



# Mali

## Great Green Wall Initiative –Country Review



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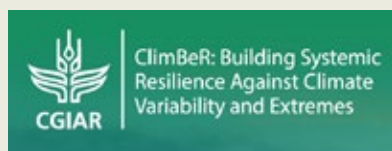
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### ClimBeR

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.

 <https://www.cgiar.org/research/publication/initiative-overview-climber-building-systemic-resilience-against-climate-variability-and-extremes/>



### Knowledge series





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# Abbreviations and acronyms

<b>AEDD</b>	Environment and Sustainable Development Agency	<b>LOA</b>	Agricultural Orientation Law
<b>ALP</b>	Agricultural Land Policy	<b>M&amp;E</b>	Monitoring and Evaluation
<b>ANGMV-Mali</b>	National Agency of the Great Green Wall of Mali	<b>MAEP</b>	Ministry of Agriculture, Livestock and Fisheries
<b>ANR</b>	Assisted Natural Regeneration	<b>MEADD</b>	Ministry of Environment, Sanitation and Sustainable Development
<b>APGMV</b>	Pan-African Agency of the Great Green Wall	<b>NAP</b>	National Adaption Plan
<b>BOAD</b>	West African Development Bank	<b>NDC</b>	Nationally Determined Contribution
<b>CAP-ANGMV</b>	National Political Framework for the Great Green Wall Alliance	<b>PNAE</b>	National Environmental Protection Policy
<b>CBD</b>	International Convention on Biological Diversity	<b>PDA</b>	Agricultural Development Policy
<b>CNE</b>	National Environment Council	<b>PLNCD</b>	National Plan for the Fight Against Desertification
<b>CREDD</b>	Strategic Framework for Economic Recovery and Sustainable Development	<b>PNCC</b>	National Policy on Climate Change
<b>CSCR</b>	Growth and Poverty Reduction Strategic Framework	<b>PNF</b>	National Forest Policy
<b>CSI-GDT</b>	Action Plan and Strategic Investment Framework for Sustainable Land Management	<b>PNG</b>	National Gender Policy
<b>ECOWAP</b>	ECOWAS Common Agricultural Policy	<b>PNISA</b>	National Agricultural Sector Investment Programme
<b>FAO</b>	Food and Agriculture Organisation	<b>PNS-Mali</b>	Mali's National Drought Plan
<b>GGW</b>	Great Green Wall	<b>POA</b>	Professional Agricultural Organisation
<b>GGW-A</b>	Great Green Wall Accelerator	<b>SDGs</b>	Sustainable Development Goals
<b>HCC</b>	High Council for Decentralized Entities (Haut Conseil des Collectivités)	<b>SLM</b>	Sustainable Land Management
<b>ICAT</b>	Initiative for Climate Action Transparency	<b>UGMV</b>	Management Unit of the Great Green Wall
<b>IDA</b>	International Development Association (World Bank)	<b>UNCCD</b>	United National Convention to Combat Desertification
<b>LDN</b>	Land Degradation Neutrality	<b>UNFCCC</b>	United Nations Framework Convention on Climate Change
		<b>WAEMU</b>	West African Economic and Monetary Union



# 1 Overview of the Great Green Wall Agency in Mali



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Mali's participation in the GGW initiative falls within the continued implementation of its National Plan for the Fight Against Desertification (PLNCD), adopted in October 1985. The Mali government created a Management Unit of the Great Green Wall (UGMV) in March 2016. The UGMV was hosted by the Forestry Department. The UGMV was later transformed into the National Agency of the Great Green Wall (ANGMV-Mali) by the government in 2019 (Traoré *et al*, 2021).

With regards to the GGW, Mali has fulfilled the following commitments:

- Signing the agreement establishing the GGW (June 2010)
- Ratifying the GMV Convention (October 2011)
- Creating a GGW National Agency (September 2019), establishing the organisation and operating procedures of the Agency, and defining its role and responsibilities
- Holding the first session of the Board of Directors of the Agency (April 2020)
- Setting up the platform for women and youth
- Setting up the National Alliance of the GGW (December 2021)
- Holding the first virtual meeting of the GGW Alliance (early 2022)

The ANGMV-Mali reports to the Ministry of Environment, Sanitation and Sustainable Development. The Agency is headed by a Director General, a position currently held by Mr. Toumany Diallo, who was nominated to this function in March 2021. He was the third director nominated in three years, an indication of a high turnover in the leadership of the Agency and potential loss of institutional memory. Several ministries are partner departments and members of the political framework of the National Alliance of the GGW, which is chaired by the Prime Minister (see below).

The ANGMV works with the Agency for Environment and Sustainable Development (AEDD) which is the designated National Authority for all financial mechanisms in Mali. It oversees the Nationally Determined Contribution (NDC) and is the Global Environmental Facility (GEF) focal point. It therefore plays a key role in identifying funding opportunities for the ANGMV. The institutional dynamic between the AEDD and the AGMV is clearly laid out in a partnership framework established between the two agencies.

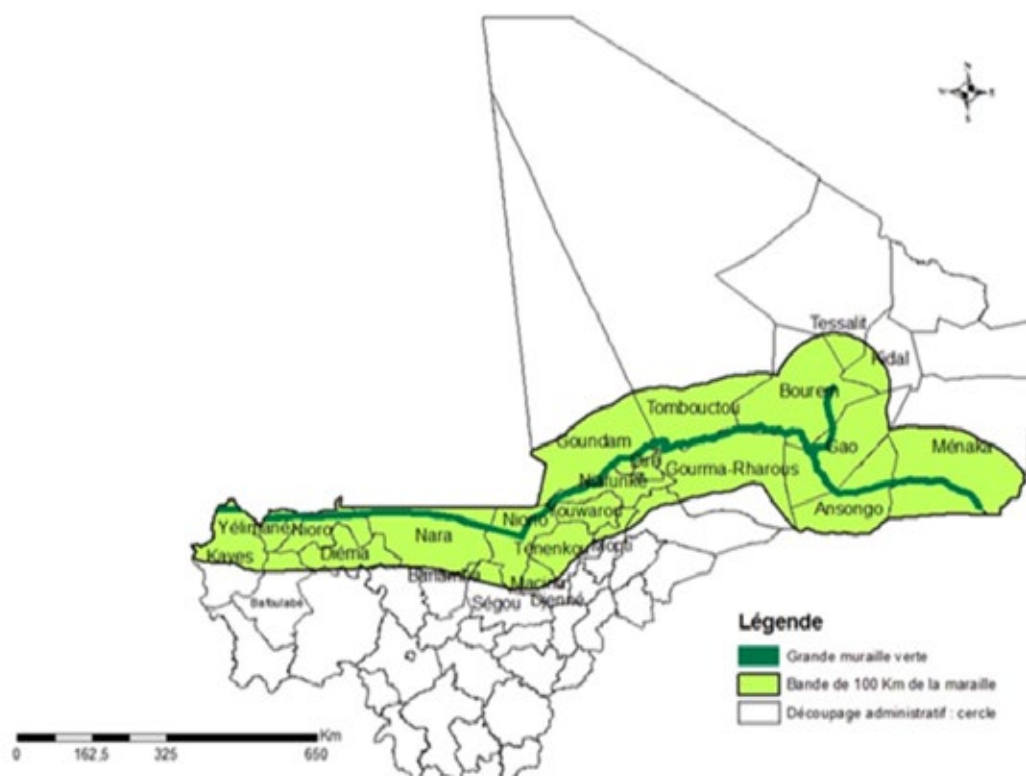
Until recently, the structure was reported to have limited connection with other departments. At the end of each year, the Agency would ask the various relevant ministerial departments about their achievements so that they could be included in the annual report. However, the ministerial partners did not know exactly what information was expected, which affected the completeness and cohesion of reporting. At the end of 2021, the Agency developed a reporting framework clarifying which locations are part of the GMV geographic focus and the expected outputs (Keita, personal communication, 2022). While this has improved reporting, the impacts on the ground carried over to 2021 remain limited (see below).

In December 2021, a ministerial decree established the National Political Framework for the GGW Alliance (Cadre Politique de l'Alliance nationale de la Grande Muraille Verte) (CAP-ANGMV) (see section on platforms below).

## Geography

In Mali, the GGW extends over a length of 2 066 km and a width of 215 km, crossing eight administrative regions, 24 districts, 204 municipalities and more than 2 622 villages (Figure 1). This zone has a population of about 4 million people.

Figure 1: Map of the GGW zone in Mali



Source: Traoré et al, 2021.

## Scope and ambitions of the GGW in Mali

The objectives of the GGW in Mali are to combat desertification, support natural resource management and poverty alleviation, and promote the development of the Sahara-Saharan zone. To achieve this, the GGW aims at restoring about 30.4 million ha in the GGW intervention zone.

The National Agency of Mali works along five strategic axes (African Union 2022):

- i. Institutional, technical and financial capacity-building of stakeholders on climate and biodiversity;
- ii. Knowledge management and sharing, including finding support and communication;
- iii. Protection, rehabilitation and management of land;
- iv. Income-generating activities, investments and subsidies; and
- v. Coordination, monitoring and evaluation.

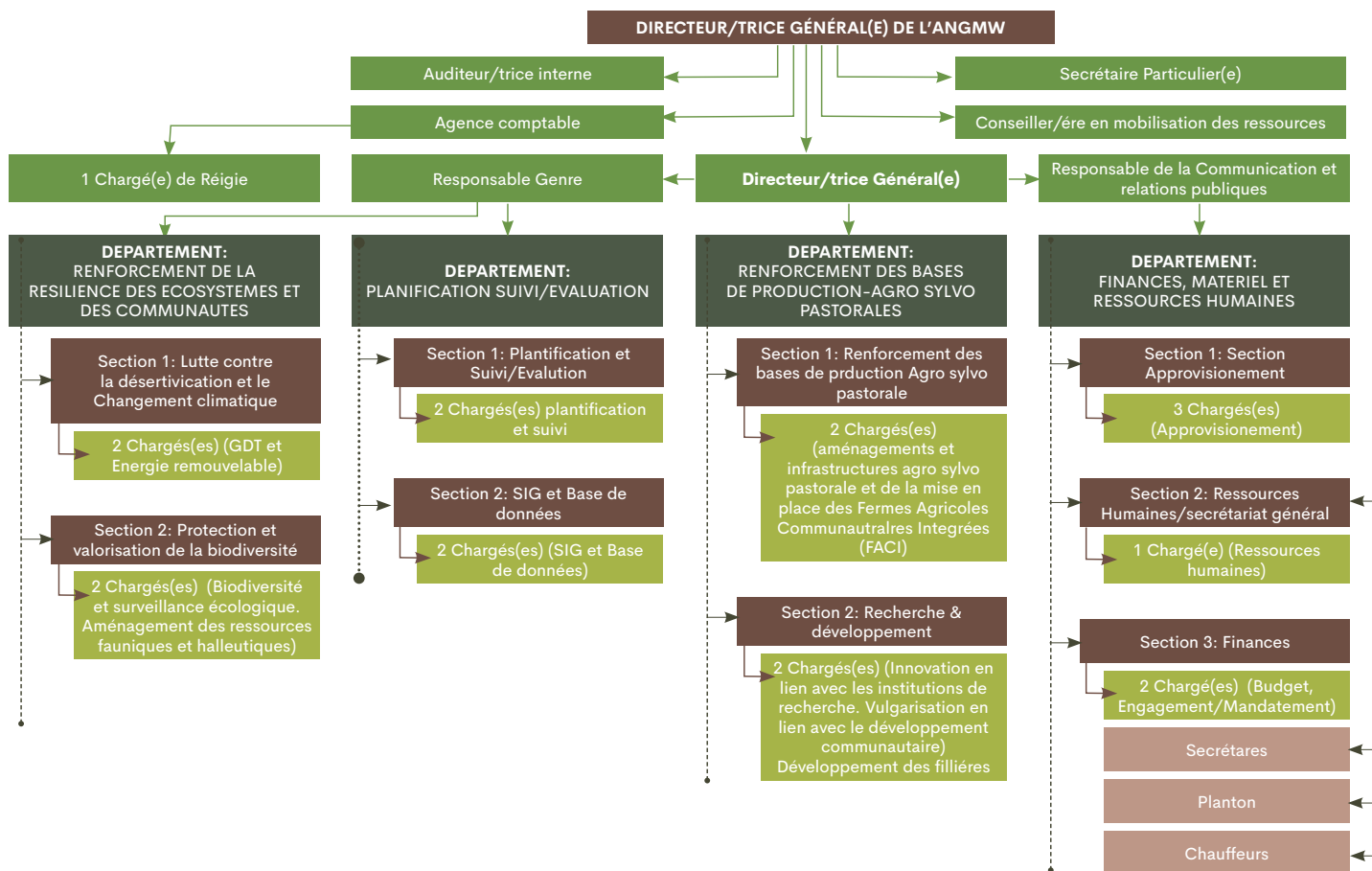
The GGW is required to share a summary of its achievements as part of the preparation of the annual report on the implementation of the National Environmental Protection Policy (PNAE).

## Organisational structure

The agency is composed of four departments:

- The Department for Strengthening the Resilience of Ecosystems and Communities;
- The Department of Planning, Monitoring and Evaluation;
- The Department to Strengthen the Production Base for Agro-silvo-pastoralism; and,
- The Department of Finance, Equipment and Human Resources

Figure 2: Mali's National Agency of the Great Green Wall (ANGMV)



Source: Avril, 2020

## Operational challenges

The main challenge the Agency is faced with is a lack of resources. According to Traoré "the Agency is running on projects and programme funding because the government's allocated budget covers only the Agency's operating costs" (Traoré *et al*, 2021). As the Agency does not have staff it can allocate to field activities, it relies on service providers and the field staff of the Ministry of Environment when it has activities. This puts more strain on Ministerial staff, as the GGW-related activities are carried without the transfer of additional funds (for example, to travel to GGW sites). The rural development directorate expressed the wish that state structures that work with the Agency at the level of all the communes be provided with dedicated GGW agents or at least that they would be given the means to meaningfully support GGW actions on the ground (Keita, personal communication, 2022).

Institutional coordination is a challenge and there have also been difficulties related to a lack of institutional leadership. However, with the recent change in leadership, the Agency has the opportunity to address these challenges (Bayala and Toure, personal communication, 2022).

