REQUESTS the Commission while implementing the Plan of Action, to avoid duplication and make use of the existing initiatives and instruments at sub regional, regional and continental levels;
6. CALLS UPON development partners to support the concerned Member States, RECs and the Commission to ensure the effective implementation of the Plan of Action at national, regional and continental levels.

Doc. EX. CL/656 (XIX) 2011 – Malabo: Decision on the implementation of the Great Green Wall Program

The Assembly,

1. RECALLS its Decision Assembly/AU/DEC.137 (VIII) adopted at its Eighth Ordinary Session in Addis Ababa, Ethiopia in January 2007 approving the Great Green Wall Initiative, and Executive Council Decision EX.CL/Dec.465 (XIV) adopted in Addis Ababa, Ethiopia in January 2009 endorsing the Action Plan of the Great Green Wall Initiative (GGWI);
2. STRESSES the need for coordination of efforts between the Commission, the implementation structures and the Member States of the Great Green Wall project;
3. COMMENDS the efforts of Member States concerned in the implementation of the GGW, including the establishment of an Executive Agency of the project located in N'djamena;
4. REQUESTS the Commission to play its coordinating role in mobilising resources for the GGW and provide the necessary support to the Executing Agency of the GGW;
5. ALSO REQUESTS the Commission and the Agency to monitor, evaluate the project and report regularly to the Assembly through the Executive Council.

2012 – African Ministerial Conference on the Environment - Decision 14/7: The Great Green Wall for the Sahara and the Sahel Initiative

We, African ministers of the environment,

Having met in Arusha, United Republic of Tanzania, from 12 to 14 September 2012 at the fourteenth session of the AMCEN,

Recognising the efforts made by the AUC, the PAAGGW and Member States to operationalise the Great Green Wall for the Sahara and the Sahel Initiative, which led to its validation at the experts meeting held in Ouagadougou from 27 to 29 August 2012,

Considering the Great Green Wall for the Sahara and the Sahel Initiative as an African flagship programme to address issues related to desertification, land degradation, drought, climate change and loss of biodiversity in the Sahara-Sahel zone in Africa,

Calling for urgent action to reverse land degradation and to achieve a land-degradation-neutral world in the context of sustainable development,

Considering the commitment made at the United Nations Conference on Sustainable Development (Rio +20) to take coordinated action nationally, regionally and internationally to monitor globally land degradation and restore degraded lands in arid, semi-arid and dry humid areas,

Recalling the Bamako declaration of the thirteenth AMCEN, in which African ministers of the environment called for a strategic partnership between the Secretariat of the UNCCD in Those Countries Experiencing Serious Drought and/or Desertification, particularly in Africa, and the AMCEN to foster the implementation of the UNCCD 10-year strategy in Africa,

Acknowledging the efforts of the partners in supporting the elaboration of national strategies and action plans to enhance the implementation of the Great Green Wall for the Sahara and the Sahel Initiative,

Concerned with the need for improving the institutional governance and the coordination of the Great Green Wall for the Sahara and the Sahel Initiative by the AUC and the 8 PAAGGW, as stressed in the decision 10 of the AU at its seventeenth session, held in Malabo in June 2011,

Taking note with appreciation of the conclusions of the regional experts meeting held in Ouagadougou from 27 to 29 August 2012, at which progress made in the implementation of the Initiative was reviewed,

Decide:

1. To consider the Great Green Wall for the Sahara and the Sahel Initiative, in the framework of the Environmental Action Plan of the New Partnership for Africa's Development (NEPAD), as a flagship programme that represents the African contribution to the achievement of a land-degradation-neutral world in the context of sustainable development, as recommended by United Nations Conference on Sustainable Development;
2. To adopt the regional harmonised Strategy for the implementation of the Great Green Wall for the Sahara and the Sahel Initiative as a strategy which has been fully aligned with the UNCCD 10-year strategic plan and framework to enhance the implementation of the Convention (2008–2018);
3. To request development partners to align their support for the implementation of the Great Green Wall for the Sahara and the Sahel Initiative with the priorities identified by countries in their national action plans;
4. To agree to the transformation of the Pan African Agency of the Great Green Wall for the Sahara and the Sahel into a specialised agency of the AUC under the Department of Rural Economy and Agriculture.

ANNEX 2. CONTRIBUTORS TO AND METHODOLOGY FOR DEVELOPING THE GREAT GREEN WALL STRATEGY

Contributors	Title/Affiliation
Oversight	
Harsan Nyambe	Director of Blue Economy and Sustainable Environment at the African Union
Leah Wanambwa Naess	Senior Policy Officer, Directorate of Sustainable Environment and Blue Economy at AUC
Elvis Paul Tangem	Coordinator, GGWI
GGW Strategy Development Team	
Constance Neely	Lead Consultant, Co-Founder and Systems Catalyst, SHARED Decision Hub,
Romy Chevallier	Senior Consultant, Policy, SHARED Decision Hub
Sabrina Trautman	Co-Founder, Systems Scientist, SHARED Decision Hub
François Tapsoba	Lead Consultant, initial GGW Strategy draft
Youssef Brahim	Chair, Desertnet International
Technical and Process Contributions	
Sibongili Mavembela	Senior Programme Officer: Environment and Climate Change at Southern African Development Community (SADC)
Birguy Lamizana	Senior Programme Director, Global Mechanisms and Coordinator, UNCCD Accelerator
Gilles Amadou Ouedraogo	Programme Management Officer, UNCCD Accelerator
Sarah Toumi	Monitoring Officer, UNCCD Accelerator
Abakar Zougoulou	Technical Director, Pan African Agency of the Great Green Wall
Adamou Bouhari	UNEP- GEF, Pan African Agency of the Great Green Wall

