Ethiopia Great Green Wall Initiative –Country Review



ClimBeR: Building Systemic Resilience Against Climate Variability and Extremes



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ClimBeR

ClimBeR seeks to address challenges to adaptation by small-holder farmers through science and innovation aimed at transforming the climate adaptation capacity of food, land, and water systems, working closely with partners at the local, national, regional, and global levels. ClimBeR focuses on generating knowledge to unlock public and private finance, foster climate- and peace-sensitive policies and backstop the Great Green Wall Initiative (GGWI), Africa's flagship programme to address climate change and desertification.



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ClimBeR: Building Systemic Resilience Against Climate Variability and Extremes



Knowledge series

















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Abbreviations and acronyms

AFR100:	African Forest Landscape Restoration Initiative			
ATA:	Agriculture Transformation Agency			
AU:	Africa Union			
CAADP:	Comprehensive Africa Agriculture Development Programme			
CBD:	Convention on Biodiversity (of UN)			
CBO:	Community-based organization			
CIFOR:	Centre for International Forestry Research			
CO2:	Carbon Dioxide			
CO2eq:	Carbon Dioxide Equivalent			
CRGE:	Climate-resilient Green Economy			
CSA:	Climate-smart Agriculture			
CSO:	Civil Society Organization			
EFCC:	Ethiopian Forest and climate change Commission			
EPA:	Environmental Protection Authority			
FAO:	Food and Agriculture Organisation			
FDI:	Foreign direct investment			
FDRE:	Federal Democratic Republic of Ethiopia			
GCF:	Green Climate Fund			
GEF:	Global Environmental Facility			
GGW:	Great Green Wall			
GGWUP:	Great Green Wall Umbrella Programme			
GHG:	Green House Gas			
GIZ:	Deutsche Gesellschaft für Internationale Zusammenarbeit			
GoE:	Government of Ethiopia			
GTP:	Growth and Transformation Plan			
Ha:	Hectare			
ICRAF:	International Centre for Research in Agro-forestry			
IFAD:	International Fund for Agriculture Development			
IFPRI:	International Food Policy Research Institute			

ILRI:	International Livestock Research Institute			
Kg:	Kilogram			
LDC:	Least Developed Countries			
M&E:	Monitoring and Evaluation			
MERET PLUS:	MERET through Partnerships and Land Users Solidarity			
MERET:	Managing Environmental Resources to Enable Transitions			
MFI:	Microfinance Institution			
Mha:	Million hectares			
NAP:	National Action Programme (to Combat Desertification)			
NDC:	Nationally Determined Contribution			
NGO:	Non-governmental organisation			
NRM:	Natural Resource Management			
NSC:	National Steering Committee			
PASDEP:	Plan for Accelerated and Sustainable Development to End Poverty			
REDD+:	Reducing Emissions from Deforestation and Forest Degradation			
RLLP:	Resilient Landscapes and Livelihoods Project			
SAWAP:	Sahel and West Africa Programme			
SDG:	Sustainable Development Goal			
SLM:	Sustainable Land Management			
SLMP:	Sustainable Land Management Programme			
SNNPRS:	Southern Nations and Nationalities and People's Regional State			
STC:	Scientific and Technical Committee			
UN:	United Nations			
UNCCD:	United Nations Convention to Combat Desertification			
UNDP:	United Nations Development Programme			
UNEP:	United Nations Environment Programme			
UNFCCC:	United Nations Framework Convention on Climate Change			





J Background

Climate change is posing serious challenges to poverty eradication and economic development in Ethiopia. Ethiopia's pastoral and agro-pastoral communities, as well as its smallholder farmers in the highlands, are particularly vulnerable to climate change. This exposure requires a concerted focus on adaptation and resilience building, as well as measures to reduce poverty.

Over the past three decades, various public policies and new institutional structures were launched by the government to tackle these challenges. Since 2000, Ethiopia has adopted several development programmes and institutionalized climate change in the form of its Climate-resilient Green Growth Economy (CRGE) Strategy, which seeks to increase agricultural productivity, end poverty and help the country achieve middle income status. Climate change is mainstreamed into these programmes, with specific projects designed to manage climate risks, both to agriculture and natural resources. Ethiopia has also subscribed to several international conventions on desertification and climate change, including the Vienna Convention, the United Nations Convention to Combat Desertification (UNCCD), the United Nations Framework Convention on Climate Change (UNFCCC) and other related initiatives.

Land degradation, deforestation, recurrent droughts and the loss of livelihoods aggravated by, inter alia, climate change, pose a significant threat to food security, economic growth and environmental sustainability in Ethiopia. Over the years, forests and vegetated areas have been subject to intense deforestation and degradation, with an estimated annual deforestation rate of approximately 91 000 hectares (ha) per year. Ethiopia has launched various policies and ratified several international conventions to strengthen its national capacity, build resilience and mitigate the impacts of climate change. Ethiopia formally adopted the Great Green Wall (GGW) initiative in 2011 to help in the fight against desertification through ensuring ecosystem restoration and the development of arid and semi-arid zones for the sustainable management of resources. Subsequently, Ethiopia has developed various steering and technical committees and a coordination office to interface with funding agencies and align with the country's development programmes. With funding mobilised from international partners, as well as domestic sources, and integrated into the country's longstanding development strategy the CRGE, the GGW initiative is being implemented in a stretch of land mainly in the northern and eastern regions that are heavily exposed to degradation and deforestation.

As of 2020, the GGW initiative is well into its second decade of implementation and is receiving growing international attention as a flagship programme to combat

land degradation, desertification, drought, climate change, biodiversity loss, poverty and food insecurity.

The GGW Ethiopia short- and medium-term strategy focusses on 1) conserving, restoring and enhancing biodiversity and soils, 2) diversifying production systems; 3) meeting domestic demand, and promoting income generating activities; and 4) improving and installing basic social infrastructure.

The long-term strategy aims to

- i. improve the capacity of carbon sequestration in vegetation cover and soils;
- ii. reverse migration flows to the restored areas; and
- iii. improve the living conditions of local communities. This commitment aligns well with the country's aim of transitioning towards a CRGE, with zero net greenhouse gas (GHG) emissions and corresponding plans for large scale afforestation and reforestation. It is also a demonstration of Ethiopia's global commitment to implementing the Sustainable Development Goals (SDGs), the African Forest Landscape Restoration Initiative (AFR100) and the Bonn Challenge on the restoration of degraded lands (UNCCD 2022; FDRE/ FAO 2012).

The GGW design and implementation is guided by certain core principles, namely to redefine the ecological range to encompass not just the isohyets of 100-400mm rainfall, but also drylands in general; adopt an integrated and multisectoral approach; enhance local community participation; support capacity building and awareness creation among local people; promote sustainable development through integrated natural resource management; strengthen social development and gender sensitivity; support poverty reduction and livelihood improvement; improve soil, water and biodiversity conservation and restoration dryland areas; build on local knowledge and existing integrated natural resource management programmes and initiatives; make best use of resources, traditional institutions and past experiences; adopt flexibility and learning by doing; develop alternative energy projects; and provide more focused support to research and education (FDRE/FAO 2012).