## Achievements to date

Over the past few years project implementation of the GGW has taken place in a challenging context. The following factors have adversely impacted the Agency's overall performance in the implementation of its activities and the mobilisation of financial resources:

- The country's institutional political transition process;
- The security situation in the country; and,
- The COVID-19 pandemic, which has constrained opportunities for partnership development and resource mobilisation.

The 2020 GGW Global Report (UNCCD, 2020) states that Mali had restored just over 6 000 ha of land (as of 2019), broken down as follows: 6 297 ha of reforested land, 120 ha of restored land, 41 ha under assisted natural regeneration (ANR) and 18 ha of dune rehabilitation. These achievements required the production of 146 million seedlings/plants and resulted in the training of 1 200 people and the creation of 21 487 jobs.

However, this reporting contrasts with the very meagre onsite achievements reported for 2021, with the planting of only 20 hectares carried out through an undisclosed service provider (Ministry of Environment, 2021).



Total funding allocated to the GGW in Mali as of 2019 amounted to US\$3.3 million domestic funding and US\$23.4 million international funding (UNCCD, 2020). In 2021, the Agency reported that its operational budget was 300 million CFA francs (roughly US\$ 475,000) with some operational shortfall having been covered by the Ministry of Environment (Ministry of Environment, 2021).

## Country-specific needs for technical assistance, capacity building and advisory services

In a survey issued by the UNCCD Accelerator to GGW countries between November 2021 and January 2022, asking about their needs for technical assistance to advance implementation of the GGW, Mali expressed:

- A “very high” need for undertaking a needs assessment related to its strategy development and project identification; and,
- A “high” need for assistance in project preparation, project submission and approval

Mali also identified other support needs, although these were classified as less urgent, including assistance with 1) fostering a more coordinated GGW approach in-country, 2) interacting with other agencies and actors, 3) the development of a national platform, and 4) fostering absorptive capacity of donor funds.

## Funding of bankable projects linked to GGW

The Agency is extremely reliant on external sources of funding. While international funding far exceeds domestic funding, it still falls short of the Agency’s needs. All projects related to the GGW being implemented in Mali are regional projects, none are being implemented with a sole focus on Mali. However, it appears that in 2022 things have been shifting, with many strategic partners re-engaging Mali on the GGW.

In 2022, under the eighth replenishment of resources of the GEF Trust Fund (GEF-8), Mali’s stakeholders have been working to establish a portfolio for the GGW (Diallo, personal communication, 2022). Amongst the initiatives being developed, the Agency highlighted the following examples:

- The Inclusive Green Climate Fund (IGREENFIN): a project led by IFAD and funded by the Green Climate Fund (GCF). The project aims to help small-scale farmers.
- The “Building on the Achievements of the GGW” project: a project that Mali is seeking to develop with UNEP in the framework of GEF 8. This project addresses institutional aspects, capacity building, knowledge enhancement, and support to communities through income-generating activities. UNEP has committed to

supporting the Pan-African Agency of the Great Green Wall (APGMV) Member States in establishing their baseline situation.

- The World Bank’s “Resilient Landscapes” project, which is in the final stages of development and covers the Malian portion of the wall.
- A Mali-EU Joint Programming agreement was put in place in 2021 for the period 2021–2024.

## National Platforms

After Senegal, Mali is the second country to have established a national political framework for the GGW Alliance (Cadre Politique de l’Alliance nationale de la Grande Muraille Verte – CAP-ANGMV), by ministerial decree in December 2021. Its mission is to ensure the realization of the GGW at the national level. The Alliance is governed by the Prime Minister’s Office, which convenes annual meetings, and with the Ministry of Environment, which provides secretarial services for the Alliance. Its key objectives are as follows:

- To support the national GGW Agency with the development of partnerships and the sharing of information at the national and sub-regional level for the purpose of converging interventions and coordinating actors around the GGW;
- To mobilize human and financial resources emanating from the various sectors concerned around the GGW; and,
- To evaluate and provide guidance on the implementation of GGW activities.

The establishment of the political GGW Alliance is being supported by the UNCCD GGW-Accelerator (GGW-A). The Alliance includes representation from 18 ministries, as well as technical and financial partners for environment and rural development. This consultation framework requires state resources to become functional at the national, district and municipal levels. To date, the Alliance has convened a virtual meeting but has not yet been able to host an in-person meeting (Diallo, personal communication, 2022).

At the technical level, the Alliance is to focus on the coordination committees at the community level, so that the monitoring and evaluation, capitalization, resource mobilization and advocacy mechanisms are coherent and synergistic. The aim is also to better involve the actors in the summary of results so that the implementation of the ANGMV is based on learning from what has been done. This coalition will be implemented at the sub-regional level through alliances. The technical coalition has not yet been formalized by decree,<sup>1</sup> but according to the ANGMV Director, Mali does not require a new structure in this regard, because at the technical level this coalition will rely on the development coordination committees that the state has already created at the level of the communal districts (Diallo, personal communication, 2022). But views on this differ. A technical advisor within the Department of Rural Development argues that, despite the establishment of the Alliance at the political level, what is missing is information sharing at the technical level. The information may not be

<sup>1</sup> The 2021 national report on the GGW does mention “a draft decree on the creation, organisation and functioning of the technical commission of the National Alliance of the Great Green Wall of Mali” (March 2021);

effectively conveyed through the existing development consultation frameworks created by decree at regional and local levels; for this reason, the advisor argued that it would be relevant to create a technical framework specifically targeting GGW to ensure that technical information is relayed to sub-national levels.

There are also other platforms and mechanisms that have been put in place to strengthen the work of the GMV and ensure the commitment of stakeholders. These include:

- The GMV Women's Platform
- A WhatsApp group was set up in 2021, dedicated to the ANGMV
- A coalition of stakeholders was set up around the GMV Accelerator to accelerate resource mobilization

## Support needed for project identification and scale up

The ANGMV expressed the need for ongoing support to develop project identification documents that are robust and impactful. In particular, technical support with converting the extensive pipeline of potential projects into bankable proposals is required.

Amongst the frameworks for effective governance, sustainability, stability and security put forward by Mali in the context of a needs assessment undertaken by the UNCCD (UNCCD 2022:21) were:

- Development of frameworks for consultation and security of people and property in the regions;
- Implementation and operationalisation of information systems;
- Youth Green Caravan;
- Women's Green Platform; and,
- Structuring and functioning of national alliances.

## Dialogue and Scaling

Mechanisms or platforms that would be suitable to scale up the GGW work and ensure stakeholder engagement include:

- Support the Alliance with holding meetings and becoming fully operational. To date the Alliance has met only virtually and the stakeholders expressed the need for an in-person meeting;
- Strengthen the inclusiveness of the Alliance in terms of broadening representation; and,
- Support engagement on the GGW resource flows to various government entities, to ensure a coherent approach to fundraising for the GGW. The West African Development Bank (BOAD) has for instance been in contact with the National Directorate of Water and Forests to see how it could contribute to the country's GGW project portfolio. It was in this respect calling for integrated projects to be implemented in vulnerable areas. The ANGMV has been in touch with the BOAD to fund projects but the feedback from the BOAD was that there was a lack of inter-departmental cooperation in submitting integrated projects. Support is required to foster inter-departmental dialogue and cooperation

to establish a solid pipeline of GGW projects (Keita, personal communication, 2022). Facilitating such a dialogue will help to ensure mutual trust and transparency (Zougmore, personal communication, 2022).

## Data Platforms

There is currently limited data related to the GGW ambitions. This includes data on land restoration, status of degradation, mapping of degradation, land health, and soil erosion at the programme and project level, as well as the national level.

The following was identified in terms of data platforms:

- Mali's **Forest Information System (SIFOR)** consolidates all of Mali's data in terms of land restoration but only includes data from major government undertakings. SIFOR also constitutes a valuable decision-making tool accessible to many actors for development and environmental advocacy purposes. However, it excludes restoration efforts undertaken by non-state actors (Dembélé, personal communication, 2022).
- In January 2021, a request was made to the Geneva Water Hub (centre specialised in hydro politics and hydro diplomacy at the University of Geneva) to create a SIGMAP for the Agency (Ministry of Environment, 2022).
- In the context of the EU-funded **Global Climate Change Alliance Plus in Mali - Phase 2 (GCCA+ Mali 2) (2017-2023)**, the AEDD will receive support in setting up a communication strategy and strengthening existing information systems; strengthening the forestry information system and the availability data; and in initiating the setting up of a national monitoring system in the forestry sector.

There is a need for further work on exploring synergies between these systems, the consolidation of the ANGMV's own information systems and the support provided by the GGW-A in setting up a monitoring and evaluation (M&E) system for the GGW's national activities in Mali.

## Financing

The national funding landscape for the GGW is characterised by the weak mobilisation of donor resources. From 2017-2020, 670.75 million CFA francs were invested at the level of the ANGMV, of which 74% was from the state, 2% was from the APGMV, and 24% from technical and financial partners (ILRI, 2021).

Mali reports having limited technical capacity in compiling project proposals. This can in part be linked to the limited knowledge of the requirements of funding partners and related procedures. Regional banks, such as the African Development Bank, have provided some support with online training and the FAO has provided technical support and training on access to funds under GEF 8. National stakeholders expressed that such training should be more regular and conducted in person rather than virtually.

A UK government-funded programme Building Resilience and Adaptation to Climate Extremes and Disasters (BRACED) has been implementing an action research and advocacy project in Senegal and Mali called “Decentralising Climate Funds (DCF)” which seeks to support communities in both countries to become more resilient to climate change through access to locally-controlled adaptation funds. There would be merit in exploring how this initiative could be synergised with the projects implemented by the ANGMV.

## Institutional strengthening

The GGW 2021 annual report flags the following capacity building support activities that have taken place:

- Capacity building on opportunities for the GCF and other funds supporting forest and landscape restoration, organised by FAO/FVC (June 2021);
- Training workshop for members of the National Steering Committee of the GEF Microfinance Programme on GEF 7 and the functioning and management tools of the GEF/MFP (July 2021); and,
- GIZ provided training on the facilitation of participatory analysis and the use of interactive information tools within the framework of the FREXUS project activities on the links between natural resources management and conflicts in the context of climate change (October 2021).

The Agency and the AEDD in a joint interview flagged the very high need for capacity development to develop bankable and “impactful” project proposals. The feedback received from funders is that the submitted projects “lack impact”. The UNCCD will be availing a consultant to assist them in this respect (Diallo and Goita, personal communication, 2022).

These priorities are echoed in a report compiled by the UNCCD following its engagement with GGW countries in June 2022, which identified specific areas where capacity building support was needed, namely:

- Strengthening the technical and logistical capacities of GGW structures and local development initiatives;
- Strengthening the scientific and technical skills of the structures and other actors of the GGW;
- Training and development of actors on GGW themes; and,
- Capacity building of actors in M&E related to natural capital and information management

Included in the priority needs to advance the implementation of the GGW, were:

- The revision of the strategy and its action plan;
- Resource mobilization; and
- Capacity building and an M&E system.

The AEDD also requested further capacity development related to climate change negotiations and climate finance in general.

Mali is one of the countries earmark for receiving GEF support as part of the project *Strengthening national-level institutional and professional capacities of country Parties towards enhanced UNCCD monitoring and reporting –*



# 2 Main bottlenecks for the implementation of the GGW initiative

The ANGMV summarizes key bottlenecks as follow:

- The low level of mobilization of the financial and technical partners around the GGW;
- The lack of synergy between projects and programmes involved in the GGW;
- The insufficient mobilization of internal resources;
- The insufficient mobilization of external resources;
- The weak coordination of the actors; and,
- The lack of information on the financial instruments of the various partners.

THESE ISSUES ARE UNPACKED IN FURTHER DETAILS BELOW.

Bottleneck or key challenge	Description and underlying factors	How this can be addressed within the country
<b>POLICY LEVEL BOTTLENECKS</b>		
<b>Lack of harmonized mainstreaming of land restoration strategy across different sectoral domains and jurisdictions</b>	<ul style="list-style-type: none"> <li>• Lack of harmonization of sectoral interventions on the theme of desert advancement and SLM. Some provisions in the forestry law contradict the agricultural policy.</li> <li>• Large scale agro-industrial developments still feature strongly in Mali. The Department of Agriculture is focused on mechanization, with many investments allocated to tractor subsidies and fertilizer subsidies, which is not aligned with an agro-ecological approach.</li> <li>• This inconsistency of public policies is reflected by a poor harmonization between regulations on decentralization, land use planning, mining operations (mining code), forestry code, agriculture, pastoral development strategies and land laws, which maintain the different resource managers in a siloed sectoral approach.</li> <li>• What is lacking in the policy framework is a process/law articulating the synergy between land uses.</li> <li>• The Directorate of Water and Forests took part in developing a strategy for the valorisation of non-timber forest products – this strategy was adopted but implementation has been slow</li> </ul>	<ul style="list-style-type: none"> <li>• Policy harmonisation</li> <li>• Allocate existing agricultural subsidies to CSE/DRSS interventions and organic compost</li> <li>• Expedite the implementation of the strategy for the valorisation of non-timber forest products</li> </ul>