Marcelin Sanou	Chief of Planning, PAAGGW
Sakhoudia Thiam	Expert on Sustainable Management of Natural Resources, PAAGGW
Mamadou Moussa Diakhité	Team Leader, Sustainable Land and Water Management, AUDA-NEPAD, AFR100
Foday Bojang	Country Director, CorpsAfrica, The Gambia
Almami Damompha	Policy Officer for Forestry and Land Management, AU
Lori Pearson	Senior Policy Advisor, Catholic Relief Services
Olaf Westerman	Director for Climate Change, CRS
Patrick Worms	Senior Policy Consultant, CIFOR ICRAF
Mieke Bourne	Programme Manager, Regreening Africa
Dennis Garrity	Board Chair, Global Evergreening Alliance
Arthur Getz Escudero	Senior Consultant, Urban Planet
Alan Channer	Senior Consultant, Environmental Restoration and Peace Building
Marie Parramon Gurney	CEO and Chief Transformative Impact Officer at SKULTCHA
Leigh Winowiecki	Senior Soil Systems Scientist, CIFOR-ICRAF
Tor Vågen	Senior Scientist, Head of GeoScience Laboratory
Wole Fatunbi	Agricultural Director of Research and Innovation, FARA
Liesl Wiese Rozanov	International Consultant - Agricultural Science and Policy
Geoff Heinrich	Senior Technical Advisor for Agriculture and Livelihoods. Catholic Relief Services
Jessica Dittmar	Regional Technical Advisor, Agriculture and Livelihoods and Catholic Relief Services
Liemo Likoti	Technical Advisor, Land Restoration Platform, Catholic Relief Services -

Nick Sharpe	Director of Global Projects, Savory Institute
Emilie Smith Dumont	Senior Consultant, SHARED Team
Gloria Adeyiga	Gender Specialist, CIFOR ICRAF
Ed Walters	Technical Advisory, Agriculture and Markets, Catholic Relief Services
Pauline Kiamba	Technical Advisor, Climate Change, Catholic Relief Services
Nqabayezwe Mowo	Programme Manager, Catholic Relief Services
Elias Nkiaka	Leverhulme Research Fellow in Hydrology and Water Security, Department of Geography, University of Sheffield
Fidaa Haddad	Secretary of the Working Group of the Committee on Forestry on Dryland Forests and Agrosilvopastoral Systems
Fiona Flintan	Senior Scientist Rangelands and Pastoralism, International Livestock Research Institute
Bob Winterbottom	Fellow, Global Evergreening Alliance
Christian Reij	Fellow, Global Evergreening Alliance
Irene Ojuok	Ambassador to the Global Evergreening Alliance
Susan Chomba	Director, Vital Landscapes, WRI Africa
Gray Tappan	Scientist Emeritus, USGS
Mawa Karambiri	Policy and technical engagement specialist for the Sahel, CIFOR-ICRAF
Brice Böhmer	Climate and Environment Director, Transparency International
Fritjof Boerstler	Senior National Resources Officer in FAO's Forestry Division, Global Coordinator of the GEF-7 Impact Programme on Dryland Sustainable Landscapes (DSL-IP)
Patrice Sawadogo	Senior Forestry Specialist, East and Southern Africa Region World Bank
Moctar Sacande	International Project Coordinator, Action Against Desertification and FAO GGW Focal Point
Philip Thornton	Research and Innovation Strategist, Clim-eat

Arona Soumare	Principal climate change and green growth officer, African Development Bank (AFDB)
Roeland Kindt	Senior Ecologist, Tree Productivity and Diversity, CIFOR-ICRAF
Eleanor Milne	Senior Consultant, Carbon Benefits Project and WOCAT
Tatenda Lemann	Senior Research Scientist and WOCAT Executive Team member, Centre for Development and Environment, University of Bern
Natalie Topa	Global Adviser for Regenerative Resilience Resilience and Food Systems Service Programme (PROR), World Food Programme (WFP)
Volli Carucci	Director, Resilience and Food Systems Service, World Food Programme
Todd Rosenstock	Principle Scientist, Climate Action, The Alliance of Bioversity International and International Center for Tropical Agriculture
Chris Trisos	Director, Climate Risk Lab in the African Climate and Development Initiative, University of Cape Town
Dr Nicola Stevens	Trapnell Fellow in African Environments University of Oxford
Alphonse Munyao	Lead, Africa Youth Assembly and YAB Pioneer, Representative Partnership4Change
Ruslan Lavrinenko	CEO ZANDER AGRO and pioneer of GGWI Service Centre, Germany
Patrice Sawadogo	Senior Forestry Specialist, East and Southern Africa Region World Bank
Tabi Joda	Expert in Climate Security, Local Communities Ecosystems Resilience, Disaster Risk Reduction and Adaptation, Agroforestry and Ambassador at Africa Union Great Green Wall
Henning Fath	Co -Initiator, GGWI Service Centre, Germany
Sara Scherr	President and CEO, Ecoagriculture Partners
Janie Rioux	Senior Climate Finance Specialist, IFAD
Jean Augustin Tsafack Djiague	CEO FAGRIB Washington
Maurice Tange	Business Development Officer, FAGRIB
Lennart Woltering	Scaling Innovations Expert OneCGIAR (CIMMYT/GIZ)