Geographical Scope for GGW Ethiopia

Data summarised in Table 1 indicates large areas of the country, many of these in the lowland and arid regions, that fall under the GGW sphere of influence. The total area under GGW is estimated at 13.2 Mha covering 58 woredas (local districts).

ECO-REGION	AREA (000HA)	MEAN ANNUAL TEMPERATURE	MEAN ANNUAL RAINFALL	MAJOR LAND USE	% OF TOTAL AREA
Arid	42 300	21-27.5	100-800	Pastoral	Somali 40%; Afar 30%; Oromia 5%
Semi-arid	2 900	16-27	300-800	Agro-pastoral	Tigray 90%; Oromia 20%; Benshangul 60%
Dry sub-humid	19 000	16-28	700-1 000	Mixed farming	Oromia 10%; Amhara 10%; Benshangul 15%; SNNPR 5%

Table 1: Dry land areas, regional distributions and their main climatic attributes

Source: Mulugeta Lemenih and Habtemariam Kassa (2010) cited in FDRE/FAO (2012) National Strategy and Action Plan for the Implementation of the Green Wall Initiative in Ethiopia.

Institutional Arrangements for the GGW in Ethiopia

The GGW is implemented as an integrated and crosssectoral programme with several stakeholders drawn from local, regional and national levels, and also representatives from the States' technical services, from local communities and civil society organisations (CSOs). A coordination committee and a monitoring and evaluation system was also established to track progress and improve synergies. Initially, two layers of institutional infrastructure were constituted, as described below (Ibid; FDRE, 2012):

THE NATIONAL STEERING COMMITTEE (NSC)

The NSC is the institutional body for decision-making and policy formulation, strategy development and management. Its mandate includes guiding the implementation of the national strategy and action plan of the GGW in Ethiopia; promoting coordination among key decision makers; and overseeing implementation of GGW activities by the National Agency.

Implementing the strategy also required putting in place new institutions and organizational structures. Key among these was the establishment of the Ministry of Environment, Forests and Climate Change. The Environment, Forest and Climate Change Commission (EFCCC) provides guidance and support, as well as monitoring implementation of multisectoral and integrated landscape restoration activities. A national focal point was located at the Land Rehabilitation Branch of the same ministry. A group of experts chosen locally and among scientists from the international community also provided expertise in specific areas of project evaluation. The Director General of the national agency of GGW in Ethiopia was mandated to conduct selfassessment against predefined indicators, beneficiaries and field activities.

The NSC consists of 25 members, 20 with voting capacity and five having only advisory capacity. These two groups of NSC members were drawn from the Office of the President, The Prime Minister's Cabinet, as well as ministries responsible for defence, agriculture, finance, water resources and higher education. Representatives also came from the Pan-African Agency of the GGW; GGW-Ethiopia; the Environmental Protection Authority; the National Meteorological Agency; NGOs/CBOs Coordination Committee on Desertification; as well as the nine regional states and two administrative councils. The NSC is chaired by EFCCC and co-chaired by the UNDP with the directorate of the national agency for the implementation of the GGW in Ethiopia serving as the secretariat. The NSC meets twice a year, to review results, discuss programmes, approve budgets and spending, draft the annual work plan and produce yearly reports.

Lower in the hierarchy, woreda steering committees are chaired by the specific woreda administrators with EFCCC representatives serving as secretariat. Members include the woreda project officer and representatives of the local university, cooperative office, local CBOs (including women and youth groups), NGOs, microfinance institutions (MFIs), and a sectoral representative from woreda and kebele level from the Environment, Forest, Climate Change Commission; Land Use Administration; Crop Production; Animal Production; and Cooperative offices (UNDP/GEF 2022).

SCIENTIFIC AND TECHNICAL COMMITTEE (STC)

The second layer is a Scientific and Technical Committee, comprising 15 experts from various disciplines to provide oversight and ensure consistency in the proposed interventions, most notably from the ministries responsible for agriculture and water resources, and from various agencies related to the GGW, meteorology, forest research, environment forum, diversity, sustainable development, NGOs and the private sector. The STC plays an advisory role in evaluating and validating the programme and in the formulation of technical and strategic documents.

OVERSIGHT

Project-specific committees are constituted at the national and woreda level to provide oversight and support implementation. For example, the GEF and UNDP projects are funded through the EFCCC but designed and implemented with several layers of committees providing oversight and technical support.

Note that the above description outlines the original design of the institutional infrastructure for the GGW in Ethiopia. Key stakeholders consulted in the development of this report noted that the current institutional infrastructure departs from the initial design. It was noted that, subsequent to the launching of the GGW and the national workshop to constitute the STC, no follow-on meetings were convened. It was noted that the STC is currently overwhelmingly dominated by line departments drawn from the regions, with representatives from key government offices.

Analysis of GGW functioning and capacity needs

The GGW country initiative is coordinated by a single individual - there is a lack of skilled human resources to coordinate and track implementation. Interviews conducted in the development of this report suggest that the GGW has not been effective in coordinating and harmoniously driving forward the GGW agenda, as set out in the initiative's goal statement and action plan. The country office is inadequately resourced, with all funds pledged by international agencies and countries channelled through the Ministry of Finance and disbursed by the Development Bank of Ethiopia to partners and implementing ministries and agencies. This is understandable, especially when the flow of funds is unpredictable. It is also a cost-effective option. The government opted to use its existing governance structure rather than establish a new structure for attracting and managing resources. However, this does mean that the national agency itself may be side-lined in terms of funding and institutional strengthening. International funding agencies like the Global Environment Facility (GEF) often channel their funds through UN agencies, while donor programmes use international NGOs to implement certain activities aligned to GGW. This may be conceived as parallel funding and can undermine coherent programming.

As noted above, the current GGW institutional infrastructure departs from the original arrangement. Initially, the GGW fell under Environmental Protection Authority (EPA) with the national focal point located at the Land Rehabilitation Branch of the Ministry of Environment, Forests and Climate Change. It has since been relocated to at least three different ministries and departments. This has undermined the policy implementation process. Institutional memory is often lost with these changes. Currently, the GGW agenda is driven by the Ministry of Agriculture with no or little input from the GGW country office. This restructuring of key government institutions means the GGW agenda is not well understood by the public. Nationally, the GGW is managed as a forestry programme under the Ministry of Agriculture.

Stakeholders consulted in the development of this report observed that the STC has not been very effective. As noted above, subsequent to the launching of the GGW and the national workshop to constitute the STC, no followon meetings were convened and the STC has become overwhelmingly dominated by line departments drawn from the regions, with representatives from the EPA, NGOs and the Ministry of Finance. In the absence of a national body to coordinate and provide oversight, research activities and climate change responses are guided by internal institutional priorities, resulting in a lack of coherence in mitigation and adaptation measures. Lessons learned and knowledge generated from the field are disseminated beyond the project intervention area to the scientific, academic and policy communities using available knowledge sharing networks and forums. Researchers from IFPRI, CIFOR and other research institutions, as well as FAO other UN agencies conduct specialised studies to test certain hypotheses and evaluate performances, but this is often not fed back to GGW implementing entities like the Ministry of Agriculture for improved outcomes.