Bottleneck or key challenge	Description and underlying factors	How this can be addressed within the country
<b>Lack of awareness/knowledge of agricultural and economic development frameworks by practitioners</b>	<ul style="list-style-type: none"> <li>• Extension officers and other actors are not sufficiently informed about the legal framework related to agricultural and economic development, which makes their application at ground level problematic. In essence, laws are not effectively applied and enforced, and this is especially true when it comes to land tenure issues.</li> <li>• A 2018 decree transfers natural resource management powers to local authorities. However, local communities are not familiar with and local municipalities are struggling to appropriate these competencies. Provision was made to set up a land tenure commission in each community area. It was intended that capacity building would be provided by the local administration, but this has not occurred, leaving NGOs to fill this gap.</li> </ul>	<ul style="list-style-type: none"> <li>• Support large scale awareness of new legislative provisions relating to land and natural resource rights and responsibilities and ensure that the necessary capacity building and resource allocation is provided.</li> </ul>
<b>Lack of an agroforestry development strategy</b>	<ul style="list-style-type: none"> <li>• Mali's forestry policy was revised in 2018 but it remains silent on use and access rights related to trees that farmers leave in their fields.</li> <li>• Elements of agroforestry governance are spread throughout different ministries.</li> <li>• There is no formal recognition in the forestry legislation that farmers have an exclusive right to the trees resulting from ANR on their fields.</li> <li>• The absence of an agroforestry development strategy, combined with insecure land tenure and unclear distribution of rights over the restored ecosystems impede the adoption and scaling of agroforestry and other land restoration practices.</li> </ul>	<ul style="list-style-type: none"> <li>• ANR and agroforestry should be adopted by the Ministry of Agriculture, as well as the Ministry of Environment, as essential elements of agricultural extension to achieve real impact on agricultural productivity and resilience</li> </ul>
<b>Competing demands in the GGW area</b>	<ul style="list-style-type: none"> <li>• Competition for land and competition between users for accessible plots to reforest seems to be an additional factor in the fragmentation of the pastoral space</li> </ul>	<ul style="list-style-type: none"> <li>• Scope for mainstreaming restoration under Mali's development plans</li> </ul>
<b>Incomplete decentralization processes</b>	<ul style="list-style-type: none"> <li>• The Agricultural Land Law, promulgated in 2017, has provided for land and village commissions, which should make restoration efforts more secure. However, these communities are not aware of the land commissions that can be used to secure land, which limits the implementation of this law.</li> <li>• While the legal decentralization framework is in place, the process of transferring competencies and resources to the local authorities is not yet effective.</li> <li>• "The effectiveness of the interventions by local authorities is compromised by the weakness of their capacity to control project management" (World Bank 2021).</li> </ul>	<ul style="list-style-type: none"> <li>• Establish legislative and regulatory frameworks favourable to local initiatives.</li> <li>• Greater efforts must be made to support the operationalisation of the decentralisation law, included the transfer of resources to support implementation.</li> </ul>
<b>Unsecure land tenure</b>	<ul style="list-style-type: none"> <li>• Land restoration requires investments, yet no project will attract financial investment without land security and without land tenure rights.</li> </ul>	<ul style="list-style-type: none"> <li>• Support land tenure security mechanisms developed in collaboration with local authorities that will ensure that investors and local actors, especially women, benefit from the value generated by their interventions.</li> <li>• Ensure that provision is made for the land commission to facilitate the process of securing land tenure rights.</li> </ul>

Bottleneck or key challenge	Description and underlying factors	How this can be addressed within the country
<b>GOVERNANCE AND INSTITUTIONAL BOTTLENECKS</b>		
<b>Insufficient information flow</b>	<ul style="list-style-type: none"> <li>• Weak communication, lack of information sharing and dissemination</li> <li>• “The main partners evolve individually according to their interest and there is lack of coordination” (Traoré et al 2021)</li> </ul>	<ul style="list-style-type: none"> <li>• Undertake a study on the contribution of NGOs in reforestation and combatting desertification and ensure that this information is made accessible.</li> </ul>
<b>Institutional weakness: lack of coordination and synergy in the implementation of projects</b>	<ul style="list-style-type: none"> <li>• There is a lack of synergies between projects related to land restoration and projects implemented as part of the GGW. In some instances, the Agency is not aware of donor-funded projects linked to SLM and livelihoods being implemented in the GGW area.</li> <li>• This lack of capitalization translates in inefficient use of resources and undermines the effectiveness of interventions.</li> <li>• This institutional weakness is a broader issue that affects many of Mali’s institutions. “This lack of synergy between departments, institutional instability and insufficient human, material and financial resources in ministerial departments are factors that limit the quality of public interventions in general” (World Bank 2021).</li> </ul>	<ul style="list-style-type: none"> <li>• There is a need to strengthen the coherence of action at the level of the governors and prefects.</li> <li>• This entails supporting the operationalising of the Alliance and the national coalition as well as the various organs of the ANGMV</li> </ul>
<b>Exclusion of farmers as primary actors</b>	<ul style="list-style-type: none"> <li>• Lack of effective inclusion of a wide range of key actors. For example, producer organisations are the grassroots of the GGW. The strategies advocated by them are often very closely aligned to the objectives of the GGW. These producers organisations should be an integral part of the implementation of the GGW (Garreau, personal communication, 2022).</li> <li>• Professional Agricultural Organisations (PAO’s) exist in Mali, but they are experiencing problems of governance, operationalisation and financing. (World Bank, 2021)</li> </ul>	<ul style="list-style-type: none"> <li>• The proposed 10 recommendations brought forward by the UNFCD (2021) to improve the work of the national coalitions can contribute to the required changes. It recommends putting in place practical mechanisms for planning dialogue and action at the local and national levels, especially focusing on producer organisations. This would allow for closer collaboration with producer organisations and bring them more actively into the GGW initiative</li> <li>• Producer organisations in turn need to be better capacitated to contribute meaningfully to the projects at ground level.</li> <li>• Prioritise the GGW as a tool for improving the livelihood of populations at the highest political level.</li> <li>• There is a need to work through farmer organisations to support the sustainability of the interventions.</li> </ul>

Bottleneck or key challenge	Description and underlying factors	How this can be addressed within the country
<p><b>Lack of involvement of partners especially CSOs, the private sector and local government</b></p>	<ul style="list-style-type: none"> <li>• A study on the mobilization of non-state stakeholders of the GGW found that the implementation of the initiative regionally was top-down, technocratic and non-inclusive (UNFCCC, 2021).</li> <li>• The lack of involvement of other critical actors involved in SLM was confirmed by several stakeholders, notably NGOs, but also strategic partners such as CIFOR-ICRAF. These actors have been involved in the GGW at its inception, but were thereafter no longer included in implementation.</li> <li>• Lack of engagement of private actors and limit scope, scalability and sustainability of interventions.</li> </ul>	<ul style="list-style-type: none"> <li>• Set up multi-actor, multi-sector dialogue mechanisms around the objectives of the GGW.</li> <li>• Involve local authorities in the implementation of the GGW and give them a significant role in local project management.</li> <li>• For create better connections between GGW actors, harness existing opportunities and knowledge through the creation of a GGW multi-actor hub. Establish practical, simple and clear criteria and procedures for engagement and integrate many actors in the system at different levels (UNFCCC, 2022)</li> <li>• National coalitions should enable the establishment of memoranda of understanding (MoU) between ministries and decentralized institutions, municipalities and cities, so that states can request dedicated funding for GGW municipal plans. (UNFCCD 2022).</li> <li>• The Agency of the GGW has the space available for both public and private partners. This public-private partnership model would then be an opportunity for the GGW in Mali to achieve its objective in the area. Also, the Agency has the political power to support the PPP. In addition, the Agency has also a great capacity of service providers' mobilization for activities implementation in the zone of the GGW in Mali. Finally, the Agency has the technical capacity to manage PPP in terms of staffing profile and leaders (Traoré et al 2021)</li> </ul>
<p><b>A technocratically-driven approach</b></p>	<ul style="list-style-type: none"> <li>• Local populations perceive GGW projects (such a market gardens or large-scale SLM) as a government environmental project with a "top-down" logic disconnected from local realities</li> <li>• There is a tendency to implement the GGW with a "one size" fits all approach, whereas each and every socio-ecosystem system along the GGW route is unique, with its own characteristics and dynamics. This calls for adapting and aligning actions accordingly.</li> </ul>	<ul style="list-style-type: none"> <li>• The implementation of each project is to be preceded by a grounded co-design with each community, with a greater focus on political ecology than just biophysical issues.</li> </ul>

Bottleneck or key challenge	Description and underlying factors	How this can be addressed within the country
<p><b>The lack of involvement of local populations, which compromises the long-term sustainability of interventions</b></p>	<ul style="list-style-type: none"> <li>• The populations that benefit from the land restoration measures must be able to take over from the state services. However often the lack of ownership and co-design of interventions with the local populations (as well as other factors such as access to resources), as well as absence of land tenure rights, inhibit the buy-in from local beneficiary populations.</li> <li>• Lack of genuine support from pastoral communities.</li> <li>• The humanitarian approach to implementing market gardens compromises their long-term sustainability. For instance, the "Food for Work" Programme consists of providing women's groups with food aid, which is conditional on their participation in the farm plot. But most development initiatives do not yield high economic returns. This poor productive and financial performance might condemn them to remain dependent on the GGW project and actors such as the World Food Programme who implement these initiatives. This is the major ambiguity of the GGW gardens which, in attempting to promote tools for the fight against poverty, adopt the institutionalized practices of humanitarian aid.</li> <li>• Failing to introduce these actors in projects will result in the risk that "the projects presented (lack) territorial anchorage. Funding partners should be encouraged to set up dedicated funding programmes for these actors." (UNCCD 2022:14).</li> </ul>	<ul style="list-style-type: none"> <li>• Implementation of GGW projects rely on existing instruments of territorial governance and shared resource management, such as pastoral units, borehole management committees and communal councils. The GGW would thus be catalytic to consultation processes and to consolidate decision-making and management bodies at the intermunicipal level for SLM.</li> </ul>
<b>GENDER</b>		
<p><b>Lack of addressing fundamental and systemic causes of gender inequality</b></p>	<ul style="list-style-type: none"> <li>• There is mention of gender equity and inclusion of women, youth and other groups in Mali's policy documents. However, there is a lack of a coordinated plan and activities able to address the root causes of those inequalities. Most of the actions relate to solving the current practical needs of these groups, with little focus on changing their status through addressing their strategic needs.</li> </ul>	
<b>RESOURCES CONSTRAINTS</b>		
<p><b>Limited resource mobilisation</b></p>	<ul style="list-style-type: none"> <li>• Land restoration is extremely costly. Government is funding only the administrative running of the Agency but not its implementation activities in the field. There is a critical shortage of human, material and financial resources.</li> <li>• The Agency is challenged by a lack of information on the financial instruments of various partners. The Agency has limited capacity to develop projects that appeal to donors.</li> <li>• Low level of disbursement compared to the intensity of activities.</li> </ul>	<ul style="list-style-type: none"> <li>• Improve knowledge and capacity on financial instruments available and requirements of donors.</li> <li>• The GGW Agency should consider public and private actors to make a consortium in applying for GCF funding. Such PPPs with other Malian actors should be formalised through MoUs after systematic strategic engagement is held with each set of actors to leverage access to funding but also to optimise on site delivery (Traoré et al 2021)</li> </ul>



Bottleneck or key challenge	Description and underlying factors	How this can be addressed within the country
<b>High reliance on external funding</b>	<ul style="list-style-type: none"> <li>• Many land restoration targets and commitments rely heavily on funding from external donors. In Mali, up to 70% of the funding to SLM activities countrywide stem from external funding sources (FAO 2022).</li> <li>• The GGW implementation document includes funding expectations from the government, the local authorities and villagers, while these entities, specifically at the local level, have limited capacity for resources mobilization.</li> </ul>	
<b>Institutional blockage in the financial dialogue</b>	<ul style="list-style-type: none"> <li>• The main obstacle to the mobilization of resources is the positioning of national agencies. These agencies are under the direction of their country's Ministry of the Environment. However, the financial partners all dialogue at the level of each country with one interlocutor: the Ministry of Finance and Planning.</li> <li>• In the case of Mali, there is a degree of uncertainty/lack of transparency on whether GGW funds accrue to other line ministries or the AEDD and how these are being used (Zougmore, personal communication, 2022)</li> </ul>	<ul style="list-style-type: none"> <li>• "There is a need to communicate about the opportunities available, not only to the Ministry of Finance and Planning, but also to the sectoral ministries that prepare projects for the government budget" (UNFCC 2021:5).</li> <li>• Advocate for inter-institutional dialogue in mobilisation of funds</li> </ul>
<b>LIMITED CAPACITY OF FARMERS AND FARMER ORGANISATION</b>		
<b>Limited technical capacity of farmers and farmer organisations to adopt the recommended techniques</b>	<ul style="list-style-type: none"> <li>• There is a lack of technical capacity of farmers and farmer organisations</li> <li>• In addition, there are only a small number of NGOs with the required expertise on these issues.</li> <li>• .</li> </ul>	<ul style="list-style-type: none"> <li>• Entry points identified by the GGW-A: "In West Africa, the ROPPA network took the lead in January 2020 in the so-called West African initiative on agro-ecology and is a good entry point.</li> <li>• Farmer-to-farmer exchanges have proven to be a powerful tool for scaling up agroecological techniques."</li> <li>• The facilitation of a network of specialised training organisations' (UNCCD 2022b)</li> </ul>
<b>BIOPHYSICAL CONSTRAINTS</b>		
<b>Water scarcity</b>	<ul style="list-style-type: none"> <li>• The GGW operates in water-constrained environments, with deep aquifers (230 m) compounded by climate change (delayed arrival of long rains). This means that there is tremendous pressure from pastoralist communities on the government to drill boreholes for their livestock. There is a high mortality of seedlings – approximately half the seedlings are lost before planting or at planting due to water constraints, cattle roaming and fire damage (ICLEI, 2022). Freshly transplanted trees need extra water due to the lack of moisture in the soil.</li> <li>• The Agency is planning on multiplying boreholes in the region with newly acquired technological equipment. However, there is uncertainty about whether there is enough water to irrigate newly restored land. This has long term consequences for the use of underground water.</li> <li>• This water stress issue has implications from a gender perspective – women have to allocate significant time, which could be used for other activities, for collecting water.</li> </ul>	<ul style="list-style-type: none"> <li>• Alternatives to and better management of water points/ponds feature among the priorities.</li> <li>• Studies required on the replenishment of underground water given the high intensity of sinking boreholes</li> </ul>

