



# ADAPT:

## Policy Innovations to Unlock Climate Finance for Resilient Food Systems in Africa



### 1. INTRODUCTION

Mali is increasingly exposed to climate change impacts, including droughts, floods, and extreme temperature and precipitation variations which in turn have led to reduced agricultural productivity, food insecurity, conflict, and migration. Over the last two decades, Mali has seen extreme climatic events at both ends of the precipitation spectrum with an increase in the frequency and intensity of both floods and droughts having severely tested its capacity to cope with a changing climate. The country's arid regions have already experienced

a rise in temperatures of 0.3°C between 1979 and 2015 (AfDB, 2018). In addition, the rural and poor populations—about 5.3 million people, most of whom are subsistence farmers—are disproportionately affected by the changes (GCF, 2016). Mali scores 0.60 on the ND-GAIN vulnerability index, among the highest on the continent (University of Notre Dame, 2022). At the same time, the agricultural sector is the largest source of the country's GHG emissions, contributing nearly 80 percent of total emissions. In addition, the country is juggling multiple overlapping



challenges as it continues its fragile recovery from the economic and social impacts of the COVID-19 pandemic alongside continued political instability, and a growing food security crisis that has been exacerbated by elevated global energy and food prices caused by the war in Ukraine (World Bank Group, 2022). In this context, the Government of Mali is implementing various strategies to increase the country's resilience against future climatic shocks and stresses. Indeed, policy and institutional innovations aim to drive growth in the agricultural sector despite the challenge of a changing climate.

Mali has increasingly been able to tap into international climate finance allowing it to make advances in transforming its food systems and increasing its resilience. Between 2011 and 2020, Mali received nearly US\$ 555 million in bilateral, multilateral, and private sector funds for adaptation (OECD, n.d.). Such investments promote Mali's food security and foster more inclusive economic growth by boosting agricultural productivity, facilitating the adoption of yield-enhancing technologies, the expansion of soil and water conservation activities, strengthening the development of input markets, improving the quality and value of essential foods, supporting the commercialization of surplus production and mitigating the negative impacts of climate change (Afokpe et al., 2022).

## 2. INSTITUTIONAL INNOVATIONS

Mali's development priorities are focused extensively on decentralization and governance, which has led to stronger service provision across all levels of government, including at the municipal level. Moreover, the government has placed a strong emphasis on strengthening resilience, particularly through climate-smart agricultural practices.

### 2.1. Dedicated climate change agency: Ministry of Environment, Sanitation, and Sustainable Development

The Ministry of Environment, Sanitation, and Sustainable Development (Ministère de l'Environnement et de l'Assainissement, MEADD) oversees natural resource management, sanitation projects, and climate change initiatives. Within the MEADD, the Environment and Sustainable Development Agency (AEDD), created in 2010, is specifically responsible for the implementation of climate change initiatives and the development

of policies that span across different sectors. It is also the Designated National Authority (DNA) for the Clean Development Mechanism (CDM) and the Green Climate Fund (GCF). In 2011, the AEDD, with support from GIZ, EcoSecurities, and the Norwegian Agency for Development Cooperation, published the National Climate Change Policy (PNCC) and its corresponding National Strategy for Climate Change (SNCC) (see Policy Innovations section below). The AEDD, formerly the Technical Secretariat of Environmental Management Framework, is the executive entity overseeing Mali's response to climate change and evaluating the implementation of the PNCC, the SNCC, and the National Climate Action Plan (PANC). It also acts as the permanent secretariat to the National Climate Change Committee (CNCC) and is part of the National Environmental Council (see below) (Zamudio, 2016).

Moreover, the AEDD, as the DNA of the GCF, provides technical and administrative support in monitoring the development of Mali's Investment Plan. It oversees the country's programs in line with national sustainable development priorities. It also convenes meetings with the country's key stakeholders to inform them of the project and program development in general, as well as the process of accessing funding through the GCF.