Biagnosis and assessment of main bottlenecks

Institutional fragmentation and a lack of coherence typifies Ethiopia's response to climate change. A UNDP study (UNDP/GEF 2022) noted that Ethiopia has been in many respects been at the forefront in terms of its climate response by introducing a number of policies, plans and strategies as well as programmes and projects, including the Managing Environmental Resources to Enable Transitions (MERET) programme, the Productive Safety Net Programme, the Sustainable Land Management Programme (SLMP) and more recently the CRGE. The report notes, however, that these policies and programmes each have unique objectives and often divergent implementation strategies, which means that synergies are not taken advantage of. To address this, there is a need for 1) improved integration of climate change into the development planning and budgetary processes across government levels; 2) improved integration of climate change adaptation interventions into land use plans and the management of natural resources; 3) strengthened technological, financial and institutional capacity at federal, regional and woreda levels to support implementation of adaptation interventions; 4) improved climate information and monitoring networks/stations; and 5) improved availability and capacity of agricultural extension agents at woreda-level (UNDP/GEF 2022).

Ethiopia has launched several initiatives for land regeneration and improved natural resource management, some predating the GGW. However, achieving some of the targets on climate change has proven a challenge. Key among these is the challenge of managing restoration in such a way that it produces both environmental and livelihood benefits (livelihood benefits are important in themselves, but also crucial for community support for restoration efforts that could fail in the absence of local stakeholder buy-in). These two dimensions have to be reconciled for a more successful outcome.

The UNCCD (2020) documented that the two most serious challenges to the GGW initiative in Ethiopia, as reported by the government itself, are financing and technical capacity. The national secretariat lacks resources to manage its office, let alone implement interventions. Often funds from international sources are insufficient, unpredictable and insecure, undermining the ability to execute planned activities. There are divergent views between the government and the donor community about climate change priorities, which presents a challenge to the allocation of funding and the implementation of interventions. A further challenge is the lack of stable, adequately staffed structures, especially at the local level, to absorb available funds. The current arrangement of channelling funding through the Ministry of Finance does support accountability and provides assurance to the donor community that funds will only be used for the intended purposes, but the lack of technical capabilities within the Ministry to appraise projects, monitor and track progress, and initiate corrective measures means that funding availability and programme delivery is even less predictable.

Considering the total area thus far restored against the target, Ethiopia will have to increase the pace of land restoration. What concerns many specialists and researchers working on climate change in the country is the sustainability of the current drive to address climate change and support restoration. If Ethiopia is to successfully restore degraded lands and avert recurrent droughts and loss of livelihoods, the country is in urgent need of a land use policy and clear governance structures that, amongst other things, provides clarity around the ownership and usage rights of trees established through restoration initiatives.

It is also clear that public finance alone will not be enough to complete the remaining work and achieve the targets set for 2030. The UN GGW report (United Nations 2020) estimates restoration costs in the region to average US\$440/ha. This means that the country will have to continue mobilising funds and grants more aggressively from international partners and donors to restore degraded lands while averting further degradation in other areas. Domestically, the Ethiopian government has to engage farmers and their unions with awareness raising and capacity building training to further strengthen community mobilisation in support of restoration efforts. Compared with other investments, returns from land restoration activities take much longer to materialise and this can discourage communities from investing resources and effort in restoration activities, yet local ownership is fundamental to achieving the objectives of the GGW initiative.

Achieving the 2030 restoration targets and mobilizing the required funding over the coming decade will require a stable institutional infrastructure with a clear mandate to drive forward the initiative. Over the past two decades climate change was placed under no less than three ministries and several agencies. There have also been times when climate change has been side-lined in the public agenda. This seems to have changed lately. Climate change has come under the Ministry of Agriculture, with projects feeding into GGW being implemented by various agencies and the Ministry itself. Going forward, the GGW agenda, its plans and credible programmes such as SLMP need to be mainstreamed into the relevant ministries dealing with



environmental matters. This will require high level political leadership and the revamping of GGW Ethiopia so that it has a more functional structure.

Our research suggests that the GGW has yet to evolve into a flagship programme at the national level like the CRGE to combat land degradation, desertification, drought, climate change, biodiversity loss, poverty and food insecurity in Ethiopia. Some meaningful progress has been made, particularly in the initial implementation stage, but progress is limited, particularly when measured against the ambitions articulated in the early stages of the initiative. Key challenges include:

- Land is public property in Ethiopia. Out of the total area of 113 million hectares, 69% is classified as agriculturally suitable land for crop and livestock production. To date only 14 million hectares (17%) have been put into cultivation.
- Smallholder subsistence farming systems predominate in Ethiopia and the average plot of land worked per family is one hectare. Smallholder farmers form the backbone of the agricultural sector, cultivating 95% of the cropped area, and producing 90-95% of the country's cereals, pulses and oilseeds. In the arid zone, nomadic and semi-nomadic pastoral livestock production dominates.
- The farming system is rain-fed; only 1% of arable land is currently irrigated. Thus, Ethiopia's agriculture is liable to climate change impacts such as droughts and dry spells.
- Many of the GGW target woredas are in the highland regions. The arid and semi-arid areas of the GGW sphere are largely inhabited by pastoral communities, stretching all the way from the border with Djibouti and through the Afar and Somali regions down to the border with Kenya. This is the stretch of the country where the GGW intervention is supposed to take place, but it is an arid area with difficult conditions for afforestation. Millions of people eke out a living in this harsh environment where drought combined with unsustainable management of grazing and water resources is causing environmental degradation, leading to long-term desertification and livelihood loss. Some international NGOs like Helvetas, Mercy Corps, Catholic Relief Services and donor programmes like PRIME strive to build the resilience of these communities, working with local partners, by improving natural resource management practices, market linkages and diversifying income sources.

- But these efforts are not integrated into the GGW strategy. Thus, this large tract of arid and semi-arid area has yet to be brought into the GGW-Ethiopia geographic influence.
- A related question is how the Green Legacy Initiative can be integrated into the GGW initiative. Currently the Green Legacy Initiative is treated as part of the CRGE, distinct from the GGW. There are no platforms to bring these two initiatives together and coordinate activities. Fikreyesus, D. et. al. (2022) observed that EFCCC has initiated discussions to link the Green Legacy Initiative with REDD+ activities. As it stands, however, the GLC is not integrated into the GGW agenda.
- The GGW initiative currently has very limited outreach to civil society organisations and the private sector to mobilise resources and enhance the resilience of communities. The emphasis seems to be to designate responsibility for implementation to certain government institutions (e.g. Ministry of Agriculture) that may lack the drive for integration with other ministries and agencies for a synergistic outcome. The various task forces constituted under the Ministry of Agriculture and other lead institutions should bring on board key stakeholders, including the private sector, for the more sustainable management of natural resources. This model should be implemented down to woreda level to maximise impact.
- The political will for developing a green economy has not yet effectively translated into efforts by the private sector to encourage investment and mobilise resources (World Bank 2020; UNDP/GEF 2022).
- Significant unemployment remains a major hurdle to the green growth. This is particularly true of youth and women, who lack resources and entrepreneurship skills. The Global Entrepreneurship Monitor reports that Ethiopia has one of the lowest rates of entrepreneurial activity in sub-Saharan Africa.
- There is a lack of official data measuring the progress of and challenges to implementation of GGW projects and associated plans and programmes. It would appear that there is limited collaborating, learning and adapting (CLA) built into the GGW initiative. Data gathering, analysis and dissemination to partners, government entities, NGOs and other parties is neglected. This needs to be addressed urgently. The GGW national office needs to be revamped with the appropriate M&E personnel, tools and capacity building to conduct research, monitor and evaluate performance, and share the outcomes of these processes with stakeholders to scale up successful practices.