Bottleneck or key challenge	Description and underlying factors	How this can be addressed within the country
<b>LOCAL DYNAMICS</b>		
<b>Insecurity and conflict</b>	<ul style="list-style-type: none"> <li>Mali has been experiencing insecurity due to the activities of armed militia in the northern part of the country, which constrains many developmental operations. It is because of this unsafe context that the "Homme Milieu Observatory" sponsored by the CNRS will not include Mali in its research activities focused on the GGW.</li> <li>This results in different use of space by several actors e.g. pastoralists and farmers. Livestock wandering in reforested plots leads to inter-community conflicts.</li> <li>Maintenance of measures to fight against external attacks (firewalls, fences, etc.). In Mali, pastoral units or pastoral perimeters have been set up around solar energy-powered boreholes.</li> </ul>	<ul style="list-style-type: none"> <li>"There is significant scope for Participatory Rangeland Management to add-value to these projects and processes already being implemented. The emphasis on decentralization with power and management of resources in the hands of local communities provides the right political context for community-led processes." (Flintan <i>et al</i>, 2022). This approach can add value to the GGW initiatives in Mali</li> </ul>
<b>WEAK MONITORING AND EVALUATION</b>		
<b>Lacking M&amp;E system</b>	<ul style="list-style-type: none"> <li>Mali does not have a baseline for the GGW.</li> <li>There is no systematic way of tracking and reporting on the progress made towards achieving SLM that addresses and meets the GGW goals (regionally applicable).</li> <li>There is a lack of a reliable M&amp;E system for strong reporting on GGW. In the policy documents, emphasis is put on reports, making it difficult to trace and verify the interventions' results.</li> <li></li> </ul>	<ul style="list-style-type: none"> <li>UNEP has developed a baseline for all GGW countries. However, this information is currently not accessible.</li> <li>Improve M&amp;E by setting up a system accessible to all actors which centralises all knowledge for innovations in the field</li> <li>Undertake a mid-term appraisal of the status of land degradation in Mali. The Accelerator is trying to remedy this by providing tools and equipment, and training sessions.</li> <li>Work has been underway for the implementation of a results management framework since May 2021. This has led to the establishment of 2 tools: <ul style="list-style-type: none"> <li>The annual financial tracking table to track commitments and disbursements by pillar and country for each funding partner.</li> <li>The annual impact monitoring table to track achievements on the ground by pillar, for each national agency of the GGW (UNFCCC, 2017)</li> </ul> </li> </ul>
<b>Undercapitalisation or under reporting</b>	<ul style="list-style-type: none"> <li>Many projects and investments, including the work of NGOs, CSOs, and autonomous investments by farmers and herders go unreported and unrecognised. This is a missed opportunity to capitalise on the work of NGOs and other actors (Dembélé, personal communication)</li> <li>NGOs must report on their activities annually as part of their requirement with the government. However, the annual reporting framework used by all NGOs does not include provision for reporting on indicators specifically related to land restoration. NGOs active in land restoration report on their progress, with areas of land planted/restored, but given the lack of a standardised joint reporting framework that touches on the objectives of the GGW, the relevant data is not captured by the administration, resulting in underreporting.</li> </ul>	<ul style="list-style-type: none"> <li>Need for the elaboration of a "GGW" label which actors can use depending on their level of contributions to the GGW</li> <li>Need to improve the reporting template that NGOs submit annually to the department to report back on their impact. The template specifically needs to incorporate indicators related to SLM so that the Agency can use this data to consolidate its own reporting.</li> </ul>

Bottleneck or key challenge	Description and underlying factors	How this can be addressed within the country
<b>Lack of multi-sector analytical accounting</b>	<ul style="list-style-type: none"> <li>The evaluation of the effectiveness of investments related to the fight against land degradation should be inseparable from the inventory of global investments made at the level of the concerned sectors of activity (agriculture, livestock, water, etc.). However, in the absence of analytical accounting, it is difficult to know the real share of investments that have had a positive impact on land degradation.</li> </ul>	
<b>RESEARCH GAPS</b>		
<b>Research bias towards forestry and certain geographical areas</b>	<ul style="list-style-type: none"> <li>A study on the Sahelian GGW reveals a predominance of ecological studies in the literature and a concentration of studies in certain geographies of interest, such as northern Senegal. (Bruckmann et al, 2022)</li> </ul>	<ul style="list-style-type: none"> <li>Redress this research bias by supporting research focusing on “social engineering”</li> </ul>
<b>Limited research time assigned to restoration/reforestation projects</b>	<ul style="list-style-type: none"> <li>Research funding is often allocated for short (2-3 year) time frames, which is deemed highly insufficient to capture the outcome of reforestation projects, taking social dynamics into account – these research time frames need to be expanded to a 10-year period. (Mbaye, personal communication, 2022)</li> </ul>	
<b>Limited cross-sharing of information and centralisation of research outcomes</b>	<ul style="list-style-type: none"> <li>There is no centralised system used by the ANGMV to report on the GGW achievements and capitalise on experiences on the ground.</li> </ul>	<ul style="list-style-type: none"> <li>Set up a mechanism to centralise all scientific and technical information and innovation and to easily disseminate, promote valorisation of research fundings and knowledge exchanges</li> </ul>
<b>Research is top down</b>	<ul style="list-style-type: none"> <li>Often research outcomes are not fed back/ disseminated to the level of community-based organisations, which could benefit from such research findings</li> </ul>	<ul style="list-style-type: none"> <li>As above – promote the establishment of observatories</li> </ul>



# 3 Stakeholders relevant to the Great Green Wall initiative

## Government Departments

In Mali, land restoration and related interventions are anchored within the institutional framework of the Ministry of Environment, Sanitation and Sustainable Development (MEADD). The National Environment Council (CNE) and the Environment and Sustainable Development Agency (AEDD), as operational branches of MEADD, oversee the design, implementation and monitoring of environmental policy including conventions, agreements, and treaties ratified by the country. Key programmes are also hosted and implemented by the Ministry of Rural Development.

Also involved in the coordination mechanism in relation to SLM are the focal points of the different conventions and initiatives (i.e., the national focal points of multilateral environmental agreements (MEAs), including the Rio Conventions), as well as the representatives of the sectoral ministerial departments (discussed in further detail below).

MEADD is responsible for developing and implementing the national environmental protection policy. As such, it is responsible for ensuring the coordination and implementation of actions; public participation and engagement; the development and implementation of legislative and regulatory measures to ensure environmental protection; as well as monitoring climate change and its impact on the environment. It includes the main structures responsible for implementing MEAs. These are:

### THE AGENCY FOR ENVIRONMENT AND SUSTAINABLE DEVELOPMENT (AEDD)

The AEDD is a national public institution of an administrative nature, under the supervision of the MEADD, whose mandate is to coordinate all the Ministry's actions (resources, activities). AEDD is the designated National Authority for all financial mechanisms related to the environment and climate in Mali. It oversees the NDCs, it is the GEF focal point and is also in charge of the national policy on environment and climate change. It coordinates the Regreening Africa project. More specifically, it is in charge of:

- The implementation of the National Policy for Environmental Protection (PNPE)
- Integrating environmental dimensions in all development policies, programmes and projects.

Its main tasks are:

- To provide the secretariat of the National Environment Council;

- To sensitize and inform the population on the different aspects of environmental protection;
- To strengthen the capacities of actors involved in the environment through training and environmental education;
- Monitoring financial mechanisms and mobilizing resources for environmental protection, combating desertification and the effects of climate change;
- Ensure the coordination and monitoring of the implementation of international Conventions, Agreements and Treaties ratified by Mali in the framework of priority themes;
- Promote the inclusion of the environmental dimension in the design of programmes, development projects and land-use plans through the development of guides for the coherence of environmental actions and advisory support to local authorities;
- Ensure the management of environmental information (elaboration of the National Report on the State of the Environment, production of statistics on the environment and sustainable development etc.);
- Disseminate the results of research related to environmental protection, the fight against desertification, climate change and sustainable development; and,
- Participate in the implementation of the programmes of the Environmental Action Plan.

### THE NATIONAL ENVIRONMENT COUNCIL (CNE)

The CNE's mission is to give advice and make proposals and recommendations on issues related to the environment. The CNE hosts the national climate change council. It is further responsible for:

- Making proposals aimed at improving the efficiency of the implementation of programmes in the environment and sanitation sector;
- Promoting the participation of national actors, particularly civil society, in the safeguarding and protection of the environment, the fight against desertification, climate change and sustainable development;
- Providing input on all draft texts relating to the environment as well as all development programmes and projects in the field of the environment to be implemented in the country;
- Providing input on the ratification of multilateral environmental agreements entered into by the country; and,
- Responding to any question relating to the environment that is referred to it by the minister in charge of the environment.

## THE NATIONAL DIRECTORATE OF WATER AND FORESTS (DNEF)

Known as "Eaux et Forêts", this service is one of the oldest in the country. The main mission of the DNEF is to elaborate the national policy on nature conservation and to ensure its execution. It is responsible for:

- Developing and implementing plans for the management and restoration of forests, parks and reserves, as well as action programmes to combat desertification;
- Participating in the negotiation of international conventions and treaties relating to the conservation of forests and wildlife and ensuring their implementation; and,
- Ensuring the collection, processing and dissemination of statistical data.

The DNEF assists the Agency with ground level project implementation. Forestry agents are assigned to work on GGW project sites.

## THE ENVIRONMENT AND CLASSIFIED ESTABLISHMENTS DIRECTORATE (DEEC)

The DEEC is responsible for:

- The prevention and control of pollution and pests;
- Monitoring the actions of various services and organisations involved in the environmental sector;
- The elaboration of legal texts concerning the environment;
- The follow-up of the conventions relating to its missions;
- The integration of the environmental dimension in development policies, programmes and projects through environmental assessment;
- The management of the classified installation for the protection of the environment; and
- The management of the coastline.

In the **agricultural sector**, the structures in place include:

- Ministry of Agriculture, Livestock and Fisheries (MAEP);
- The Higher Council of Agriculture, chaired by the President;
- The National Executive Committee, chaired by the Prime Minister;
- The Regional Executive Committees for Agriculture chaired by the regional governors; and
- The Permanent Assembly of the Chambers of Agriculture of Mali (APCAM)

## MINISTRIES DIRECTLY INVOLVED IN THE GGW

In Mali, the Alliance and the Agency fall under the Prime Minister. The following ministries are part of the GGW Political Alliance and therefore the identified government departments for the GGW:

- Environment and Sanitation
- Security
- International Cooperation
- Agriculture
- Livestock and Fisheries

- Mines, Energy and Water
- Land Administration
- Domains, Land Use Planning and Population
- Finance
- Education
- Higher Education and Scientific Research
- Infrastructure
- Health and Social Development
- Industry and Commerce
- Women
- Handicrafts and Tourism
- Youth
- National Entrepreneurship, Employment and Professional Training.

There are also links with the Ministry of the Economy, Planning and Integration which is responsible for the development and implementation of economic policy and regional and sub-regional integration. It coordinates all economic reform programmes and ensures the coherence of economic, budgetary and monetary policies for sustained growth of the national economy.

## Presidency, Agencies, Commissions

Also involved in the coordination mechanism in relation to SLM is the High Council of Territorial Communities (*haut conseil des collectivités territoriales* - HCC). The HCC is the institution that represents all the municipal and regional authorities and is responsible for decentralized environmental management.

**Sub-regional level:** Regions are responsible for implementing public policies at a local level. They have the potential to strengthen local planning processes and implementation of land restoration activities, contributing to LDN. However, an adequate allocation of resources from the central government is vital for effective local contribution. At national level there is an LDN working group overseeing the LDN process in the country.

**Local authorities:** Mali has 703 communes, including 96 urban communes (e.g. villages in rural areas and townships in urban areas), 49 counties (*cerdes*) and eight regional councils with responsibility for the management of development projects. These structures develop, implement and evaluate, in consultation with the agricultural profession, the schemes and plans for the development and management of the agricultural sector, including the agricultural development programmes of their respective territories.

At sub-national and local levels there are regional agencies of development, and local agencies that can enhance local expertise and contributions to the institutional framework of LDN.

In addition to seeking territorial justice through decentralization and the participation of local populations, Mali's policy framework also emphasises gender equity and social inclusion, especially of those in situations of vulnerability.

## Development Partners

Partners of the National Agency include traditional financial institutions, donors and civil society.

### FINANCIAL AND STRATEGIC PARTNERS:

- The **Green Climate Fund** finances several land degradation and climate resilience projects of which Mali is part, such as the **Africa Integrated Climate Risk Management Programme** aimed at supporting vulnerable Sahelian populations adapt to climate change, with a plan to restore degraded land and provide climate information systems and agricultural insurance. GCF also supports the **Inclusive Green Financing Initiative (IGREENFIN I)**. Both these projects focus on the GGW. In Mali, the GCF funds several energy access projects, for example the SURAGGWA project, which has a GGW focus, and the **Africa Hydromet Programme – Strengthening Climate Resilience in Sub-Saharan Africa**.
- **The World Bank** funds large projects in Mali with a focus on food security and livestock management. It has been financing important regional programmes to support pastoralism in the Sahel (PRAPS phase I and II) since 2016, of which Mali is a beneficiary. The World Bank is trying to achieve two main goals in the Sahel: mobilize financial resources to protect a fragile environment, and help the countries restore the living conditions of their population, particularly livestock herders (ILRI, 2022b). Since 2018 it has also been financing the Livestock Sector Development Support Project for Mali (PADEL-M) which focuses on non-pastoral livestock sectors. The World Bank and GEF co-designed and co-funded the Sahel and West Africa Programme in support of the GGW (SAWAP).
- **The Islamic Development Bank** has been earmarked to fund projects for the GGW. It is also one of the main funders of livestock management projects in Mali.
- **The African Development Bank** in 2021 pledged **US\$6,5 billion** in support of the GGW. In 2021 consultations were held within the framework of the support project for the implementation of the GGW on the initiative (pillar III of the Transition Support Facility). Target countries are Mali, Niger, Sudan, Chad, Djibouti, with an overall cost of US\$1.65 million for three years.
- **The West African Development Bank** (BOAD) is the common development finance institution of the member countries of the West African Economic and Monetary Union (WAEMU). It has been in touch with the ANGMV and the Ministry of Environment to discuss their GGW projects. The BOAD announced that between 2024 and 2034, the **"100 Million Trees" project** will bring together the efforts of eight West African countries mobilised against desertification. This major reforestation operation will cover the entire WAEMU zone, as part of the GGW.
- **The European Union** (EU) supports several land restoration and agro-ecologically focused projects, including the Global Climate Change Alliance Plus (GCCA+) in Mali, which is now entering its second phase. In addition, it supports the Research and Innovation Project for Productive, Resilient and Healthy Agro-Pastoral Systems in West Africa aimed at fostering an agro-ecological transition.
- The **Development Agency of Belgium's Federal Government (ENABEL)** features among the lead supporters for Mali in the environmental/agriculture sector. ENABEL funds the "Regional Climate and Environment Programme", a 5-year project, which is implemented with several NGOs.
- The **Swiss Agency for Development and Cooperation (SDC)** funds several initiatives aimed at supporting the national food security system and resilience.
- The **French Development Agency (AFD)** is supporting regional projects focused on the agro-ecological transition and resolving transboundary issues in the context of the GGW. Within the framework of the formulation of the project "Contribution to the GGW in 5 West African countries within the framework of the Climate Resilience for Rural Africa Initiative", ANGMV took part in a few meetings at the invitation of AFD. The AGRECO consultancy firm was appointed to lead this activity (Ministry of Environment, 2021). The AFD has also recently launched the "Programme d'Appui à la Transition Agroécologique" (PATAE) with support of €8.2 million. It proposes to support organisations in the implementation of innovative agro-ecological projects to improve food and nutritional security in West Africa.
- **Swedish International Development Cooperation Agency (SIDA)** support to Mali focuses on building climate change resilience and adaptation (e.g the Decentralised Forest Management Programme (GEDEFOR) whose approach is being replicated in Mali's PDD DIN II).
- **Kew (UK Royal Botanical Gardens)** is supporting coordination and providing technical assistance to GGW partners in Mali, Burkina Faso and Niger.
- The **GIZ, through BMZ funding in Mali**, funds several projects focused on technological innovations, sanitation, green energy and circular economy, as well as a strong focus on agriculture, food resilience and security, and fostering viable agricultural businesses.
- **USAID funding (Feed the Future)** focuses on increasing agriculture and nutrition by delivering technology and knowledge and building local institutional capacity to spur a vibrant private sector-led approach to achieve economic and food security. It focuses on improving livestock productivity and trade (Livestock4Growth project) and invests in three value chains in Mali, namely, 1) millet and sorghum for food security and poverty reduction; 2) rice for growth in household incomes and food security; and 3) livestock for growth in household incomes and nutrition.