Peter Zoutewelle	Project Manager, CARE Netherlands
Paul Demeritt	Water and Ecosystems Programme Officer, CARE US
Aruna Compaore	C3 Sahel
Emmanuel Seck	Head of Programmes, Enda Energie
Moussa Halilou	Founder and Managing Director ICON, Ecole Polytechnique, Yaounde
Adama Doulkom	GGW Focal Person, Burkina Faso
Maisharou Abdou	GGW Focal person, Niger
Damas Poda	Forest/NWFP Expert, FAO, Burkina Faso
Pierre Omer Ouedraogo	Programme Officer, SPONG
Philippe Zoungrana	Zootechnologist and Management Planner, CILSS
Patrice Burger	Founding President of Centre d'Actions et Réalisations Internationales (CARI)
Manon Albagnac	Agronomist CARI
Ibrahima Semega	Focal Point ReSaD
Goundo Kouyate Sissoko	President, REFEDE Mali
Jean Luc Chotte	Senior Scientist, IRD, has been appointed Chairman of the French Scientific Committee on Desertification
Alexandre Ickowicz	Head of the mixed research unit SELMET, Senior Scientist in ruminant nutrition and rangeland management. CSFD
Ahmed Elmekas	Coordinator, AU-SAFGRAD
Mamadou Koutou	Senior Research and Programme Officer, AU-SAFGRAD
Jean Marc Garreau	Director of Knowledge Management, SOS Sahel
Rémi Hemeryck	CEO, SOS Sahel
Saliha Fortas	UNCCD Focal Person, Ministry of Agriculture and Rural Development Algeria
Consultation – Member States and RECS Virtual Validation Meeting	Facilitated 4-hour session with Representatives of Member States, RECs and stakeholders

**Great Green Wall Strategy for Coordination Virtual Validation Event
Attendees, October 31, 2023**

Name	Affiliation
Tabi Joda	1 Billion Trees
Jimmy Dalemet	AU
Marie Parramon Gurney	SHARED Decision Hub
Daud Kachamba	Africa Forest Forum
Vusimuzi JR Shawnee	
Victor Squires	University of New England, Australia
Honoré Tabuna	ECCAS Commissioner Environment, Natural Resources, Agriculture and Rural Development Department
Kodou Choukou Tidjani	Ministry of Environment, Chad
Adamou Bouhari	UNEP
Quirico Migheli	UNISS
Jibril Semakura Owomu	Million Trees International
Mailes Zulu	WeCaN
Mawa Karambiri	CIFOR ICRAF
Eduardo Baixo	Ministry of Coordination of Environmental Affairs, Mozambique
Natalia Natasha	
Georges Mba Asseko	Head, Blue Economy Division, African Union Commission
Roch Pananditrigri	
Youssef Brahim	Desertnet International
Niguse Hagazi	CIFOR ICRAF
Collin Mkhabela	FunderTech Eswatini

Jean Augustin Tsafack Djiague	Futures Agribusiness
Anni Schulz	Tree Aid
Jean Mar Garreau	SOS Sahel
Tedlaye Forsido	AUDA NEPAD
Mieke Bourne	Regreening Africa, CIFOR-ICRAF
Bernard Terris Danaya	CARI
Romy Chevalier	SHARED Decision Hub
Kornelia lipinge	SACREEE
Constance Neely	SHARED Decision Hub
Sabrina Trautman	SHARED Decision Hub
Raoul Kouam	Climate Change and Climate Services, ECOWAS
Dr. Sakhoudia Thiam	PAAGGW
Sipho Shiba	Planning Department Eswatini
Simon Ravelli	Transparency International
Ambassador Amdou Diallo	NEPAD
Melisa Mavhenge	IUCN
Rapule Pule	Water Resources Specialist at ORASECOM, South Africa
Palesa Leoaneka	Ministry of Forest, Range and Soil Conservation, Lesotho
Niclas Gottmann	Policy Officer, EU
Malillane Lillane	Agro Foods, Maseru, Lesotho
Abrade	Algeria
Habib Hali	UMA
Ange Mboneye	SOS SAHEL
Absalom Sakala,	Ministry of Water Development, Zambia
Alidor Lunda	Ministry of Finance DRC