Table 2: Assessment of key bottlenecks

BOTTLENECK OR KEY ISSUE	DESCRIPTION	HOW THIS CAN BE ADDRESSED WITHIN THE COUNTRY	
Coordination and cooperation	Lack of coordination, fragmented approach, loose coordination with national level institutions, duplication of effort and limited information sharing.	Strengthen coordination among key stakeholders from federal to region to local woreda and kebele level. Both horizontal and vertical cooperation and coordination need to be strengthened.	
Lack of stable lead institution	Institutional instability	Strengthening national institutions in terms of resources, key skills and services (e.g. data collection and management) and improve human resources	
Lack of coherence and continuity in policy design implementation	Certain laws that support climate change and GGW are not consistent to each other, while some intervention lacks policies (e.g. land use policy, watershed policy and forest policy)	Revisiting policies in the face of growing population, climate change and other environmental stressors.	
Lack of finance	Donors lack commitment for releasing funding after pledging for timely execution of projects. The GGW initiative does not have resources to initiate projects	Donors pledging the fund should channel the fund using appropriate and accountable national institutions and live up to expectation	
Accountability of institutions	Accountability is lacking in certain institution; there are weaknesses in monitoring and evaluation systems	Good governance and monitoring, evaluation and learning mechanisms should be in place. Particularly those departments and directorates working under the Ministry of Agriculture need to strengthen their monitoring, evaluation and learning systems.	
Lack of skills and knowledge	Lack of appropriate skilled human resources in the areas of climate change, adaptation and resilience, breeding, facilities	Mobilize knowledgeable people and promote experience sharing among neighbouring countries	
Water infrastructure	Lack of sufficient rainfall and groundwater impacts tree survival.	Sufficient investment is needed for irrigation and watering of plants in such areas.	

GGW linkages with major plans and programmes

The GGW is not a separate programme in Ethiopia; there is no specific project dealing with the GGW initiative as such. The GGW is currently conceived like any other forestry programme under the Ministry of Agriculture. It is complementary to several policies and development strategies. As such, it can contribute towards the goals of regional and global environmental conventions such as the National Action Programme to Combat Desertification, the Convention on Biological Diversity, the Strategy for Reducing the Impacts of Climate Change, and the National Action Plan for the Environment. The goals of the initiative are also aligned with the Sustainable Development Goals that Ethiopia is earnestly pursuing. This means that the success of the GGW in Ethiopia is heavily dependent on how effectively it is integrated with on-going strategies. The key strategies and initiatives aligned with the GGW in Ethiopia are summarised below.

Sustainable Land Management Programme (SLMP I: 2008-2013; SLMP II: 2014-2019): SLMP was a national initiative launched in 2008 with the aim of alleviating rural poverty, vulnerability and land degradation through restoring, sustaining and enhancing the productive capacity, protective functions and biodiversity of Ethiopia's natural ecosystem resources and sustainable land management practices (FAO/FDRE 2012). SLMP was a multi-sectoral, multi-stakeholder and multi-donor financed programme providing assistance to smallholder farmers to adopt sustainable land management practices on a wider scale with the aim of reversing land degradation in agricultural landscapes, increasing agricultural productivity and income growth and protecting ecosystem integrity and functions. Interventions involved conservation and improvement of vegetation cover, enhancing soil fertility and carbon stock in agricultural soils, micro-irrigation, rehabilitating degraded lands and popularising the cultivation of high value crops to enhance the income generating capacity of communities and, hence, reduce pressure on natural resources (Ibid). Capacity development and knowledge generation and management and rural land administration and certification were also major components of the programme (Bekele, et. al. 2015). With support from the World Bank and GEF, a five-year SLMP I programme was implemented in 35 woredas in six regional states (Amhara, Oromia, Tigray, SNNPR, Beneshangul Gumuz, and Gambella) (Ibid). Implemented across critical watersheds, the programme identified and designed appropriate interventions for degradation factors. An important achievement also included the work done on land registration and certification, with millions of people receiving title deeds/holding certificates, potentially leading to improved tenure security on farmlands (Bekele, et. al. 2015).

SLMP-II focused on water and soil conservation measures in the forestry and agriculture sectors, with the Ministry of Agriculture assuming an overall coordination and implementation role. Funded largely by the World Bank and the REDD+ Investment Programme (supported primarily by the Government of Norway), SLMP-II implemented water conservation measures such as watershed management, drilling of bore holes and water harvesting techniques. The SLMP-II also focused on institutional strengthening, capacity development and knowledge generation (United Nations 2020).

SLMP I and II have contributed significantly to afforestation and land rehabilitation. Evaluations of SLMP I and II by the World Bank, Fikreyesus, et. al. (2022) suggests that the programmes have helped to restore productive capacity and build resilient livelihoods in 135 major watersheds in Ethiopia's highlands and contributed to afforestation or reforestation of more than 80 000 ha. SLMP practices were promoted in 556 776 ha of land (of which 65% was communally held and 35% individually held).

More than 270 000 individual households have benefited from climate smart agriculture (CSA) interventions implemented under the SLMP. About 28% of households were reportedly female-headed. About 1 446 self-help groups supported by SLMP-II were engaged in apiculture, poultry, sheep and goat fattening, and vegetable and fruit farming, and have contributed to the reduction of pressure on the watersheds' natural resources through the promotion of improved cook stoves (Ibid).

It should be noted that SLMP projects were all implemented in high agricultural-potential areas. They have very little relevance to the arid and semi-arid pastoral areas of the Afar and Somali regions that are the primary focus of the GGW initiative in Ethiopia.

Growth and Transformation Plan (2011-2015) and the Climate Resilient Green Economy Strategy:

Launched as a successor to the Plan for Accelerated and Sustainable Development to End Poverty (PASDEP), Ethiopia introduced the Growth and Transformation Plan (GTP I 2011-2015). The GTP sought to support the CRGE targets of making Ethiopia a middle-income country by 2025 and limiting GHG emissions by 2030 to no more than 2010 levels. The CRGE strategy provides an ambitious cross-sectoral plan for achieving the transition without increasing current levels of GHG emissions, while safeguarding economic growth and adaptation initiatives to reduce vulnerability to climate change. The key sectors targeted were agriculture; forestry; power; and transport; industry and buildings. More than 85% of GHG emissions in Ethiopia come from forestry and agriculture. According to CRGE estimates, in 2010, agriculture and forestry accounted for 50% and 37% of Ethiopia's total emissions, respectively. The strategy thus envisages agriculture and forestry to contribute significantly to GHG emission reductions, up to 80% of the abatement potential (FDRE, 2011). In total, the Government in 2014 pledged to restore 15 million hectares of degraded land by 2025 - one-sixth of the country's total land area (Minnick, A. et. al. 2014). This commitment was part of the pledge made to the Bonn Challenge and the African Forest Landscape Restoration Initiative (AFR100).