**Livestock-focused funding:** A recent study commissioned by ILRI (2022) on livestock finance in Mali established that the main bilateral donors to Mali's livestock sector were the Governments of Belgium, Switzerland, the Netherlands, and France. Most of this bilateral funding was aimed at adapting pastoral populations to climate change, notably through water infrastructure development activities (France) pasture management, early warning mechanisms through technology (STAMP and STAMP+4 from Netherlands), and fodder production (SDC action research project). US funding focuses on improving livestock productivity and trade (Livestock4Growth project).

## REGIONAL BODIES:

- **The Permanent Interstate Committee for Drought Control in the Sahel (CILSS)** invests in research for food security and combatting desertification. Through the Action Against Desertification project, CILSS supported biophysical data collections for the GGW.
- The **Sahara and Sahel Observatory** is one of the three executing entities of the Building Resilience through Innovation, Communication and Knowledge Services project (BRICKS) under the SAWAP.

## UNITED NATIONS SYSTEM:

- **The United Nations Development Programme (UNDP)** supports the ANGMV with strengthening its institutional, technical and logistical capacities. In 2021, UNDP organised a “sensemaking” workshop on the theme “Degradation of Ecosystems, Biodiversity and Land” in order to analyse the challenges linked to the greening of the Sahel and the implementation of the GGW (Min. Env. 2021). UNDP is funding renewable energy projects in the GGW interventions zones. The FAO is working with UNDP on validating a new project “Mini African Network”. UNDP will be implementing the recently approved GEF-funded **Climate security and sustainable management of natural resources in the central regions of Mali for peacebuilding**.
- **United Nations Environment (UNEP)** has been working with member countries to define their national strategies and action plans (2010- 2013), a regional harmonized strategy (2012), and supported implementation activities on the ground (2014-2020). The GEF, through UNEP, has committed to supporting the APGMV Member States in establishing their baseline situation.
- **International Fund for Agricultural Development (IFAD)** is involved in several projects in Mali related to climate change resilience and livestock support.
- **The Food and Agriculture Organisation (FAO)** provides technical support to the Agency and offered training on accessing funds from GEF. It is involved in the implementation of the **Great Green Wall Cross-border Pilot Project**.

The 2021 GGW report flags the following strategic partners with whom there is opportunity for strengthening collaboration:

- UNESCO
- International Labour Organisation
- G5-Sahel
- Wetlands International
- Institute for International Cooperation
- International Migration organisation – Prospects for the development of a project to strengthen climate resilience in three counties of the Kayes region.

## Civil Society

There are many NGOs involved in land restoration and working closely with farmers to improve their conditions. Many operate in the area of the GGW, but their work is not recognised as contributing to the GGW – building partnerships with NGOs and granting them a “GGW label” for projects that align to the ANGMV would add value.

## NATIONAL NGOS

The 2021 GGW report (Ministry of Environment, 2021) flags the following strategic partners with whom there is opportunity for collaboration:

- **Sahel Eco** is an NGO active in the Mokti region, which falls within the GGW zone. It is involved in numerous initiatives focused on sustainable resource management and land restoration. Sahel Eco is an implementation partner for the Regreening Africa programme.
- **DANAYA SO**, a Malian association, open to all women living from sex work. Its goal is the autonomy of free women, by improving their living conditions as sex workers. DANAYA SO provides women with concrete assistance in the areas of health, the defence of their rights, income-generating activities, literacy and childcare.
- **REFEDE MALI**, an associative network, whose objective is the economic autonomy of women and the most vulnerable groups, while considering the protection of the environment. REFEDE MALI works through training in environmental issues and the protection of natural resources. The network also works against desertification, seeks to prevent chemical pollution, supports market gardening and the development of value chains.
- **PADEV-Mali** is a database of NGOs working in Mali.

## INTERNATIONAL NGOS

- **SOS SAHEL** is a French NGO currently active in 11 countries in the Sahel, from Senegal to Djibouti. It helps rural communities in sub-Saharan Africa to guarantee their food security and nutritional quality in a sustainable manner that respects their environment. The NGO has been actively involved in the GGW, having taken part in identifying GGW champions and has, together with the **1t.org** platform (hosted by the World Economic Forum), formed a partnership to support the GGW to accelerate the initiative. This partnership is focused on encouraging the establishment of partnerships around landscape restoration, supporting and strengthening the visibility of Sahelian eco-preneurs, and attracting investment for restoration in the Sahel. SOS Sahel has also signed a partnership agreement with the Pan-African Agency for Food Security to strengthen collaboration between governments and civil society actors. It also runs the **GGW partners’ platform**.
- **World Vision** is involved in the Regreening Africa project.
- **IUCN** is a membership union uniquely composed of both government and civil society organisations. It has recently called for bringing back the focus on wetlands and water issues within the GGW.
- **Oxfam** coordinates the Regreening Africa project in Mali.
- **Birdlife International** is taking part in the conservation and enhancement of continental and transboundary GGW wetlands.
- **Trees for the Future** trains communities on sustainable land use and has signed a collaboration agreement with the ANGMV.

## The Private Sector

An AICCRA-Mali study exploring the potential of public-private partnerships has identified the telecommunications company **Orange Mali** as a key partner for effective access and use of climate information service by farmers and pastoralists in the GW intervention zone of Mali.<sup>2</sup>

ANGMV has commissioned the consulting firm **Cabinet d'Analyse et de Conseils en Gouvernance Durable (CACGODU)** to work jointly with UNEP to define the GW baseline scenario.

An ILRI study on livestock financing (2022b) mentions the **NAYRAL-NEF** private initiative, which is financing women in Douentza, Mopti and Timbuktu, in the semi-arid northern part of the country. By 2021, the company has provided loans of US\$1 million, providing each of its borrowers with an average of US\$125 each year. The microcredit scheme has enabled many poor households to reduce their vulnerability to climate shocks by diversifying their income generating activities and accessing financial loans when needed (Banerjee et al., 2021, as cited in ILRI 2022b).

## Networks and Alliances

The ANGMV envisages a partnership with the **Réseau Sahel Désertification (ReSAD)** around the BMUB project (Ministry of the Environment, 2021). ReSaD is a network that brings together four national civil society platforms, namely: **SPONG in Burkina Faso, CNCOD in Niger, REFEDE in Mali and GTD in France**. This North-South initiative, at the crossroads of national and regional concerns, works to combat desertification and improve the living conditions of people in the rural areas of the Sahel. ReSaD responds to the need to organise civil society actors in the Sahel in the field of desertification. It pools the experiences of hundreds of actors to build methodological expertise that will enable them to strengthen, mobilise and improve their actions.

**Professional agricultural organisations (PAOs)** include cooperatives, associations, unions, federations, confederations, foundations and unions. The **CNOP** and its member Organisations, **FENAFER, FENAJER, AOPP** (at the national and regional levels) are among the PAOs and agricultural organisations that contribute to the development of the agricultural sector.



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<sup>2</sup> Developing Public-Private Partnerships for effective access and use of climate information services by farmers and pastoralists in the Great Green Wall intervention zone of Mali (Traoré et al 2022)



## Summary of stakeholders linked to the GGW in Mali

Stakeholder Category	Stakeholder Contact	Role - how is the stakeholder important	Specific role of the stakeholder related to GGW	Role of stakeholder linked to GGW
Gov. agency	<p>Agence Malienne de la Grande Muraille Verte (AMGMV)</p> <p>Directeur: M. Toumany DIALLO</p>	<p>The AMGMV oversees the GGW in Mali. This entails institutional, technical and financial capacity-building of stakeholders on climate and biodiversity; knowledge management and sharing, including finding support and communication; protection, rehabilitation and management of land; income-generating activities, investments, subsidies; and coordination, monitoring and evaluation</p>	<p>Meeting its GGW target (30.4 million ha), enhanced resource mobilisation, greater technical capacity, improved coordination, implementation and monitoring of initiatives</p>	<p>Primary stakeholder in charge of GGW</p>
Gov. department	<p>Agency for Environment and Sustainable Development (AEDD) (MEADD)</p> <p>Amidou GOÏTA, Chef Département Mobilisation des Ressources Financières (DMRF, GEF Operational Focal Point &amp; GCF NDA.</p>	<p>AEDD coordinates all the MEADD actions (resources, activities). DNA for all financial mechanisms in Mali; it oversees NDCs, GEF focal point, in charge of the national policy on environment and climate change.</p>	<p>Resource mobilisation, developing national funded project focusing on GGW, capacity development to develop bankable projects, greater project coordination, knowledge of what other stakeholders are doing in terms of SLM in the GGW area</p>	<p>Assume secretarial services – key partner in identifying funding for GGW projects</p>
Gov. department	<p>National Environment Council (CNE)</p>	<p>Responsible for making any proposal aimed at improving the efficiency of the implementation of Programmes in the environment and sanitation sector; promoting the participation of national actors, particularly civil society, in the safeguarding and protection of the environment</p>	<p>- Not known</p>	<p>- Not known</p>

Stakeholder Category	Stakeholder Contact	Role - how is the stakeholder important	Specific role of the stakeholder related to GGW	Role of stakeholder linked to GGW
Gov. department	Directorate of Water and Forests, (MEADD)  Mme Kanoute Fatoumata Kone	It elaborates the national policy on nature conservation and to ensure its execution. It is among others responsible for developing and implementing plans for the management and restoration of forests, parks and reserves, as well as action Programmes to combat desertification and processing and dissemination of statistical data.  The DNEF assists the Agency with on the ground project implementation. Forestry agents are assigned to work on the GGW project sites.	Receiving some resource allocation from the GGW projects to supplement its own Operational budget, as its staff and resources are being used by GGW projects over and above its own site work.	Direct implementation support. Enhanced/ more streamlined
Gov. department	Environment and Classified Establishments Directorate, MEADD  Madeleine Diouf Sarr Point focal for Climate change	The DEEC is among others responsible for monitoring the actions of the various services and organisations involved in the field of the Environment.	Monitoring of projects with an environment dimension  The integration of the environmental dimension in development policies, Programmes and projects through environmental assessment.	Its monitoring of various services and organisations involved in the field of the Environment is key in the development of an M&E platform for the GGW
Gov. department	Ministry of Agriculture, Livestock and Fisheries  Camara Adama, technical adviser  Animal Production Directorate: Coulibaly Seydina Ousmane	Oversees all development and implementation of agricultural activities in Mali.	Operational budget to implement activities related to GGW	Integration of GGW projects with current initiatives carried by Min. of agriculture.
Gov. entity	High Council of Territorial Communities	The HCC is the institution that represents all the municipal, Cercle and Regional authorities, and is responsible for decentralized environmental management.	Inclusion of infra-national level in project design and beneficitation	Enhanced, participatory, sustained implementation of GGW and lasting legacy

Stakeholder Category	Stakeholder Contact	Role - how is the stakeholder important	Specific role of the stakeholder related to GGW	Role of stakeholder linked to GGW
<b>Go. entity</b>	Local authorities	The 703 communes, including 96 urban communes, 49 cercle councils and eight regional councils of Mali are responsible for the management of development projects. As such, they develop, implement and evaluate, in consultation with the agricultural profession with the agricultural profession, the schemes and plans for the development and management of the agricultural, as well as the agricultural development Programmes of their respective territories.	Bottom-up co-design of projects/indicatives, taking local dynamics in consideration	Enhanced, participatory, sustained implementation of GGW and lasting legacy
<b>Network</b>	Réseau Sahel Désertification (ReSAD)	ReSaD is a network that brings together four national civil society platforms: SPONG in Burkina Faso, CNCOD in Niger, REFEDE in Mali and GTD in France. ANGMV envisages a partnership with ReSAD around the BMUB project	Inclusion in the GGW Alliance, leveraging off existing networks	ReSaD responds to the need to organise civil society acting in the Sahel in the field of desertification. It pools the experiences of hundreds of actors in order to build a methodological expertise that will enable them to strengthen, mobilise and improve their actions.
<b>Network</b>	Professional Agricultural Organisations (PAOs)	PAOs include cooperatives, associations, unions, federations, confederations, foundations and foundations and unions.	Being included in co-design, to have farmers benefit GGW, knowledge shar.	Enhanced, participatory, sustained implementation of GGW and lasting legacy
<b>Gov. department</b>	Permanent Assembly of the Chambers of Agriculture of Mali  Barry Belco	its objective is to represent the agricultural profession to the public authorities and to participate, on its behalf, in the definition and implementation of rural development policies and Programmes.	Inclusion in the GGW Alliance	
<b>Financial partner</b>	Green Climate Fund	Finances several land degradation and climate resilience projects of which Mali is part	Direct support to GGW projects	Funding