### 2.2. Multistakeholder engagement: National Environment Council and the National Climate Change Committee

In 2010, the National Environment Council (Conseil National de l'Environnement, CNE) was created by MEADD through Decree 10-390. The CNE was established to develop and implement sustainable development programs; promote greater stakeholder engagement, particularly of civil society organizations; review all draft texts and Multilateral Environmental Agreements; and respond to queries from the Minister of Environment. The CNE is chaired by the Minister of Environment or a delegate and it is composed of representatives from the public and private sectors, local authorities, and civil society. In addition, the CNE can create ad hoc committees on environmental sub-themes (Republique du Mali, 2010). One such committee, the National Climate Change Committee (CNCC), was established in 2011 by Decree N°2011-107/PM-RM with a specific focus on climate change. Both, the CNCC and the AEDD were tasked to support the implementation of the National Strategy for



Climate Change's (SNCC) first strategic axis to advance the institutional framework for climate change, the PNCC, and the National Climate Action Plan (PANC) (see Policy Innovations section below). The CNCC is also a multistakeholder committee chaired by the Minister of Environment and Sanitation. It is divided into four thematic groups covering adaptation, mitigation, technology transfer, and finances and national capacity strengthening (Zamudio, 2016).

### 2.3. Creating a climate budget line: The Ministry of Economy and Finance

Mali's Ministry of Economy and Finance (Ministère de l'Économie et des Finances) plays an increasingly important role in the government's efforts to mitigate the impacts of climate change and to build adaptive capacity within the country. The ministry has formulated economically viable investment plans to deliver on Mali's NDC and has incorporated a climate budget within national development plans. In fact, since 2019, a dedicated climate budget has been created and is part of the Strategic Framework for Economic Recovery and Sustainable Development of Mali (Cadre Stratégique pour la Relance Economique et le Développement Durable 2019-2023, CREDD, see Policy Innovations below) (Ministère de l'Économie et des Finances, 2019).

The mainstreaming of climate into the national budget goes hand in hand with several financial vehicles, including the Mali Climate Fund. Various organizations in Mali, including the National Agency for Investment of Local Governments, are currently working on their accreditation to the Green Climate Fund to implement crosscutting climate change projects. In addition, Mali's Development Bank (Banque de Développement du Mali - BDM) is seeking accreditation for private sector projects, and the Mali Folk Center is seeking to do so for civil society projects. The combination of climate change mainstreaming in the national budget and the different financial vehicles make Mali's climate policy stand out in the region.

### 2.4. Mainstreaming climate in regional and local authority budgets: National Investment Agency of Local Authorities

The National Investment Agency of Local Authorities (Agence Nationale d'Investissement des Collectivités Territoriales, ANICT), is an important example of the Government of Mali's

decentralization efforts and processes. ANICT receives, allocates and guarantees subsidies to regional and local authorities to support them in the implementation of their activities, including those focused on the environment and climate change. It facilitates local governments' access to bank credit, manages grant funds and monitors their use, and has set up a simple, equitable, and solidarity-based distribution system. The agency also encourages local authorities to mobilize resources to finance their plans and guarantees the loans contracted by them. The mission of ANICT is to provide continuous and stable financial support to local authorities, including for a minimum number of structural facilities in the community development program.