Growth and Transformation Plan (GTP II: 2016-

2020): GTP II focused on rapid, sustainable, and broad-based growth by enhancing the productivity of the agriculture and manufacturing sectors, improve the quality of production, and stimulate competition within the economy. GTP II adopted a number of strategies and priorities in support of environment management and climate change that have direct relevance to the GGW initiative. Key among these are reducing GHG emissions through enhanced crop and livestock production that improves food security and the incomes of farmers and pastoralists; natural resource development, forest protection and reforestation programmes that enhance the economic and ecological benefits of forests; expanding electricity generation from renewable sources of energy; and leapfrogging to modern and energy efficient technologies in transport and other sectors (FDRE 2016).

Reducing Emissions from Deforestation and Forest

Degradation (REDD+): The national REDD+ programme was an integral part of the CRGE to address the drivers of deforestation and forest degradation and help the country achieve its mitigation potential. It aimed to create a mechanism to monetise the abatement potential, thereby attracting climate finance and generating financial incentives to support sustainable forest management, conservation and restoration, which in turn would enhance environmental, social and economic benefits (Bekele, M. et. al. 2018; Solomon, Z. 2015).

Some of the pilot REDD+ projects include the Bale Mountain Eco-region REDD+Project (in Oromia), REDD+ Participatory Forest Management in Southwest Ethiopia, the Yayu REDD+ Project, forest related Clean Development Mechanism projects (Sodo Zuria and Humbo); the Oromia Forested Landscape Programme (OFLP); and the Humbo Ethiopia Assisted Natural Regeneration Project. Projects were implemented since 2012 through the national REDD+ Readiness Programme funded by a grant from the World Bank (US\$3.6 million) and financial support (US\$10 million) from Norway and the United Kingdom through the World Bank's BioCarbon Fund. Funding from the Austrian Federal Ministry of Agriculture, Forestry, Environment and Water Management and SIDA supplemented the REDD+ Readiness Programme in Ethiopia (FDRE, Ministry of Environment, Forest and Climate Change National Secretariat 2017; Bekele, M. et. al. 2018).

Ethiopia has made significant progress in establishing a National Forest Monitoring System for the Measurement, and Reporting and Verification (MRV) of REDD+. Milestones include the acceptance of the Forest Reference Level by the UNFCCC and the completion of the National Forest Inventory. Ducker, et. al. (2019) reported the establishment of community forests in 54 woredas and 342 kebeles, along with afforestation of 24 000 ha and restoration of 778 000 ha of land. REDD+ has also provided alternative livelihoods and jobs for about 120 000 individuals (60% male and 40% female) who benefited from beekeeping, poultry or small ruminant keeping, and improved cook stove use. Other outcomes include demarcation of 660 000 ha of natural forests and the establishment of participatory forestry management in 59 woredas.

However, empirical evidence from the Bale Mountain Eco-region REDD+ Project in Ethiopia (Duker, A. E. C. et. al. 2019) suggests that mitigation programmes such as REDD+ were geared towards conservation efforts in the forestry sector without prominently taking into account smallholder agricultural interests in project design and implementation. Planners failed to recognise that expansion of smallholder and commercial agriculture is one of the main driving forces behind deforestation and forest degradation in the country. Case studies and interviews conducted in the development of this report suggest that REDD+ projects failed to adequately incorporate the demands of smallholder farmers and that this has led to a loss of livelihoods and diminishing interest to participate in REDD+ by local farming communities. The intervention also experienced high staff turnover, with capacity constraints further exacerbated during the COVID-19 pandemic.

i. Forestry and Agriculture:

- 5.5 billion plants and seedlings produced
- 151 448 ha of forest lands
- 240 ha of multipurpose gardens
- 96 774 ha of restored lands
- 236 551 ha of assisted natural regeneration
- ii. Soil
- 792 711 ha terraces
- 91 km of windbreaks
- 893 706 ha watershed management forest

iii. Human Resource

• 62 759 people trained and 218 405 jobs created

Source: UNCCD (2020): The Greet Green Wall Implementation Status and Way Ahead to 2030, Advanced Version.

Taken together, interventions in this first phase of GGW have yielded measurable outcomes, though significantly short of initial targets. A report by the UNCCD (2020) provides an overview of the achievements between 2011 and 2019 in terms of area restored, activities implemented and beneficiaries reached. The total area restored over this first phase of GGW accounts to 2.1 Mha against the target of 13.2 Mha. The most commonly implemented activities were forest and watershed management, with terracing and soil measures also covering large area. Land restoration and conservation activities have been implemented to increase climate change resilience and ensure sustainable agriculture production. The establishment of windbreaks are the most common land restoration activities, but only account for a small share in terms of total land area covered.

The strategic plans and projects discussed above have mutually reinforcing objectives of reducing emission and building resilience. Cumulatively, they have contributed to the broad objective of the GGW initiative. It is worth noting, however, that limited work has been done in terms of harmonising the interventions and aligning the strategies for more measurable outcomes. The GGW has lacked a functioning national platform to bring actors together; instead, each project has largely worked independently.

GGW Umbrella Programme (GGWUp): Building on the work undertaken in the first phase, the 2nd phase of GGW is expected to run from 2020-2030. Initially introduced in Niger but later expanded to include five West African and seven East African countries, the Great Green Wall Umbrella Programme (GGWUp) is supported by the GCF and UNCCD. The umbrella programme launched with a US\$14 billion contribution from the French Government and the World Bank, with implementation led by IFAD. The focus is on activities aimed at restoring ecosystems and tackling the interlinked issues of climate change, job creation, poverty reduction and food security and peace building (IFAD, 2021).

This umbrella programme aims to support member countries, including Ethiopia, with initiatives leading to land restoration and sustainable management of natural resources, while scaling up existing investments by other partners. Small-scale farmers and agribusinesses will have better access to markets and strengthened value chains, creating economic opportunities and jobs, through the development of climate-resilient agriculture and rural infrastructure and expanding the use of solar energy. The Ethiopian programme is still at the design stage, but once completed, IFAD will channel US\$36.3 million through the Development Bank of Ethiopia to fund climate adaptation projects. Close to US\$1.3 million of this budget is dedicated for capacity building. Accredited projects, MFIs, associations, cooperatives, unions and private sector will be able to apply for grants through the programme.

The programme is also designed to facilitate concessional loans and IFAD is expected to raise additional funds for this purpose. This co-financing scheme will be implemented through the Ministry of Agriculture. Information from the Ministry of Agriculture suggests that the initiative will be led by the various Directorates and Departments working down to regional level. Key directorates include forest development, irrigation, soil, land use and land administration having various specialists. IFAD will assign its own specialists to work together with government actors in various departments.