Stakeholder Category	Stakeholder Contact	Role - how is the stakeholder important	Specific role of the stakeholder related to GGW	Role of stakeholder linked to GGW
Financial partner	Global Environment Fund	GEF funds multiple SLM and climate resilience projects including	Direct support to GGW projects	Funding
Financial institution	Islamic Development Bank	one of the main funders of livestock management projects in Mali. Was earmarked to fund projects for the GGW	(Status of support/ interest in GGW unknown)	has been earmarked to fund projects for the GGW (status unknown)
Financial partner	African Development Bank	In 2021 pledged US\$6,5 billion in support of the GGW.	Direct support to the GGW	consultations were held within the framework of the support project for the implementation of the Great Green Wall on the initiative of the ADB (pillar III of the transition support facility)
Financial & strategic partner	World Bank Amadou Ba	Funder of large projects with a focus on food security and livestock management (PRAPS, PADEL). co-designed and co-funded the Sahel and West Africa Programme in support of the GGW (SAWAP)	Vision for the Sahel: mobilize financial resources to protect a fragile environment, and help the countries restore the living conditions of populations, particularly livestock herders	In 2021 the World Bank announced it would invest <b>US\$5 billion</b> to help restore African drylands.
	West African Development Bank	Was earmarked to fund projects for the GGW (discussion held in 2022). Will fund the "100 million trees" project" 2024 and 2034 (cover the GGW area)	Direct investment in GGW	Funding
Financial & strategic partner	European Union	supports several land restoration, agro-ecologically focused projects, including the Global Climate Change Alliance Plus in Mali (GCCA+-Mali 2) + Research and Innovation Project for Productive, Resilient and Healthy Agro-Pastoral Systems in West Africa (PRISMA).	Fostering an agro-ecological transition in the Sahel.	Funding

Stakeholder Category	Stakeholder Contact	Role - how is the stakeholder important	Specific role of the stakeholder related to GGW	Role of stakeholder linked to GGW
Financial & strategic partner	Development Agency of Belgium's federal government	One of the lead supporters for Mali in the environmental/agri sector. funds the "Regional Climate and Environment Programme", a 5-year project, which is implemented with several NGOs.	Focus environmental/agri sectors	Funding
Financial & strategic partner	Swiss Agency for Development and Cooperation	funds several initiatives aimed at supporting national food security system and resilience in the context of insecurity.	national food security system and resilience	Funding
Financial & strategic partner	French Development Agency	supporting regional projects focused on the agroecological transition, resolving transboundary issues in the context of the GGW. ANGMV was engaged within context of design of "Contribution to the Great Green Wall Initiative in five West African countries within the framework of the Climate Resilience for Rural Africa Initiative"+ funds "Programme d'Appui à la Transition Agroécologique" (PATAE)	agroecological transition	Funding – enhancing agricultural enterprise dimension of projects
Financial & strategic partner	Kew (UK Royal Botanical Gardens)	supports the coordination and providing technical assistance to GGW partners in Mali (and Burkina Faso and Nige).	Direct support to GGW	technical assistance to GGW partners
Financial & strategic partner	Swedish International Development Cooperation Agency (SIDA)	Support to Mali focuses among other on building climate change resilience and adaptation	Not known	Not known
Financial & strategic partner	USAID Tossama Diarra	USAID funding focuses on improving livestock productivity and trade and invests in three value chains in Mali	Not known	Not known

Stakeholder Category	Stakeholder Contact	Role - how is the stakeholder important	Specific role of the stakeholder related to GGW	Role of stakeholder linked to GGW
<b>Financial &amp; strategic partner</b>	GIZ – funding from German Federal Ministry for Economic Cooperation and Development (BMZ).  Fatoumata Coulibaly	Funds several projects focused on technological innovations, sanitation, green energy, circular economy and a strong focus on agricultural and food resilience and security and fostering viable agricultural businesses.	Not known	Not known
<b>INGO</b>	IUCN	Was solicited to run a land restoration focus project in the GGW perimeter with funding from DANIDA (status unknown)	Not known	GGW project funding
<b>INGO</b>	Birdlife International	Involved in the conservation and enhancement of continental and transboundary GGW wetlands.	Not known	GGW project funding
<b>Multilateral partner</b>	UNDP	Supports the AMGMV with strengthening its institutional, technical and logistical capacities + funds renewable energy projects in the GGW interventions zones. UNDP will be implementing the recently approved GEF funded project named <b>Climate security and sustainable management of natural resources in the central regions of Mali for peacebuilding.</b>	Direct support to GGW, technical support	GGW project funding

Stakeholder Category	Stakeholder Contact	Role - how is the stakeholder important	Specific role of the stakeholder related to GGW	Role of stakeholder linked to GGW
Multilateral partner	UNEP	Supported the elaboration of national strategies and action plans (2010- 2013), a regional harmonized strategy (2012), and supported implementation activities on the ground (2014-2020). The GEF, through UNEP, has committed to supporting the APGMV Member States in establishing their baseline situation.	Being part of GGW Alliance  Direct support to GGW, technical support	GGW project funding
Multilateral partner	CIFOR-ICRAF	Assisted GGW at inception phase.  Data Science and Applied Learning Lab at World Agroforestry unit has spearheaded the development of the Regreening App.	Involvement in GGW Alliance, extensive experience in restoration research and implementation including the novel research in development project, Regreening Africa.	CIFOR-ICRAF can aid Mali's projects' sites thanks to its development focus on agroforestry and related areas such as land restoration, climate change resilience can contribute to the objectives of the GGW initiative.
Multilateral partner	IFAD  Karim Sissoko	IFAD is involved in several projects in Mali related to climate change resilience, livestock support.	Being part of GGW Alliance	GGW project funding. IFAD was solicited to fund a resilience focus project in the GGW perimeter (status unknown).
Multilateral partner	FAO  Issa Keita	Provides technical support to the Agency and offered training on accessing funds from the GGF. It is involved in the implementation of the <a href="#">Great Green Wall cross-border pilot project</a> .	Being part of GGW Alliance  Direct support to GGW, technical support	Funding. has been solicited to fund a resilience focus project in the GGW perimeter (status unknown)
National NGO	<a href="#">Sahel Eco</a>	NGO active in the Mokti region which falls right in the tracing of the GGW. It is involved in numerous initiatives focused on sustainable resource management and land restoration. Co-implements Regreening Africa.  Mentioned by AMGMV as a strategic partner with which there is opportunity for collaboration.	Inclusion in GGW platform, recognitions of its projects as being part of the GGW	Implementation support. Enhanced surface area under SLM for the GGW.

Stakeholder Category	Stakeholder Contact	Role - how is the stakeholder important	Specific role of the stakeholder related to GGW	Role of stakeholder linked to GGW
National NGO	Danaya So	<p>Malian association, open to all women living from sex work.</p> <p>Mentioned by AMGMV as a strategic partner with which there is opportunity for collaboration.</p>	Inclusion in GGW platform, recognitions of its projects as being part of the GGW	Implementation support. Enhanced participation of local communities – bolster the gender dimension of GGW projects.
National NGO	Refede Mali	<p>An associative network, whose objective is the economic autonomy of women and the most vulnerable groups, while considering the defence of the environment.</p> <p>Mentioned by AMGMV as a strategic partner with which there is opportunity for collaboration.</p>	Inclusion in GGW platform, recognitions of its projects as being part of the GGW	Implementation support. Enhanced participation of local communities – bolster the gender dimension of GGW projects.
INGO	World Vision	Involved in the Regreening Africa project	Inclusion in GGW platform, recognitions of its projects as being part of the GGW	Implementation support. Enhanced surface area under SLM for the GGW
INGO	Trees for the future	Trains communities on sustainable land use – the AMGMV signed a Collaboration protocol with this INGO	Inclusion in GGW platform, recognitions of its projects as being part of the GGW	Implementation support. Enhanced surface area under SLM for the GGW
INGO	SOS Sahel Jean-Marc Garreau	The NGO has been actively involved in the GGW, having taken part in identifying GGW champions and has together with the <a href="https://1t.org">1t.org</a> platform. SOS Sahel has also signed a partnership agreement with the Pan-African Agency for Food Security to strengthen collaboration between governments & CSOs. It also runs the GGW partners' platform.	Inclusion in GGW platform, recognitions of its projects as being part of the GGW	Implementation support. Enhanced surface area under SLM for the GGW



Stakeholder Category	Stakeholder Contact	Role - how is the stakeholder important	Specific role of the stakeholder related to GGW	Role of stakeholder linked to GGW
Private sector	Telecommunications company, Orange Mali	Key partner for effective access and use of climate information service by farmers and pastoralists in the GGW intervention zone of Mali. <sup>3</sup>	Securing business opportunities	Enhanced communication with farmers
Private sector	Cabinet d'Analyse et de Conseils en Gouvernance Durable" (CACGODU)	ANGMV has commissioned this consulting firm to work jointly with UNEP to define the GGW baseline scenario.	Securing business opportunities	Contributing to baseline scenario – can be commissioned to carry out other analytical work
Research	Rural Economy Institute Dr Modibo SYLLA	Involved in research/ co-implementation of several projects in GGW area	Inclusion in GGW platform	Research (see research table)



<sup>3</sup> Developing Public-Private Partnerships for effective access and use of climate information services by farmers and pastoralists in the Great Green Wall intervention zone of Mali (Traoré et al 2022)

# 3 Major land restoration and climate change initiatives

## Land Degradation, Land Neutrality and Land Restoration

The GGW in Mali overlaps with several global and regional restoration initiatives:

- The Bonn Challenge
- The New York Declaration on Forests
- The African Forest Landscape Restoration Initiative (AFR100)
- The UNCCD Land Degradation Neutrality (LDN) by 2030
- The **African Resilient Landscapes Initiative (ARLI)**
- UN Decade on Ecosystem Restoration (2021 – 2030)
- The **TerrAfrica partnership for sustainable land management in sub-Saharan Africa**, a coalition-based partnership created by the World Bank to combat land degradation by increasing the scale, efficiency, and effectiveness of investments in SLM. Launched in 2008, the Programme has provided US\$1 billion in development funding – including US\$150 million from GEF and US\$580 million from the International Development Association. AUDA-NEPAD is the Secretary of this partnership
- The creation of the **Great Green Wall Accelerator** in 2021 hosted at the UNCCD to set up a harmonized M&E system around five action pillars, publish an annual progress report, and organize an annual monitoring meeting that brings together all GGW stakeholders.

A key challenge to flag in the context of this mapping of projects is that many projects in Mali may include a dimension focusing on climate change and land restoration (in fact most community-based projects include these aspects) but often the projects are not explicitly framed in these terms.

## Mapping of national and regional projects involving Mali

### PROJECTS EXPLICITLY LINKED TO THE GGW:

- The FAO'S **Action Against Desertification Programme (AAD)** (2014 – 2019), funded by the European Union and FAO. Programme activities targeted GGW intervention areas and focused on the creation of reforestation plots, the restoration of land using the anti-erosion techniques and the development of market gardening plots through the creation of small hydraulic

installations.

- The **Local Environmental Coalition for a Green Union Front (FLEUVE)** (2014–2018), implemented by UNFCCC and financed by the European Commission, with a budget of €7 million. FLEUVE targeted the GGW intervention area in Mali and four other GGW countries, aiming to strengthen the capacities of local communities to help boost investments in land restoration and create employment opportunities through green jobs. It was co-implemented by **CARI** and members of the **ReSaD**, **RADDO** and **Drynet** around the networking and strengthening of civil society platforms involved in actions to combat desertification and land degradation at the sub-regional level.

### ONGOING PROGRAMMES IMPLEMENTED WITH PARTNERS, WITH AN EXPLICIT FOCUS ON THE GGW IN MALI, INCLUDE:

Currently, all the GGW projects under implementation in Mali are regional programmes; there is no project or programme solely focusing on Mali funded by strategic partners.

- **Improving security and climate resilience in a fragile context through the Water-Energy-Food Nexus (FREXUS)** – A GIZ funded project (2019-2023) implement in Mali, Niger, Chad which focuses on the transboundary area between these 3 countries (GGW area) with funding from the European Commission DG DEVCO, German Federal Ministry for Economic Cooperation and Development (BMZ). The Malian Ministry of Environment placed the FREXUS project under the anchorage of ANGM.
- Within the framework of Mali-Belgium cooperation, a new project entitled **"Regional Climate and Environment Programme"** (2022-2026) has been developed with Enabel at an estimated cost of more than €40 million for a period of five years. It brings together four countries: Mali, Senegal, Niger and Burkina Faso.
- The **Great Green Wall cross-border pilot project** developed under Kew's Millennium Seed Bank Partnership and implemented in Burkina Faso, Mali and Niger, aims to gather environmental and social data on land restoration to help inform larger restoration projects in the Sahara and Sahel region by building a model for the restoration of large-scale agro-silvo-pastoral systems.