Luck Dlamini	WWF
Anne Therese Tansi	Youth Climate Activist, Cameroon
Churchill Mkwalo	Principal Geographer at National Dept. of Agriculture, Forestry and Fisheries, South Africa
Marcelin Sanou	Chief of Planning APMV
Babtunde Ayanda	
Philipon Kamanga	
Rachel Warnock	Friedrich-Alexander-Universität
Marc Parfondry	FAO
Asiphe Radebe	DAFF, South Africa
Azwinaki Muingi	
Christophe Brossé	Directeur général chez CARI ONG
Ntebaleng Thapelo	Department of Environmental Affairs, Botswana
Machine Tshepape	Department of Environmental Affairs, South Africa
Lindelani Maraganedzha	Founder and Director at Delta Racklers (Pty)Ltd., Co-founder and Executive Secretary at Universal Greening Organisation
Papa Libasse Dieng	Financier-Comptable et Spécialiste en Passation des Marchés publics, Partenariats public-privé (PPP), Senegal
Phetogo Sell	
Elvis Paul Tangem	GGWI
Arelie Bres	TMG
Mateo Lalumbe	
Alenyi Innocent	OnuStrategic Planning Officer/ Monitoring and Evaluation Specialist
Mahamat Zougoulou Abakar	PAAGGW
Raoul Kouame	Programme Officer, Climate Change & Climate Services, ECOWAS

Patrick Bhekisisa Dlamini	Ministry of Agriculture, Eswatini
Melisa Mavhenge	Project Officer, Climate Change, IUCN
Asiphe Radebe	DAFF, South Africa
Ntebaleng Thape	Natural Resources Officer, Department of Environmental Affairs, Botswana
Muchuene Tshep	
Phetogo Selelo-	EIA Projects, Botswana
Maseo Lalumbe	Department of Forestry and Fisheries, South Africa
Mayando Kany	
Agostinho Chicaia	Assistant Spécial auprès de la Commissaire en Charge de l'Agriculture, Développement Rural, Economie Bleue et Environnement Durable de la Commission de l' Union Africaine
Pamela Levra	Policy Officer, Climate Change AUC
Yelly Diawara	Banc D'Arguin and Coastal and Marine Biodiversity Trust Fund Limited
Regina Mulanga	
Asteria Markus	Gender and Diversity Management, SOLTRAIN, Windhoek
Ruslan Lavrinenko	Steering Committee Member, GGW
Alidor Lunda	Ministry of Finance, Congo
Patrick Bhehisisa	
Abdulhamad Tah	Chef de project étude technique Algeria
Colani Mkhabela	Ministry of Agriculture, Eswatini
Bernard Terris	
Seloinyana Selelo	Coordinator AfCFTA, Botswana
Mousa Sidibe	Disaster Risk management Specialist GFDRR, WBG
Emmanuel Seck	ENDA
Daud Kachamba	African Forest Forum

Moussa Leko	Principle Program Officer Forestry, ECOWAS
Wase Gubena	Senior Pastoral Program Advisor, Welthungerhilfe
Tedlaye Forsido	AUDA NEPAD
Tillem Burlace	1t.org
Carline Gelderblom	Rabobank
Doris Mutta	AFF
Palesa Leoaneka	Lesotho
Ratiba Arbadi	Directorate of Forests, Algeria

**Great Green Wall Steering Committee
Attendees, November 8-9, 2023, Addis Ababa, Ethiopia**

Name	Affiliation
Nabasnogo Roch Pananditgri	GGW Agency -Burkina Faso
Kodou Choukou Tidjani	GGW Agency - Chad
Ibrahim Abdou Malik	GGW Agency- Niger
Toumany Diallo	GGW Agency - Mali
Houssein Rirache	GGW Agency - Djibouti
Tayseer Mohamed	GGW Agency - Sudan
Yusuf Maina	GGW Agency - Nigeria
Dr Alenyi Innocent Onu	NAGGW
Abakar Zougoulou	PAGGW
Dr Sakhoudia Thiam	PAGGW
Marcelin SANOU	PAGGW
Jimmy Dalemet	AUC
Dr Elvis Tangem	AUC
M. Maxime Thibon	IFAD
H.E Mrs Leyla Traoré	EIB
Ms Fatima Mousass	AFDB
M. Arona Soumare	AFDB
M. Bernard CRABBE	European Commission
M. Niclas Gottmann	European Commission
M. Simone Anzerine	EU Green Facility
Dr Tabi Joda	One Billion Trees for Africa