Youth and women groups and communities will be able to apply for climate smart agriculture activities. Communities are expected to contribute to the costs of projects. This may include mobilisation of local resources and labour contribution. For example, for a seedling nursery establishment, 30% of the cost is expected to be covered by beneficiaries while 70% will be covered by IFAD. The government of Ethiopia in its part is expected to facilitate tax exemption. The Development Bank of Ethiopia will not only disburse grants but also lead the capacity building of MFIs, cooperatives, unions, etc to ensure that funds are appropriately used for the intended purpose, while the Ministry of Agriculture will mobilise its extension teams, development agents and experts to support implementation of approved projects. It will promote the programme through awareness raising campaigns. Its specialists will also support beneficiary groups in identifying climate agriculture projects that would qualify for grants.

An M&E system is developed by IFAD to track and measure progress. Mid-term reviews, field visits and missions will also be initiated to support implementation. IFAD has already seconded 15 M&E specialists to the Ministry of Agriculture.

Ethiopia Resilience Landscapes and Livelihoods Project (RLLP): The RLLP is the major Green Climate Fund (GCF) project implemented in Ethiopia. It seeks to improve climate resilience, land productivity and carbon storage, as well improve access to diversified sources of income in selected watersheds in Amhara, Beneshangul Gumuz, Gambella, Oromia, SNNP and Tigray regions. The project will be implemented through four integrated components (World Bank 2020):

- A green infrastructure and resilient livelihoods component to support the restoration of degraded landscapes in selected watersheds and help build resilient livelihoods.
- Investing in institutions and information for the promotion and management of sustainable land and water management practices and improving information in support of resilient landscapes and diversified rural livelihoods.
- A rural land administration and use component to strengthen the system that secures tenure rights, optimizes land use, and empowers land-users to sustainably invest in productive landscapes.
- A project management and reporting component to ensure effective implementation and reporting on project activities with due diligence and integrity.

The RLLP aims to scale up initiatives with demonstrated climate value and co-benefits within the Sustainable Land Management Programme (SLMP). The interventions target rural livelihood productivity and resilience through sustainable land management, low-emission resilient agriculture practices, enhanced land tenure, gendersensitive livelihood initiatives which contributes to removing barriers to women's ownership of and control over assets, and strengthening of value chains for longterm programme impact.

The project is designed to contribute to climate resilience in 210 major watersheds with 8-12 micro-watersheds per major watershed. It will complement ongoing sustainable land and water management practices and scale up proven interventions to 57 additional watersheds (average 10 000 ha each). Climate-smart agriculture interventions under RLLP will be implemented in 135 watersheds that have already been supported with landscape restoration in 70 micro-watersheds. Another 152 watersheds will be supported by the International Development Association and Multi-Donor Trust Fund (Contribution by the Government of Norway), 18 watersheds by the Government of Canada, and 40 watersheds by GCF.

As an outcome, the project expects watersheds to "graduate" from project-based assistance to the sustainable management of restored landscapes through normal government mechanisms built into the RLLP. The project interventions are also expected to lead to a GHG emissions reduction of 43.9 million tons CO_2 eq due to carbon sequestration as a result of improvements to grasslands and agriculture. Beneficiaries of RLLP include the population of target watersheds, estimated at 4.2 million people, or 834 000 households.

Approved in July 2018 with a total budget of US\$129 million, the GCF funds are channelled through the World Bank and made available to the Government of Ethiopia in an agreement with the Ministry of Finance. Responsibility for project execution lies with the Ministry of Agriculture and Livestock Resources in collaboration with the Ministry of Environment, Forest and Climate Change, the Ministry of Water, Irrigation and Energy and other relevant public sector agencies.

Transboundary Projects: A number of transboundary projects have been initiated by the World Bank, FAO and UNCCD and resourced by GEF under the SAWAP programme in support of the GGW initiative. The UNCCD (2020) reported that Ethiopia has benefited from these projects through the improvement of landscape resilience and livelihoods and thus poverty reduction, food security and water resource security. The main transboundary projects are:

- Scientific Assessment of Land Degradation (2019-2024): With the main budget drawn from GEF and co-funding from NASA and USAID, this UNEP-led project aims to enhance methodologies and tools for scientific measurement of the ecological impacts of land degradation and SLM practices in support of future investment decisions.
- Integrated Approach Pilot on Food Security (2017-2022): This 5-year programme aimed at fostering sustainability and resilience to improve food security by targeting communities affected by environmental degradation and the loss of ecosystem services and resultant loss in crop production and livestock productivity.
- Linking Sectors and Stakeholders for Increased Synergy and Scaling-up (2016- 2019): A GEF-funded project developed by UNEP aimed at supporting the involvement of civil society organizations and vulnerable groups for improving inter-sectoral coordination and synergy in the GGW initiative.
- Tree Aid: An international NGO helped 6 000 people to grow 190 752 trees in 2019-2020. Another 560 people were supported to produce fuel-efficient stoves. In 2021-2022, Tree Aid mobilised communities to grow 379 145 trees, including 7 110 mango and papaya trees. Several thousands of vulnerable rural people, including women and children, have earned up to US\$117 in income directly from Tree Aid activities.
- Partnering for Green Growth (P4G): This initiative focuses on helping Ethiopia meet its climate commitments under the Paris Agreement in five key areas: food and agriculture, water, energy, cities and circular economy. The Ethiopian P4G National Platform is hosted by the EFCCC. Currently the P4G National Platform secretariat is hosted by the EPA and the Platform is co-chaired together with the Ethiopian Chamber of Commerce and Sectoral Associations.
- Reach for Change (Sweden): This organisation is currently implementing a pilot project funded by the IKEA Foundation to catalyse green businesses in

Ethiopia that will create green jobs and inspire young people to start sustainable, green businesses. The intention is to scale this pilot nationally, working with technical schools and universities in order to build a broad pipeline of sustainable green businesses, thereby generating more green jobs.

- Regreening Africa: This is an ambitious five and a half-year programme (2017-2023) that seeks to directly reverse land degradation across eight countries in sub-Saharan Africa by integrating trees into agricultural systems while improving the livelihoods, food security, and climate change resilience of smallholder farmers. The programme's vision is to spur regreening among 500 000 households across one million hectares in Ethiopia, Ghana, Kenya, Mali, Niger, Rwanda, Senegal, and Somalia, thereby catalysing a much larger scaling effort to regreen tens of millions of hectares of degraded land across the continent using locally appropriate practices such as farmer-managed natural regeneration, nurseries, tree planting, water harvesting and other forms of agroforestry and sustainable land management interventions. The programme operates as a consortium of research partners (ICRAF) and implementing NGOs (World Vision, Catholic Relief Services, Care, Sahel Eco, Oxfam) in partnership with local governments and communities. Through the use of monitoring tools like the Regreening Africa App developed by ICRAF, scientists are empowered to monitor the programme's progress for a more holistic picture of local realities. Operating in 25 woredas in four regional states, the scheme has registered significant success in Ethiopia. In the past five years, Catholic Relief Services and World Vision-Ethiopia alone have planted nearly 20 million tree seedlings and restored 217 056 ha of degraded land to benefit 156 206 households. Another 125 000 ha has been brought under area enclosures for restoration, with 1 146 government and private nurseries provided with technical support.
- The Green Legacy Initiative: The Government of Ethiopia made global headlines in July 2019 when it claimed to have broken a world record by planting more than 350 million trees in one day. Since then, the Green Legacy Initiative has become an annual treeplanting drive. The Green Legacy Initiative is rooted in a vision of building a green and climate resilient Ethiopia – aligned with the ambitions of the country's green economy strategy (CRGE). By far the most popular initiative has been the seasonal campaign to plant billions of seedlings every year and restore the landscape. The initiative has been going on in earnest over the past three years, with 25 billion tree seedlings already planted, some outside of the GGW areas. The Green Legacy Initiative report estimates that up to 20 million volunteers from villages, government, the private sector and NGOs have taken part in the annual drive. Budgetary demands are quite substantial, with the government claiming to have spent US\$22 million in the 2021 campaign alone.