- The approach taken combines the reintroduction of native trees and shrubs in a restoration framework which includes the economic and ecological rehabilitation of traditional agroforestry systems. In parallel, surveys have been undertaken to determine possible long-term socio-economic outcomes triggered by the project. The project in Mali is co-implemented with the Rural Economics Institute (IER Sikasso), the FAO and the AU. It is funded by The Dr Mortimer and Theresa Sackler Foundation.
  - The **Prevention of conflict and resilience of cross-border food systems in Africa (PCR-SAT)** is a €3 million project funded by AFD (Minka Peace and Resilience Fund) that was launched in 2022. The project aims to sustainably strengthen the resilience of food systems in communities in two cross-border areas through collaborative management of the plant protein potential of agro-silvo-pastoral resources and economic development initiatives. The aim is to prevent and mitigate conflicts linked to the anthropogenic and/or climatic impact on natural resources by strengthening the resilience of food systems through support for the plant protein sector, thus also contributing to the implementation of the Plant Protein Development Initiative launched at the sixth European Union-African Union Summit. The project will operate in two cross-border areas: a Mauritania-Senegal cross-border area (communes of Toulél, Sagné, Wompou, Dembacani and Bokiladji) and a Mali-Senegal cross-border area (communes of Falémé, Fégui, Gathiary, Tomboura, Sinthiou Fissa and Bélé)
  - **Scaling-Up Resilience in Africa's Great Green Wall (SURAGGWA) (2021- 2030)**– implemented by a regional coordinating body (FAO with the Pan- African Agency of the Great Green Wall), specialized regional and national agencies and NGOs, in Burkina Faso, Chad, Djibouti, Mali, Mauritania, Niger, Nigeria, Senegal. SURAGGWA aims to remove barriers to heightened resilience and greater mitigation in these countries through: 1) scaling-up of successful restoration practices with native species; 2) supporting the development of climate-resilient, low emission value chains of non-timber forest products in support of vulnerable communities' livelihoods, and 3) strengthening the GGW's regional and national institutions. The proposed project will restore approximately 2 million ha of degraded drylands by 2030.
  - The **Sahel and West Africa Programme in the support of the GGW (SAWAP) (2012-2019)** was a programme developed by the World Bank using US\$100 million of GEF resources on top of US\$1.2 billion IDA resources for twelve Sahelian states, including Mali. A review of the project concluded that the SAWAP projects have surpassed their initial cumulative targets establishing 1.6 million ha of SLWM practices across the twelve countries. In Mali the SAWAP (2014-19) focused on natural resource management in a changing climate.
  - The **Building Resilience through Innovation Communication and Knowledge Services (BRICKS)** project: a six-year regional knowledge and monitoring hub. This US\$4.6 million project supported the Sahel and West Africa Programme (SAWAP) of TerrAfrica, a regional Programme of 12 World Bank-financed country operations plus related partner-supported activities that together contribute to the regions GGW priorities.
- The project aimed at improving accessibility of best practices and monitoring information within the SAWAP portfolio on sustainable land use and management. The project contributed to improve the resilience of ecosystems and people and support the countries' efforts towards poverty reduction, food security and sustainable natural resource management. It established an M&E system for the SAWAP Programme, which includes indicators such as change in vegetation cover, change in carbon accumulation rates in biomass and soils, additional land brought under SLM, and institutions with increased adaptive capacities to reduce risks and address climate change.
- The **Great Green Wall Initiative Ten-Year Priority Investment Plan (2020 –2030)** is being rolled out in GGW intervention area in Mali and other GGW countries. The plan is funded and implemented by States, local authorities and national private sector actors (up to 20%) and foreign direct investments and financing (to account for 80%). The main expected results and impacts include: Land restoration and development; biodiversity conservation; integrated management of water resources; management of climate and ecological impacts and risks; capacity building; resilient economic development and security.
  - **Harnessing the Great Green Wall Initiative (GGW) for a Sustainable and Resilient Sahel** is a regional project (implementation started in 2020) of which Mali is part, implemented by UNEP Terrestrial Ecosystems Unit in collaboration with National GGW Agencies/ Coordinators; the Pan African Agency of GGW; the UNCCD Secretariat, the Global Mechanism, and the UNEP Africa Office. Funded by GEF.
  - The **Africa Integrated Climate Risk Management Programme** was announced in late 2021 as a US\$143 million investment programme (GCF funding) aimed at supporting vulnerable Sahelian populations adapt to climate change, with a wide-reaching plan to restore degraded land and provide climate information systems and agricultural insurance. It will operate in seven countries: Burkina Faso, Chad, The Gambia, Mali, Mauritania, Niger and Senegal (where it is implemented by the MEDD). Through this programme, IFAD will work with the AfDB, the World Food Programme (WFP) and the African Risk Capacity (ARC) Group to address climate-related agriculture risks at every stage.
  - **"Closing the gaps in the Great Green Wall,"** a programme funded by GEF and implemented by IUCN in 11 countries. One of the global objectives was to review and analyse the existing set of SLM indicators to improve policies and practices of SLM.
  - **Large-Scale Assessment of land degradation to guide future investments in to guide future investments in sustainable land management in the Great Green Wall countries (2019 to 2024)** with US\$5.6 million funding support from the GEF Trust Fund and executed by CILSS / AGRHYMET through SERVIR West Africa Programme with the goal of improving scientific evidence supporting sustainable land management of land in the GGW region. Intervening primarily in Burkina Faso, Ethiopia, Niger, and Senegal, the project aims to assess tools and methodologies available to conduct scientific assessment of the ecological impacts of land degradation and sustainable land management practices, as well as and sustainable land management practices, as well as monitoring

and knowledge management. The focus is on aiding the countries to use existing platforms and establish as necessary the coordinating mechanisms, build technical capacities, and information dissemination strategies. Partners involved include the European Space Agency has contributed to the project making available the EO4SD Climate platform, the Sahara and Sahel Observatory (OSS), Lund University Centre for Sustainability Studies – LUCSUS, National Aeronautics and Space Administration – NASA, Institut de Recherche pour le Développement – IRD, European Space Agency – ESA (DHI/GRAS and SISTEMA).

- The **Prevention of conflict and resilience of cross-border food systems in Africa (PCR-SAT)** is a €3 million project funded by AFD (Minka Peace and Resilience Fund) launched in 2022. The project aims to sustainably strengthen the resilience of food systems in communities in two cross-border areas through collaborative management of the plant protein potential of agro-silvo-pastoral resources and economic development initiatives. The aim is to prevent and mitigate conflicts linked to the anthropogenic and/or climatic impact on natural resources by strengthening the resilience of food systems through support for the plant protein sector, thus also contributing to the implementation of the Plant Protein Development Initiative launched at the sixth European Union-African Union Summit. The project will operate in two cross-border areas: a Mauritania-Senegal cross-border area (communes of Toulél, Sagné, Wompou, Dembacani and Bokiladji) and a Mali-Senegal cross-border area (communes of Falémé, Fégui, Gathiary, Tomboura, Sinthiou Fissa and Bélé).

## PROJECTS WITH A LAND DEGRADATION, LAND NEUTRALITY, LAND RESTORATION FOCUS

### COMPLETED PROJECTS:

- The World Bank-funded Economic and Environmental Rehabilitation of the Niger River Project (PREEFN)
- The World Bank **Natural Resources Management and Climate Change Project (PGRNCC)**, which sought to scale up the adoption of Sustainable Land and Water Management practices in targeted communes in Mali, with the aim of improving the long-term resilience of ecosystems and populations to climate variability and change.
- **Drylands Development Programme (DryDev)** (2013–2019), a six-year initiative (2013–2019) funded by the Ministry of Foreign Affairs (MoFA) of the Netherlands, with a substantial contribution from World Vision Australia (WVA) and implemented by ICRAF in five countries in West and East Africa, namely Mali, Burkina Faso, Niger, Ethiopia and Kenya. It aimed to promote the transition from subsistence and relief agriculture to sustainable rural development through an integrated package of interventions focusing on soil fertility improvement, restoration and enrichment of agroforestry parks, availability of water for various uses, structuring of agro-silvo-pastoral value chains, facilitation of access to markets, credit and financial services
- *The approach and lessons learned from DryDev would be relevant for the GGW-I.*

### PROJECTS UNDERWAY:

- **Climate security and sustainable management of natural resources in the central regions of Mali for peacebuilding.** Funded by GEF and approved in July 2022, this project is implemented by the AEDD with UNDP support. It seeks to ensure the long-term sustainability of vulnerable productive landscapes in Mali's central region of Mopti, through nature-based solutions that reverse land degradation, strengthen communities' climate resilience and promote conflict resolution
- The **Inner Niger Delta Sustainable Development Programme** is a continuation of the Rehabilitation of Degraded Ecosystems in the Inner Niger Delta (PDDIN) (2018–2021) project supported by the SIDA covers the eight counties of the regions of Ségou (Ké – Macina), Mopti (Djenné, Ténenkou, Mopti, Youwarou), Timbuktu (Goundam, Diré and Niafunké). Specific project objectives include:
  - Strengthening the institutional framework and the steering and management system, drawing on the achievements of the transitional phase;
  - Contributing to the protection of the environment by the men and women of the Delta through the sustainable management of natural resources, ecosystems, the protection of biodiversity;
  - Contributing to the strengthening of food security of vulnerable groups, through water management, promotion of production systems, capacity building of stakeholders and diversification of income sources; and
  - Developing initiatives to change the behaviour of the population.
- **Regreening Africa** (2017–2022) is an ambitious programme running from 2017–2023 that aims to reverse land degradation across eight countries in sub-Saharan Africa. Regreening Africa integrates trees into crop and communal areas along with complementary restoration practices and approaches to enhance inclusion, value chains, policy, and local governance. As part of a larger global and regional effort to halt and reverse land degradation, Regreening Africa aims to improve smallholder livelihoods, food security, and resilience to climate change in eight African countries by restoring ecosystem services. More specifically, it seeks to reverse land degradation over at least one million hectares and benefit 500 000 households, while also catalysing an even larger scaling effort to restore tens of millions of hectares of degraded land across Africa. Regreening Africa works to support people in their efforts to restore their landscapes to secure sustainable benefits while boosting the impact of invested resources. At the local scale, the project works with smallholder farmers through lead farmers, farmer groups, community-based organizations, extension staff, and local government to provide technical support. On a sub-national and national scale, the programme works with a range of stakeholders to share lessons and technical support as well as to create an enabling policy and institutional environment.

### PROJECTS AT DESIGN STAGE:

- The World Bank-funded Landscape Integrated Development and Resilience Project – Mali. The project aims to strengthen the integrated development of targeted landscapes in Mali (area of land under sustainable landscape management practices – 25 000 ha). Within the context of Malian decentralization, the project will facilitate collaboration and synergies between, on the one hand, sectoral and line ministerial departments and local governments (collectivités territoriales – CTs) and, on the other hand, between CTs and local producers and users' groups and CSOs.
- *This focus on supporting decentralisation and planning territorial development in selected communes has relevance for the GGW-I.*
- The PASEM (4-year project) project for the livestock sector will be implemented by Sahel Eco with SNV and Swiss funding, and includes the restoration of degraded pastures, which affects the activities of the GGW.

### PROJECTS WITH A CLIMATE CHANGE FOCUS

ILRI (2022b) recent research on livestock finance in Mali found that "Among the total amount of funding allocated for the livestock climate finance in Mali between 2015 and 2022, only 58% were allocated to the livestock sector as the main target; the remaining of 42% were allocated to the agriculture in overall, with a component for the livestock sector". The World Bank's IDA is the main funder of the livestock climate finance, followed by IFAD.

- **R4 Rural Resilience** is a USAID-funded project that has been implemented by the WFP since 2011. The second phase is starting in 2022 with GCF support (ClimBer, 2022). The objective is integrated multi-risk management with risk mitigation and risk transfer products.
- **CASSECS (EU) 2019-2023** - The CASSECS project is an ongoing project on the impact of livestock on climate change in CILSS countries. The overall objective of the project is to provide the CILSS countries with emission factors and reference data that will enable them to better establish the seasonal and annual carbon balance of agro-silvo-pastoral ecosystems and thus correctly fulfil their commitments in the framework of the implementation of the Paris Agreement. Among the project objectives are a focus on training and strengthening the skills of the technical services of the CILSS member states, local and international NGOs and livestock breeders' associations.
- **The Promotion of Climate-Smart Agriculture in West Africa (2020-2023)**. Mali is part of this project, initiated by ECOWAS in collaboration with the West African Development Bank (BOAD) to support the implementation of the ECOWAP/SADC AIC Intervention Framework by providing a mechanism for consultation, coordination, convergence, capitalization and monitoring of the various initiatives. This action is part of the operationalization of the alliance and the implementation of commitments for the protection of the environment and support to States in their efforts to combat climate change. It allowed the mobilisation of resources for the initiative. The resource mobilization process is part of a call for regional project proposals launched by the Adaptation Fund (AF) in 2015.
- **Africa Hydromet Programme – Strengthening Climate Resilience in Sub-Saharan Africa: Mali Country Project (2015-2025)**. The project will support training and capacity building, expanding and upgrading existing hydromet observation networks (including Automatic Weather Stations and hydrological stations), as well as investments to enhance data collection and communication systems. A national network for climate services will be established in order to develop a framework for climate services. Improved flood and drought warning systems will also be developed, as well as building systems to ensure that early warnings reach the municipal and community level through better 'last mile' systems, and improved awareness at the local level.
- **The Natural Resource Management and Climate Change Project (PGRNCC)** is implemented by the Network for the Prevention of Food Crises (RPCA). The aim of the project is to scale up the adoption of sustainable land and water management practices in targeted communes in Mali, with the aim of improving the long-term resilience of ecosystems and people to climate variability and change. Specific objectives include:
  - Strengthening knowledge sharing mechanisms for sustainable land and water management, as well as climate change;
  - Strengthening the institutional and technical capacities of stakeholders to integrate sustainable land and water management into communal development plans;
  - Scaling up good land management practices; and
  - Increasing income and resilience of vulnerable communities from project activities.
- **Global Climate Change Alliance Plus in Mali - Phase 2 (GCCA+-Mali 2) (2017-2023)** is a US\$7 million programme that contributes to the sustainable management of natural resources in response to climate change issues. The programme particularly targets the forestry sector as a sector that can play an important role in both climate change adaptation and mitigation. Within this framework, the new programme aims to 1) facilitate climate mainstreaming and action by the various actors by supporting the AEDD in setting up a communication strategy and strengthening existing information systems, 2) strengthen the forestry information system and the availability of data, 3) initiate the setting up of a national monitoring system in the forestry sector and 4) improving forest cover.
- *The expected outputs of this Programme are highly relevant to the GGW. The focus on the AEDD support for setting up a communication strategy and strengthening existing information systems are closely aligned with GGW priorities.*
- **Multi-energy for Resilience and Integrated Territorial Management Project (MERIT) (2019-2026)**, a \$US50 million project implemented and partly funded by IFAD. The project goal is to contribute to improved food and nutritional security, poverty reduction and strengthened resilience, including climate resilience, for poor rural people in southern Mali. The development objective is sustainable improvement in access to renewable energy and soil productivity. MERIT will strengthen the climate resilience of ecosystems by promoting low-

emission energy sources. It will benefit more than 42 000 households, or some 420 000 indirect beneficiaries in the project area, of whom at least 50% women and 30% young people. The ASAP/PAPAM project area was located in six counties in the southern part of the Kayes and Sikasso regions. Under MERIT, interventions will be expanded within these regions and will also include the Koulikoro and Ségou regions. MERIT targets smallholder women, men and young people (crop and livestock farmers, and agro-pastoralists), who are considered the group most vulnerable to climate change.