Moctar Sacande	FAO
Marc Parfondry	FAO
Mana Farooghi	FCDO
Birguy Lamizana	UNCCD
Sarah Toumi	UNCCD
Bernard Terris	Danaya France
Darren Posey	CRS Ethiopia
Malefia Tadele	CRS Ethiopia
Ambachew Worku	CRS Ethiopia
Yidnekachew Wendaferew Asrat	World Vision Ethiopia
Yordanos Berhe	World Vision Ethiopia
Wase Gubena	SOS Sahel
Ange Mboneye	SOS Sahel
Feyere Abdi	SOS Sahel
Alemu Gebre,	WFP Dakar
Firku Tessema	Treeaid
Annie Schultz	Treeaid
Dr Debissa Lemessa	University of Addis Ababa
Titus Wamae	Wetlands International
Marie Parramon Gurney	SHARED Facilitation
Romy Chevallier	SHARED Facilitation
Mieke Bourne	CIFOR-ICRAF
Patrick Worms	CIFOR-ICRAF
Mawa Karambiri	CIFOR-ICRAF
Ibrahim Toure	CIFOR-ICRAF
Jules Bayala	CIFOR-ICRAF
Niguse Hagazi	CIFOR-ICRAF
Kimberly Mertens	CIFOR-ICRAF
Hannington Mwaya Odhacha	CIFOR-ICRAF
Samuel Hailu	CIFOR - ICRAF
Theo Ubani	Satel Construction Ltd
Emmanuel Seck	ENDA Energie
Gustave Aonye	French Embassy
Nanky Christine	GreenAid
Gebrella Dagne	UNA - Ethiopia

Dawit Zogoge	OPAD
ONLINE	
Christophe Praturlon	Balon Solaire
Raoul Kouame	ECOWAS
Nkole Mwamba	Savannah Zambia
Oumarou Malam Issa	IRD - France
Sonigity Ekpe	Ministry of Environment, Calabar - Nigeria.
Ratiba Arbadi	Director General Forests, Algeria
Jonathan Robinson	Great Green Wall Frontline
Saliha Fortas	Ministry of Agriculture and Rural Development, Algeria
Titus Dlamini	SADC Network for Civil Society
Mailles Zulu	CEO, WECAN Zambia
Jean Augustin	TSAFAC
Elisabeth Kihel	Senior Evaluator, Resilience and Recovery Specialist
Constance Neely	SHARED Team

GGW Strategy Development Methodology

The GGW Strategy was developed based on the premise of creating an evidence- and experience-based document built on consultative sessions with individuals, institutions, and representatives from different stakeholder groups. The following activities were carried out.

LITERATURE REVIEWED

Assessments, evaluations and lessons learned from the implementation of GGW related projects and evaluations including, for example, SAWAP-BRICKS, AAD, the FLEUVE Project, Filling the Gap, the UNCCD evaluation of the GGWI, Independent Review of GGW Accelerator, Transparency International, CIFOR-ICRAF, ClimBeR and the Alliance of CIAT and Bioversity, and CIFOR-ICRAF Regreening Africa and the Regreening Africa foresight analysis.

Documents produced by regional and national coordination bodies were also consulted, including, for example, the Regional Harmonised Strategy, the 2021-2030 DPIP of the PAAGGW, the capacity development strategy and action plan and the communication strategy and action plan developed under AAD, as well as the results framework. Some actors, including the GGW coordination Unit in Burkina Faso, SAFGRAD, the Global Mechanism, SOS Sahel – France, CARI, the French Scientific Committee on Desertification (CSFD) also shared documents, for example, the

assessment made by the Global Mechanism of the UNCCD: “The Great Green Wall implementation status and way ahead to 2030”.

Socio-ecological state of Africa. A literature review was also undertaken to support an understanding of the polycrisis and the state of evidence associated with Africa to support the evidence shared in Chapter 3 on Context and Justification. Key areas covered included climate change impacts, African drylands, soil erosion prevalence, water stress, economic values of biodiversity and biodiversity loss, trees outside of forest cover, tree density associated with the scaling of FMNR, tree suitability under climate change impacts, new research on the potential for emission reduction under restoration practices, pastoral and silvo-pastoral systems, trends and status of drylands forests, migration and internal displacement, climate and conflict, undernourishment, changes in population, and youth population.

Questionnaire. A targeted questionnaire was developed with open-ended or semi-open-ended question to guide (i) face-to-face interviews; and (ii) to conduct virtual discussions or shared by email to all stakeholders not directly interviewed. In addition to the questionnaire, a preliminary SWOT analysis was prepared and widely shared with stakeholders for their comments.

FACE-TO-FACE AND VIRTUAL MEETINGS

Based on the questionnaire and on the preliminary SWOT analysis, physical and virtual meetings were organised with the support of the GGW Coordination Unit of the AU. Participants included: the GGW Focal Persons, representatives of CSOs (SOS-Sahel, CARI, SPONG, GCOZA-Mali, ReSaD-Niger, Chad), Technical and Financial Partners (The Global Mechanism of UNCCD, IFAD, and the French Scientific Committee on Desertification, collaborators from Germany and Ukraine, and SAFGRAD).

Physical and virtual meetings focused on four (4) thematic areas:

- **The missions and objectives of the GGWSSI in light of the results achieved.** The mission refers to the “raison d’être” of the GGWSSI, the reason why it was created. Why, if it did not exist, should it be created? What is the purpose of the GGWSSI and why should governments fund it?
- **The Governance of the GGWSSI.** In line with the challenges faced during the last ten years, what should be the respective role of the AUC, the PAAGGW and the RECs? The discussions targeted the institutional arrangements to be made for better and more efficient support from the AUC, the Pan African Agency and the RECs to Member States and CSOs.
- **The context of the GGWSSI (SWOT).** The consultant discussed with the stakeholders the major trends in the immediate or distant future/environment of the GGWSSI. What are the events or situations that will have a positive or negative impact on the Initiative in the next five to ten years (e.g. terrorism and climate change)?
- **The specific identity of the GGWI or what should make the GGWSSI unique?** (Area and scope of intervention, actions to be carried out, and actors - beneficiaries). What, among all that the GGW Community do, is different

from what others do? Are their services/products competitive? Are there other structures at the national or regional level that do or can do the same things, but better and cheaper? Are there new products or services that the GGWSSI can offer? If so, which ones?