The Ministry of Agriculture is spearheading the campaign, with the EFCCC (co-chair) and the Ministry of Water, Irrigation and Energy playing important roles in coordination and implementation. The Ministry of Innovation and Technology supports data management for the initiative. Other government ministries contribute to supporting mobilisation and planting trees. The Ministry of Education, for example, works with universities, while the Ministry of Women, Children and Youth promotes involvement of youth.

Ethiopia has also supported other countries in the region as part of expanding its green legacy. Ethiopia raised quality seedlings and shared them with Eritrea, Djibouti, and Somalia. The UN Environment Programme has also recognised the Ethiopian Green Legacy Initiative, hoping that other countries will be inspired to carry out similar reforestation initiatives and contribute to the objectives of the UN Decade on Ecosystem Restoration 2021-2030. The Ethiopian government has claimed that, since the launch of the Green Legacy Initiative in 2019, the initiative has increased the number of nurseries in the country from 40 000 to 121 000 and that 767 000 jobs have been created for youth and women alone. A remarkably high survival rate of 84% for saplings has also been claimed. Some have questioned the veracity of these statistics, particularly the high survival rate of saplings, given the challenges related to land use planning and tenure. It is important to set up a robust monitoring system to determine the impact of the campaign on the environment and carbon sequestration to draw lessons for GGW. A pre-requisite then is to plant the right trees in the place and ensure that local populations and key local entities have the incentive to look after them for at least 10 years to maximise their survival rate.





Project finances were mobilized from domestic and external resources by the Ministry of Finance and then channelled to implementors through the Development Bank of Ethiopia. Implementation of projects is spearheaded by the Ministry of Agriculture. This funding and implementation structure, which developed in the early years of the CRGE, has become the main modality for the implementation of GGW projects. Data released by the Ministry of Planning and Development indicates the amount of funds received and the corresponding co-financing leveraged from various funding sources (Table 3). The bulk of these funds come from GEF, which financed 85 projects at national, regional and global levels. GEF has also made substantial funds available directly to civil society organisations through its Small Grants Programme.

Table 3: GGW-Ethiopia Funding

Funding	Project Type	Number of Projects	Total Financing (US\$)	Total Co-Financing (US\$)
GEF Trust Fund	National	27	102,259,787	722,266,747
	Regional/Global	58	751,494,718	6,194,695,187
Least Developed Countries Fund	National	6	31,453,378	151,157,430
	Regional/Global	2	9,751,956	33,528,600
CBIT Trust Fund	National	1	1,166,000	192,000
Multi Trust Fund	National	1	12,962,963	94,655,517
Special Climate Change Fund	National	1	995,000	1,866,667
	TOTAL	96	US\$910,083,802	US\$7,198,362,148

Source: GEF Ethiopia Country at-a- Glance (2022), Ministry of Planning and Development; see also https://www. thegef.org/projects-operations/country-profiles/ethiopia; Federal Environmental Protection Authority Environment Protection Authority (2013) Ethiopia - Fact Sheet - GGW Phase 1.

At the same time, about 48 projects were submitted for funding, of which 43 qualified for US\$23 million in financing. Examples include:

- To facilitate CO₂ trading in the country, the REDD+ National Secretariat was established with a US\$13.5 million grant from the Government of Norway.
- The Government of Norway also provided about US\$50 million for the Oromia Pilot Forest Development and Protection Project, with a further US\$9 million for capacity building in other regions.
- Ethiopia has also benefited from GCF a global platform to respond to climate change by investing in lowemission and climate-resilient development.
- Funds were also mobilised from some of the world's multilateral climate adaptation finance instruments, including the Special Climate Change Fund, the Global Mechanism, and the LDC Climate Change initiative.

In total, domestic and international finance mobilised between 2011 and 2019 stood at US\$482,975 and US\$1,666,667 respectively (United Nations 2020). The GGW has limited capacity to monitor these funding flows. Given its current structure, the GGW office faces serious challenges in developing funding proposals, preparing co-financing or blended financing instruments and managing systems of results-based payment. Significant improvements should be made in terms of staffing and capacity development to address these constraints.

Stakeholder mapping

Stakeholder Category	Key focus of the stakeholder	How could the stakeholder contribute to the GGW?	Suggested strategy or action point for engaging the stakeholders
CIFOR-ICRAF	ICRAF Agroforestry research Feed into the GGW goal afforestation		Member of scientific committee in GGW
Forest Research Forest Development Zenebe Mekonnen (PhD)	Climate change and risk analytics and forestry, monitoring emission	Evidence based knowledge transfer	Include as part of the network or forum
Mr. Addisu G.Madhin	GGW direct engagement and contribution	Design programme and direct funding through Ministry of Finance	Direct involvement
Dr. Adefris Worku	Direct engagement	Country coordination and regional link to initiative	Need very high-level engagement with stakeholders, partners and funders
Zena Habtewold	Direct involvement in implementation of projects and programmes	Involve through monitoring and Evaluation	Participation in every part of the process of design and implementation of the GGW activities
Dr. Tadesse Kuma Senior Researcher scientists under the Policy Study	Involved in climate policy research	Contribute to policy and decision making	Needs to be part of policy forum through workshop participation
Mr. Dejene Habesha	Climate change is one of the donor technical working groups	Contribute to coordination and funding mechanisms, consultations	Include in the national task force
Ethiopian Institute of Agriculture Research (EIAR) Dr. Feto Director	Climate adaptation and resilience	Support crop and livestock and natural resource management including agro- meteorology monitoring	Most important sources of agricultural technology in the nation and regions.
ILRI Tigist Worku	Low land livestock research and information generation	Data generation and technology dissemination	Important stakeholder for generating public good information and hence should be part of stakeholders
Youth groups	Raising sufficient nurseries	Selecting nursery and planting trees adapted to the agroecology	Organize the youth groups into clusters so that they have sufficient representation in the GGW initiative
Ethiopian Environmental Protection Agency (EPA)	High influence through environmental policy	Help to make decision on environmental policy and climate change	Potential partners in GGW or Forum
International Centre for Agricultural Research in the Dry Areas Dr. Zewdie Bishaw Head, Seed Section	Drought resistant pulse research and adaptation And forage seed bank in dryland areas feeding into GGW areas	Climate change adaptation and mitigation	Member of task force/ coalition
International Crops Research Institute for the Semi-Arid Tropics Addis office	Knowledge and technology generation	Supporting national research institutes with climate change adaptive research	Include in working groups or national forums
CIMMYT Dr. Dagne Wegari	Climate smart agriculture in maize and wheat	Closely work with the national NARS and contribute to drought tolerant maize and wheat	Part of working group