- **Initiative to Combat Desertification to Build Resilience to Climate Change in the Sahel and Horn of Africa resilience to climate change in the Sahel and Horn of Africa (IA-CD) (2016-2022)** supported by the UNCCD and JICA, aims to make countries and communities resilient to climate change by promoting measures to combat desertification and drawing international attention to the issue. It covers seven countries in the Sahel (Burkina Faso, Cameroon, Chad, Mali, Mauritania, Niger and Nigeria) and seven countries in the Horn of Africa (Djibouti, Eritrea, Ethiopia, Kenya, Somalia and Sudan). To achieve its ambitions, the IACD plans to establish networks between these countries to share and promote good practices in combating desertification, and to improve access to funding for combatting desertification.
- *The GGW-I should capitalise on the lessons learnt from this project.*
- **The Joint Programme for the Sahel in Response to the Challenges of COVID-19, Conflict and Climate Change (SD3C) (2020-2027)** in the Sahel and Senegal is a US\$32 million project implemented in Mali by IFAD in partnership with the FAO and the World Food Programme (WFP) – and the G5 Sahel. It aims to consolidate the livelihoods of small producers, in particular women and youth, living in cross-border areas of the six targeted countries. It seeks to address the challenges posed by COVID-19, conflict and climate change in the Sahel. The programme covers six years in two phases (phase 1: 2021-2023 and phase 2: 2024-2026). The programme will directly benefit 25 000 rural households, representing 125 000 household members. Women and young people aged 18 to 40 represent respectively 50% and 40% of the beneficiaries.
- **Wati Yelema Labenw: Strengthening community initiatives for resilience to climate extremes**, a UK-funded project (BRACED Programme) implemented by International Relief and Development (IRD) and Blumont. This project builds on the rich experience and relevant results of the RIC4REC project (Strengthening Community Initiatives for Climate Resilience), aimed at strengthening the resilience of the most vulnerable people in Mali against risks of various climatic disasters, helping them to build adaptation through interventions on social cohesion, livelihoods, natural resource management and governance in the regions of Koulikoro, Ségou and Mopti.
- Save the Children has been running a food security project **ALBARKA**, with US\$100 million in funding provided by USAID, which includes a land restoration component.
- **Support to Climate Change adaptation in the Boucle du Baoule National Park (2022-2024)**, a UNESCO-led project.

## PROJECTS WITH AN AGRICULTURAL AND FOOD SAFETY FOCUS

### COMPLETED PROJECTS:

- The World Bank-funded Mali Livestock Sector Development Support Project (P160641) - (PADEL-M) focuses on non-pastoral livestock sectors. The objective of PADEL-M was to enhance productivity and commercialization of non-pastoral animal production in selected value chains and strengthen the country's capacity to respond to a crisis or emergency.
- The World Bank funded the Mali Drylands Development Project (P164052)
- USAID/Mali's **Mali Climate Change Adaptation Activity (MCCAA) (2015-20)** worked to strengthen the capacity of Mali's meteorological agency, Mali Météo, to provide improved climate and weather information and forecasting.
- **Africa Rising**, a USAID-funded Feed the Future Programme which operated in the Guinea and Sudano-Sahelian zones of northern Ghana and southern Mali. In Phase 1 (2011-2016), research activities aimed at establishing the best-bet technologies that would deliver development solutions to smallholder farm families. These technologies were tested and validated through participatory research approaches together with the farming communities. Phase 2 of the project (2016-2021) combined continuity with evolutionary change to ensure that the technologies identified in Phase 1 drive wider adoption at scale through effective development partnerships.

### PROJECTS CURRENTLY UNDERWAY:

- The first phase of the Support Programme for the Improvement of Livestock Systems in Mali (PRAPS 1) (2016-2021) will be followed by **PRAPS 2**, which was launched in Mali in August 2022. PRAPS has made it possible to establish rules for managing the areas primarily dedicated to pastoralism. This includes essential infrastructure established around water points, such as reception zones for the pastoral herders, pasture for the livestock, vaccination stations, livestock markets, fodder storage warehouses, and shops managed by women. PRAPS II is a regional project benefitting six countries, including Mali, and will be funded by a US\$375 million grant from the World Bank's IDA. It will make full use of lessons learned from PRAPS I interventions and research for pastoral development in the Sahel zone. This initiative involves the following partners: CIRAD, FAO, ILRI, CORAF, IRAM OIE, CRSA. The objective of PRAPS 2, which is an instrument for the implementation of the National Agricultural Sector Investment Programme (PNISA), is to improve access to essential production and market resources and services for pastoralists and agro-pastoralists in selected border areas and along transhumance routes and to improve the capacity of these countries to respond in a timely and effective manner in the event of a pastoral crisis or emergency. The project will be implemented in three priority areas of transhumance and or commercialization, with a view to concentrating investments in complementarity with government interventions and funding provided by other projects (i.e the areas of Gao, Timbuktu, Mopti, Ségou, Kayes, Sikasso, Kinshasa, Kayes, Sikasso, Koulikoro, Ménaka).

- *Through the PRAPS 1, Mali benefited from the following, which are all aspects that the GGW-I could capitalise on: establishment of a database for the geo-referencing of all the infrastructure, strengthening the coherence and relevance of training actions thanks to the elaboration of a national training plan, fostering a combined approach of the social development strategy and the operational approach for conflict prevention in pastoral areas, and developing a baseline of pastoral water points in the targeted areas.*
- The “Programme d’Appui à la Transition Agroécologique” (PATAE) is supported by €8.2 million in funding from the French Development Agency (AFD). It proposes to support organisations in the implementation of innovative agro-ecological projects to improve food and nutritional security in West Africa. It aims to stimulate the development of innovative practices that optimise the mobilisation of ecological processes in the field of agricultural production and food and nutritional security in the ECOWAS zone.
- The Safe locally produced vegetables for West Africa’s consumers (2021-2025), a €8 million project (Implemented in Burkina Faso and Mali), aims to pilot and scale innovative approaches to improve the functioning of vegetable value chains through strengthening the relationships among value chain actors, and increasing the production and consumption of safe vegetables, leading to better nutrition and more jobs, especially for women and youth in West Africa. The project is implemented by the World Vegetable Centre (WorldVeg).
- *Given the GGW’s focus on fostering sustainable vegetable production in intervention areas, it could prove valuable to engage with this project.*
- The Research and Innovation Project for productive, resilient and healthy agro-pastoral systems in West Africa (PRISMA)(2022-2025) is a €6 million project co-funded by the European Union and AECID, and implemented by Enabel, LuxDev and AECID. The project aims to:
  - Improve availability and access to pastoral resources through sustainable management practices adapted to climate change, tested by research and known by technical and social actors;
  - Improve the availability of and access to quality livestock feed at the regional level, through better production and distribution organisation;
  - Limit the risks to human health associated with the consumption of local milk through better control of zoonoses; and
  - Ensure coherent consultation with the main influential and potentially impacted stakeholders and initiate a dialogue with decision-makers to improve sectoral policies.
- The World Bank funds several regional projects with a focus on food system resilience, these include:
  - The West Africa Food System Resilience Programme (US\$315 million)
  - Regional Sahel Pastoralism Support Project II (US\$251 million)
  - The Sahel Irrigation Initiative Support Project - closing 2024 (US\$105 million)
- The Regional Dialogue and Investment Project on Pastoralism and Transhumance in the Sahel and Coastal Countries of West Africa (PREDIP), an EU-funded project (€25 million) focusing on Mali, Burkina Faso, Niger and the ECOWAS coastal countries.
- FAIR Sahel (2020-2023), a project coordinated by CIRAD, with a budget of €9 million co-funded by the EU and the French Development Agency, aims to bring together ten European and West African partners for four years to conduct activities in Burkina Faso, Mali and Senegal in support of a transition to agro-ecology. Activities are carried out at three levels:
  - The communities, based on the experiences of the producers themselves and the contributions of research and development actors, to define new production methods and techniques;
  - Regional institutions (producers’ federations, local authorities, market and commodity chain companies, local research, training institutes and NGOs). Using foresight tools (workshops, role-playing games), all the actors collectively explore the conditions for the emergence of tomorrow’s agro-ecology: access to commodity chains, access to seeds, mechanisation, specialised technical support, training; and
  - At the national and intra-Saharan levels, advocacy work aims to achieve convergence with other similar initiatives, but above all political support from governments. The aim is to perpetuate and extend the agro-ecological transition of systems.
- *The project map indicates that interventions areas in Mali intersect with the GGW- synergies could be explored.*
- The Inclusive Finance in Agricultural Value Chain Project (INCLUSIF) (2018-2024) implemented and co-financed by IFAD, the Governments of Denmark and Canada (US\$100 million in total). It aims to improve financial inclusion for smallholders and small and medium agri-food enterprises in Mali. It is expected to reach 440 000 direct beneficiaries from disadvantaged groups, rural family farms, professional organisations (cooperatives, unions and federations) and private-sector agricultural enterprises. In terms of expected impact, INCLUSIF aims to: 1) Bring 440 000 smallholders and 360 professional agricultural organisations into the banking system; 2) Develop five permanent financial products in the areas of savings, credit and micro-insurance; 3) Develop, together with rural financial institutions, a rural credit portfolio of at least 20 billion CFA francs in lending by the end of the project; 4) Build the capacity of 36 000 smallholders in partnerships with the private sector; and 5) Raise the incomes of at least 22 000 smallholders and 4 500 rural young people in income-generating activities and rural microenterprises.
- The Projet de Développement de la Productivité et de la Diversification Agricole dans les Zones Arides du Mali (PDAZAM), funded by the World Bank’s International Development Association (IDA). It aims to strengthen the resilience of poor and vulnerable households and to enable government institutions to strengthen their capacity in terms of agricultural planning, supporting agricultural sector productivity and household resilience. In November 2022, the World Bank has approved an additional IDA credit of

US\$30 million.

- The Sustainable Development Project for Pastoral Farms in the Sahel (PDDEPS) Mali launched in 2019.
- The Feed the Future (FTF) Mali Sènè Yiriwa project is a US\$19 million five-year activity (2021–2026) working to empower producer organisations in Mali's southern zone. Project ambitions are to increase smallholder productivity, boost incomes, strengthen resilience, and enhance nutrition in the zone by introducing improved, climate-smart techniques, technologies, and farming practices. RTI leads the activity consortium which includes the Inter-Church Organisation for Development Cooperation, Association des Organisations Professionnelles Paysannes, International Fertilizer Development Center, Vétérinaires Sans Frontières, and North Carolina A&T University. Sènè Yiriwa is complemented by a market systems activity (Sugu Yiriwa) working in the same communes to collectively develop the supply and demand side of agricultural production.
- *The project's focus on strengthening producer organisations to deliver inclusive, diversified extension and nutrition advisory services is relevant to the GGW, with the strong recommendation that has been expressed on working more closely with producer organisations.*
- The Swiss Agency for Development and Cooperation (SDC) funds several projects:
  - **Soutien au Dispositif National de Sécurité Alimentaire -PRESA (2022–25):** The SDC aims to strengthen the institutional and organisational capacities of the national food security system to improve the prevention and management of cyclical crises and increase the resilience of vulnerable populations to food and nutrition insecurity.
  - **Programmeme d'Appui aux Filières Agropastorales de Sikasso - PAFA 2 (2021–2024):** In partnership with Luxembourg, Switzerland supports family farms, the private sector and communities, each in their own role, in the development of the potato and milk sectors in southern Mali, thereby generating sustainable employment and income opportunities, particularly for women and young people.
  - **Resil - Project to strengthen resilience and social cohesion in the Dogon plateau (2020–2022):** This project seeks to improve land productivity and strengthen mechanisms for managing land disputes. The project contributes to conflict prevention and increasing resilience.
- The German Federal Ministry for Economic Cooperation and Development (BMZ) funds several projects:
  - **Green Innovation Centres for the Agriculture and Food Sector (GiC) (2014–2026)** BMZ funded and implemented by the EU, SDC and GIZ. The focus of the work is on smallholdings in 21 selected value chains. These farms are supported primarily through the provision of advisory services and educational and training courses, with the goal of enabling them to use input-based, technical, knowledge-based and organisational innovations to improve their productivity, income and climate resilience in the long term.
  - **Global Programme Food and Nutrition Security, Enhanced Resilience (2014–2026)** (BMZ funded,

GIZ implemented) supports food and nutrition security strategies in partner countries. It is closely aligned with the relevant ministries and cooperates with national and international non-governmental organisations and other donors. The Programme also builds on existing programmes run by German development cooperation actors. This ensures continuity and a common approach to the issue of food and nutrition security.

- **Promotion of Agricultural Finance for Agri-based Enterprises in Rural Areas (2016–25)** (BMZ funded, GIZ implemented). The project advises and supports the expansion of financial institutions into the agricultural sector and assists them with developing adapted financial services. This process is based on the business models the project has identified as viable.
- **Strengthening national agricultural extension in Mali. (2022–23)** (Co-funded by BMZ and Affaires Mondiales Canada (AMC)/Global Affairs Canada; implemented by GIZ). The project contributes to harnessing the value of small-scale irrigation systems in the long-term. To do so, the project is developing a new version of the national programme for small-scale irrigation based on past results and experience. This will incorporate economic, agro-ecological, gender-sensitive and nutrition-based aspects. It is also supporting the National Directorate of Agriculture in adopting a national agricultural extension system and developing integrated framework planning in two selected regions.

## OTHER PROJECTS - PROJECTS WITH A FOCUS ON ENERGY

### PROJECTS CURRENTLY UNDERWAY:

- The **Desert to Power** launched in 2019 by the AfDB and its partners, is designed to increase solar generation capacity to provide 250 million people with electricity access across Africa's Sahel region. The project focuses on Senegal, Nigeria, Mauritania, Mali, Burkina Faso, Niger, Chad, Sudan, Ethiopia, Djibouti and Eritrea.
- **Multi-energy for Resilience and Integrated Territorial Management Project (MERIT) (2019–2026)** – see details in section on climate change projects listed above.

### UNDER DEVELOPMENT:

Multi-Energy for Resilience and Integrated Territorial Management (under definition / US\$50.8 million) with IFAD and Agronome and Veterinaires Sans Frontieres. (African Union 2022)



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ClimBeR: Building Systemic Resilience Against Climate Variability and Extremes



Alliance