The discussions provided a qualitative assessment of the implementation of the GGWI, and data and information collected allowed an exhaustive analysis of:

- I. Current strengths and weaknesses in the implementation of the GGWSSI; Strengths that need to be exploited and reinforced; and weaknesses that need to be addressed.
- II. Opportunities that have been insufficiently exploited in recent years and new opportunities that should be exploited for greater efficiency and impact in the operation of the GGWSSI;
- III. Threats to the GGWSSI that should be taken into account and work to mitigate their impacts or occurrence.

Solutions and options identified by the consultant or proposed by stakeholders to strengthen and make better use of the strengths, address the weaknesses, better seize/exploit opportunities, and deal with threats form the corpus of the strategic framing proposed.

Interviews. To further elaborate key recommendations and actions, interviews were carried out with representatives of a range of institutions closely associated with GGW the PAAGGW, the GGW Accelerator, UNEP-GEF -PAAGGW, the Global Evergreening Alliance, the World Bank, AU-NEPAD AFR100, Regreening Africa, CIFOR-ICRAF, FAO, CRS, SADC, and the private sector.

Consultation during the 8th GGW RSC Meeting (9-10 November) with AU, GGW Agencies and affiliated organisations, Member States, RECs and donors and other stakeholders including youth, research, private sector, NGOs.

AU RECs and Member States Virtual Validation Meeting. Facilitated a 4-hour session held on 31 October, 2023 with Representatives of AU, Member States, RECs, and stakeholders.

ANNEX 3. ANALYSIS OF STRENGTHS, WEAKNESSES, OPPORTUNITIES, AND THREATS FROM THE GREAT GREEN WALL STRATEGY DEVELOPMENT PROCESS

SWOT Analysis carried out for the AU GGW Strategy Development (2022-2023)