North Man Mar North	Stakeholder Category	Key focus of the stakeholder	How could the stakeholder contribute to the GGW?	Suggested strategy or action point for engaging the stakeholders
	Ministry of Finance	Managing funding	Support the national GGW	
No Contraction	Ministry of Irrigation and Lowlands	Addressing main goal related to GGW in lowland areas	Directly contribute to facilitating implementations	Should be major partners
A CONTRACTOR OF A CONTRACT	Meteorological Data and Climatology . Melesse Lemma Lead Executive Officer	Data monitoring on climate related to GGW goas	Long term data base storage on weather monitoring to help climate change, provide data for users	Should be part of national task force or collaborators
		Agriculture on climate change related projects such as soil	Funding the climate change projects and monitoring in GGW	Consider them as part of consortium
Warney 125	Civil Society	Influencing policy through evidence-based research and advocacy	Research on climate change policy and organize forums	
A REAL PROPERTY AND A REAL	Consortium for Climate Change Ethiopia(CCC-E) CARE-Ethiopia, Catholic Relief Services, World Vision	-Capacity development of member organizations Awareness raising Networking, constructive engagement,Coordination and harmonization Experience sharing Action research, publications and dissemination	Networking	Include as major stakeholders
CONTRACTOR NO.	Pastoral Forum Ethiopia Mr. Tezera Getahun , Managing Director	Advocate for natural resource management and interventions in dryland/lowland areas of Ethiopia, work on rangeland management, degradation etc.	Advocacy and networking, creating awareness in the pastoral areas, international and national linkage	Useful part of GGW initiative for the lowland areas of pastoralists

Reflections and recommendations for scaling up GGW action in Ethiopia

A number of land restoration, reforestation and watershed management projects (including SLMP, REDD+ and MERET) have been implemented by several Ethiopian ministries and agencies as a component of national development programmes, notably PASDEP, CRGE and GTP. Several projects have also been implemented with funds from GEF, UNDP and other funders and development agencies in partnership with the EFCCC. In the second phase of the GGW initiative, additional projects have been implemented that are aligned with the initiative's objectives, including RLLP, Tree Aid, P4G and Regreening Africa. In many cases, however, the linkages with the GGW initiative are not made explicit. Community-based natural resource management projects are implemented in the arid and semi-arid regions of the country and yet they remain fragmented. Successful practices are often not scaled up. Ethiopia's Green Legacy Initiative has supported the establishment of billions of saplings and positioned the country as a leader in large scale restoration, yet improvements must be made to the country's land tenure system and a greater emphasis placed on establishing incentives and mobilizing communities and other stakeholders to protect and care for the saplings to ensure long term results.

Since 2011, Ethiopia has mobilized US\$1.7 billion from external funding agencies and a corresponding US\$0.5 million from domestic sources for climate-related projects. However, neither the GGW Ethiopia office nor the Ministry of Agriculture have adequately monitored how this money was raised or disbursed. This is partly due to the lack of a lead institution to conduct a comprehensive mapping of available funding opportunities and direct these to specific projects that are aligned with the GGW initiative.

The private sector and civil society feature prominently in the GGW agenda, but this has not been effectively translated into action to draw on resources and encourage investment for developing Ethiopia's climate-resilient green economy.

Ethiopia lacks a stable lead institution to drive forward the GGW agenda, with the mandate for managing the country's climate change response being shuffled between several ministries and agencies over the past number of years. An outcome of this instability is that many of the country's climate and restoration projects were implemented without any reference to the GGW agenda. This has also resulted in a lack of coherence, continuity, coordination and alignment between these projects. This institutional instability and lack of policy coherence has also created challenges in assessing the outcome of these project and integrating emerging lessons and good practice. The GGW has lacked a functioning platform to bring actors together; instead, each climate and restoration project implementers have worked independently.

The GGW needs a coordination mechanism and system of monitoring and evaluation for the various climate and restoration initiatives in the country. Initially, a national agency for Great Green Wall was constituted with the mandate to handle all issues related to the implementation, coordination, and monitoring of the Initiative.



Concurrently, a national steering committee and a scientific and technical committee were proposed to provide oversight and help guide implementation. This original structure has, however, not been operationalised.

Currently, there is limited awareness of the GGW initiative even by government institutions and research centres. Moreover, key institutions lack the platform for a systematic, coordinated assessment of and response to climate change risks and opportunities. This much is also true of international NGOs implementing natural resource management activities. In the absence of a lead institution, successful practices are not scaled up to mitigate the effects of climate risk and help improve the country's climate resilience.

Climate, land management and restoration research is not coordinated and results are not shared across the spectrum of stakeholders to draw key actors around a common agenda. The generation and dissemination of knowledge should be improved so that future activities can be informed by past experience. The GGW country office should reach out to universities, donor projects and UN organisations to identify priority research themes and to support the documentation and dissemination of lessons and best practices to communities, civil society actors and policy makers in support of adaptive learning.

The GGW should cultivate collaborative relationships with projects, agencies, and organisations working on climate change, including community-based organisations. It should work on aligning and harmonizing strategies, while also coordinating implementation to address the disconnect between projects and institutional mandates.

The GGW country initiative should play a more active role in supporting the integration of climate change into development plans and programmes at the national and subnational levels. It should cooperate with relevant government institutions to develop a cadre of knowledgeable government and civil society actors to push for the development and implementation of improved natural resource management policies.

Integrating economic activities like beekeeping, honey production, fodder trees, nurseries for seedlings, etc with

land restoration and water harvesting initiatives would not only create job opportunities, reduce poverty and generate a stable flow of income but also assure the sustainability of restoration projects over time and ultimately help to achieve the GGW objectives.

Projects like Regreening Africa have demonstrated that community-based adaptation initiatives can be strengthened through the provision of training to local extension staff and local communities, including youth and women groups, for improved land, water and forest management. The GGW country office should encourage development finance institutions and the Ministry of Agriculture to require projects to adopt such practices.

Climate change-induced resource scarcity often leads to conflict and impedes efforts to tackle environmental degradation and achieve economic growth. The GGW will have to work on pre-empting such conflicts through a concerted campaign and in collaboration with projects on the ground.

The GGW should promote tailored adaptation strategies built on local practices and customary institutions; it should encourage community-based planning and ownership for sustainable management of forest resources, trees, watersheds, and other natural resources and ecosystems.

The GGW needs to play a more proactive role in reaching out to external funding agencies and driving the mobilisation of resources. There remains a significant gap between the amount of international support pledged by donors and the amount reported by the Ministry of Finance in support of the country's 2030 restoration and climate targets.

The GGW Ethiopia country office needs to be revamped and provided with more resources and personnel so that it can play a more active role in supporting climate change and restoration initiatives. This will allow the country office to take the lead in coordinating and monitoring the various initiatives in the country, as well as raise public awareness of the GGW initiative and mobilize support for its objectives, agenda and operational modalities.



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