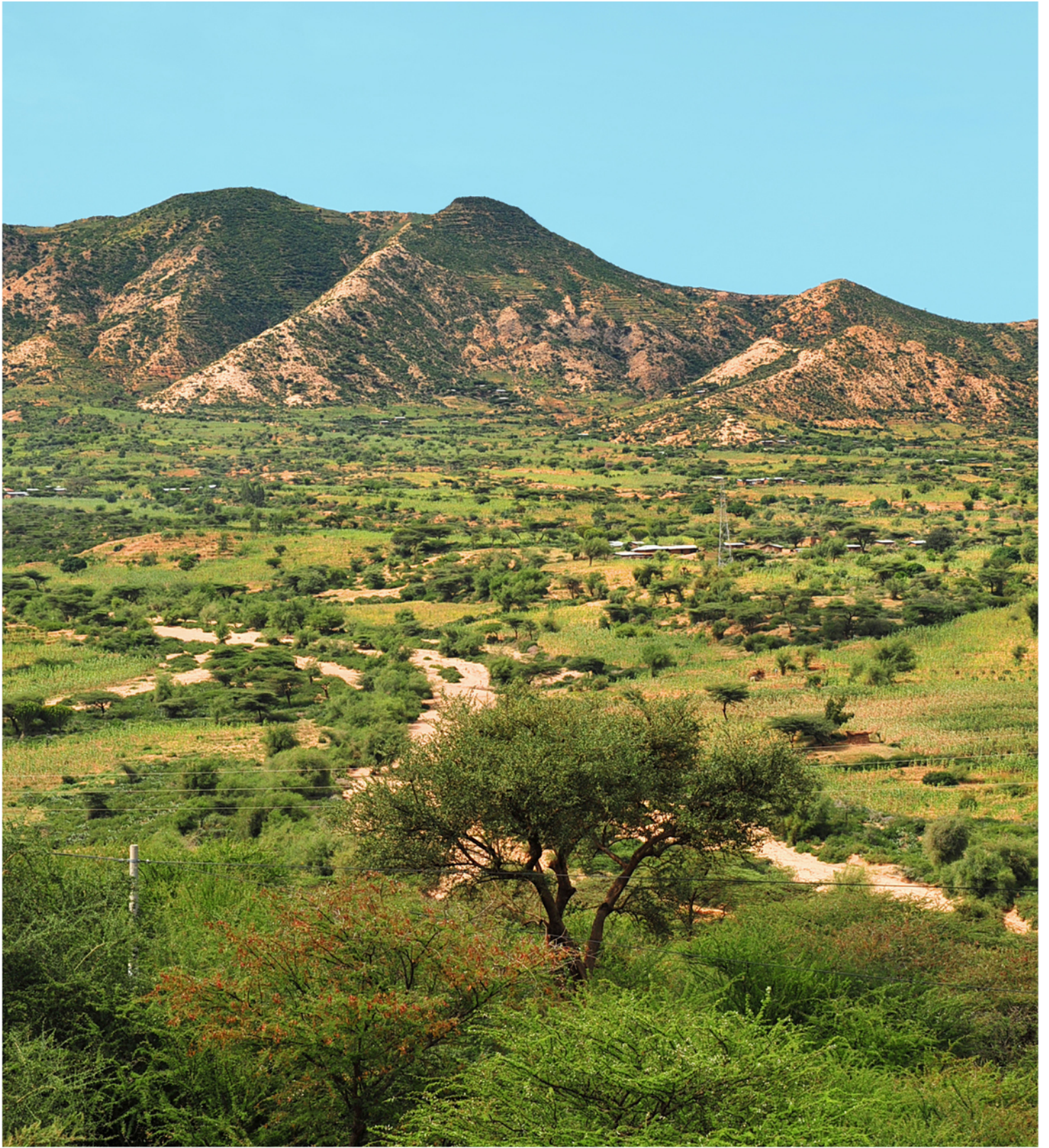
STRENGTHS	WEAKNESSES
<p>i. The GGWI is Africa's own bold development concept recalling the sentiments of pan Africanism and African renaissance and these give a lot of political good will to the concept by African leaders at least at the start.</p> <p>ii. The adoption of the Paris Agreement on climate change gives value to the GGW concept and commitment by states to address the growing climate crisis.</p> <p>iii. Institutional strengths</p> <ul style="list-style-type: none"> – Existence of institutional arrangements. Many countries have established institutional arrangements for the coordination and implementation of the GGWI. All of the PAAGGW's Member States have set up either national agencies or national coordination units. – Existence of community-based organisations (Farmers, Women, Youth, Herders, groups) and CSOs already engaged in the implementation of the Rio's convention and willing to engage in the implementation of the GGWI. <p>iv. Technical Strengths</p> <ul style="list-style-type: none"> – Existence of "success stories" for the capitalisation and 	<p>i. The GGWI remains vague in terms of scope, content and with regard to the national development frameworks, as follows:</p> <ul style="list-style-type: none"> – Unclear scope and geographic coverage of the GGWI. The Initiative is presented by some actors as an Initiative for the Sahel only, even though its name refers to the Sahara first, the Sahel second. – Inadequate African ownership and leadership for the Initiative and a clear communication strategy has led many of the financial partners and the international community to think that the Initiative is only limited to 11 Sahelian countries. – At the national level, the GGWI remains vague, both in terms of geographic coverage and content, with regard to the actors involved, as well as its integration into the national development plans. – Prevalence of the vision of "wall of trees" leads to lack of tangible and consistent results. <p>ii. Governance</p> <ul style="list-style-type: none"> – Unclear definition of roles and responsibilities between the AUC, the RECs and the PAAGGW. This leads to weaken

STRENGTHS	WEAKNESSES
<p>popularisation of good practices of SLM, including community practices and traditional knowledge. Experiences in the economic valorisation and monetisation of natural resources (valorisation and commercialisation of NTFP and fodder management) strongly encourage local communities to adopt and adapt the concept and operational modalities of the GGWI.</p> <ul style="list-style-type: none"> - Existence of proven technologies. The practices of reforestation, afforestation, grazing and water resource management, and the long history of bushfire use and management make the adaptation and domestication of the GGWI concept familiar to the local communities involved in its implementation. <p>v. The cross-cutting nature of the GGWI: This has made it attractive to development partners who saw an opportunity to support their various interventions in the drylands of Africa. The birth of the GGWI concept coincided with the global search for sustainable development models.</p> <p>vi. Existence of a strong communication at global level: The GGWI is a globally recognised brand sought after by financial and other partners.</p>	<p>Africa's leadership and voice in the implementation process.</p> <ul style="list-style-type: none"> - Insufficient human resources at the RECs and AUC levels: The Coordination Unit created by the AUC does not have sufficient resources, both financially and technically. Most RECs do not even have a coordination unit or a focal person. The RECs, with the exception of SADC have not yet taken ownership of the GGWI. The PAAGGW too, lacks capacity and the governance is not up to what could be expected. - Weak coordination and engagement with other relevant sectors at the national level. National entities in charge of the GGWI have difficulties to adopt a "landscape approach" and to strongly link it up with the action plans developed under the UNCCD, UNFCCC and UNCBD. - Decision-makers in other non-environmental sectors (agriculture, livestock, energy, water, etc.), local authorities and the CSOs are not very involved in the definition of the intervention axes and in the operational and strategic management of the Initiative. <p>iii. Weak high-level political support for GGW and environmental management: In many countries, activities are poorly funded from state budgets. The majority of national GGW entities seek to have field operations as a mean to access external financial resources. This leads to competition, as well as problems of overlap between GGW structures and other existing operational structures.</p> <p>iv. Inadequate knowledge management, sharing and coordination mechanisms: Knowledge developed through UNCCD and other SLM,</p>

STRENGTHS	WEAKNESSES
	<p>adaptation/mitigation projects is largely unknown and sometimes ignored. In addition, the place and role of science and research in the implementation of the Initiative is not well emphasised. African academia has not been mobilised to the benefit of the GGW.</p> <p>v. A project approach, and not a programme approach: Funding from technical and financial partners is cosmetic, essentially oriented towards the implementation of specific projects and not global, comprehensive and integrated programmes.</p>
OPPORTUNITIES	THREATS
<p>i. The GGWI offers strategic opportunities to sustainably utilise the enormous solar energy potentials, GGW could be an accelerator for the Light up Africa initiative.</p> <p>ii. The GGWI, a unifying platform for sustainable development and poverty reduction policies and activities in the drylands of Africa. Designed as part of the acceleration of the implementation of the UNCCD, the GGWI provides a point of mutual convergence and synergy for the Rio Conventions and SENDAI framework for disaster risk reduction. There are enormous opportunities to leverage GGWI to achieve food security and poverty reduction goals through diversification of agriculture and production systems to boost food production and create employment opportunities, particularly for women and youth in arid zones.</p> <p>iii. The GGWI has great potential to contribute significantly to the achievement of the aspirations of the AU's Agenda 2063.</p> <p>iv. The GGWI can benefit from the existence of active communities' organisations at the grassroots' levels, professional organisations and other farmers' groups.</p> <p>v. The existence of similar strategies at AUC, including the African Union Sustainable Forest Management Framework, the CAAADP, the Land Governance Strategy,</p>	<p>i. Inability to secure long-term financing /funding. The inability of African governments to provide the necessary funding for GGWI is indeed a serious threat. The GGWI is, by definition, a long-term and ambitious initiative. It may take decades for some of the benefits of the actions in drylands to become apparent. In fact, the GGWI should not be evaluated on the basis of time criteria, but rather as a catalyst for adaptation to changing conditions in drylands.</p> <p>ii. Inadequate investment by governments in dryland agriculture.</p> <p>iii. The inability of partners to meet the funding pledges made to the GGWI. Huge sums of money have been pledged since COP15 but very little of that money has reached ground implementation.</p> <p>iv. Insecurity and wars have considerably reduced the possibilities of intervention by public structures in many countries (Burkina, Mali, Niger, Nigeria, and Ethiopia).</p> <p>v. The seemingly lack of cooperation and coordination between the AUC and the Pan African Agency can divide political allegiance to the Initiative.</p> <p>vi. The absence of GGWI in the organogram of the Directorate of SEBE</p>

STRENGTHS	WEAKNESSES
<p>the AU Strategy on Wildlife and the AU Climate Change and Resilient Development Strategy, all provide room for synergies and coordination to deliver better.</p> <p>vi. The Initiative has the potential to complement and take advantage of the implementation in arid zones of other African initiatives and flagship programmes, including PIDA, Trans Saharan Road, Lagos-Algiers gas pipeline, Lagos-Algiers optical fibre, and AFR100, as well as the AfDB's five operational priorities with the following strategic objectives: i) light and power Africa, ii) feed Africa, iii) industrialise Africa, iv) improve governance, and v) improve the quality of life of the people of Africa.</p> <p>vii. The creation of the GGW Accelerator to support resource mobilisation and growing interest in GGW-related activities. All countries already have national SLM coordination structures that can support implementation of the Initiative.</p> <p>viii. The establishment at the UNFCCC COP 27, in November 2022, of a Loss and Damage Fund in favour of climate-vulnerable developing countries to support them for losses arising from droughts, desertification, floods, rising seas and other disasters that are attributed to climate change. The Middle East Green Initiative under the auspices of the Kingdom of Saudi Arabia provides opportunities for synergies and complementarities with the GGWSI as several African countries have opted to join the Saudi initiative.</p> <p>ix. The existence of an African diaspora that could potentially be mobilised to invest in GGW through technical and financial resources.</p> <p>x. The transformation of the New Partnership for Africa's Development (NEPAD) into the African Union Development Agency (AUDA) should boost the financing and sustainability of the Initiative.</p> <p>xi. The decentralisation process in almost all countries and the potentials and willingness of local governments to play a full role in integrating the GGWI concept into their planning and</p>	<p>may lead to the gradual phasing out of the Initiative as there would be no budget for it.</p>

STRENGTHS	WEAKNESSES
<p>budgeting processes as brought into focus the essential role of local governments and communities in sustainable development and conflict resolution.</p> <p>xii. The adoption of the SDGs in 2015 was a pivotal moment of opportunity for the effective implementation of the GGWI. Strengthening synergies and complementarities between the GGWI and the SDGs has opened up opportunities for scaling up SLM in the drylands of Africa.</p> <p>xiii. The external shocks that have affected Africa due to the COVID-19 pandemic, the war in Ukraine and its consequences in terms of food security, have deepened awareness of the importance of local development, the promotion of family farming and agroecology to build resilience to global shocks.</p> <p>xiv. The GGWI offers many opportunities for resource mobilisation and stakeholder capacity development.</p> <p>xv. Existence of specialised AUC structures that can be used to coordinate the Initiative.</p>	



African Union 