### 2.5. Focus on financing adaptation projects: Mali Climate Fund

A large number of climate projects in Mali are financed through a national fund, the Mali Climate Fund (Fonds Climat Mali, FCM). Created in 2012 and operational since 2014, the FCM was established under a Memorandum of Understanding between the Government of Mali and the United Nations Development Program (UNDP). It is financed by annual contributions from Sweden and Norway and tasked with mobilizing domestic and international as well as public and private finance. Key objectives of the FCM include the development and protection of water resources, irrigation and aquaculture, particularly within communities that are faced with increasing water scarcity; the introduction of soil conservation, drought resistant seeds, and improved livestock management to reduce crop failure and maintain agricultural incomes; and fostering diversification of livelihoods to improve the resilience of vulnerable households. By 2022, FCM had funded 14 projects that align with the priorities outlined in Mali's NDC, National Strategy for a Green and Climate Resilient Economy, CREDD, the National Strategy on Climate Change (SNCC), and the National Strategy for Disaster Risk Reduction and Management (see Policy Innovations below). Eighty percent of projects are oriented towards adaptation and 20 percent towards mitigation; projects funded to-date focused mainly on energy, agriculture, and forestry activities. Indeed, FCM is the first public-private fund in Africa to strategically leverage funds for pilot interventions that can identify and scale resilience-building interventions.

The fund is managed by a steering committee





that is chaired by the Minister of Environment and is composed of four representatives from across the government, technical and financial partners, and civil society (MAEDD et al., 2022). It reports to the National Climate Change Committee at the National Environment Council. The steering committee makes decisions on financing and oversees the general management of the Fund. Funds are accessible to National Entities, through the Treasury, as well as international development partners and civil society organizations (UNDP, n.d.). By 2022, the MCF had raised US\$ 28 million from donors, and committed a total of US\$ 33 million across 32 projects with an average size of US\$ 1 million (UN MPTF Office Partners Gateway, n.d.).

### 3. POLICY INNOVATIONS

Climate change is increasingly becoming a top policy priority for Mali's Government. Over the last 15 years, the country has worked to develop a comprehensive policy framework to guide investments and interventions to build resilience to economic and natural shocks and stresses. In line with its low historical responsibility for emissions, and the immense pressure that climate impacts have on economic growth and development, the country is dedicating significant attention to developing policy responses to mitigating

the impact of climate change on communities, especially those engaged in the agricultural and forestry sectors. Crucially, Mali's efforts are being propelled by its desire to meet its international commitments and play a role in the global response to climate change.

For instance, one of the initial steps that Mali's Government took to develop its national climate policy framework was the submission of a National Adaptation Programme of Action (NAPA) in 2007. The NAPA provided a 'realistically achievable', prioritized, and country-driven program of actions focused on agriculture, forestry, water resources, coastal zone protection, and human health (Ministere de l'Equipment et des Transports and Direction Nationale de la Meteorologie, 2007). It presented 19 priority activities, including the diversification of animal and crop production, use of improved species that are adapted to climate change, diversification of livelihoods with specific attention to gardening, fish farming, and micro-credit, the creation of cereal banks, strengthening of agro-meteorological expertise and the construction of micro dams and other water supply structures. By 2014, six projects from NAPA had been approved for implementation using funds from the Least Developed Countries Fund (LDCF), with a total budget of US\$ 18.97 million. Two of those projects had already been completed by 2016 in partnership with the Ministry of Agriculture,





Livestock, and Fishing: Enhancing Adaptive Capacity and Resilience in the Agricultural Sector in Mali, implemented by the UNDP; and Integrating Climate Resilience into Agricultural Production for Food Security in Rural Areas of Mali, implemented by the FAO (Zamudio, 2016).

### 3.1. Mainstreaming climate change into national development plans

Following the submission of its NAPA, the Government of Mali proceeded to integrate climate and environmental considerations into its medium-term national development plans. One of those was the 2011 Strategic Framework for a Green and Climate Resilient Economy (EVRCC) to build momentum on reforestation, climate-resilient agricultural development and rangeland management, rainwater harvesting, and the development of renewable energy solutions (GCF, 2015). The EVRCC set the stage for the development of a national climate change policy; the establishment of a national fund to mobilize, program, and disburse financial flows, and the production of a near-term prioritized portfolio of projects for the period 2011-2013 to catalyze fast-start finance (GCF, 2018).

In parallel, the Malian Government also published the 2012-2017 Strategic Framework for Growth and Poverty Reduction (Cadre stratégique pour la croissance et la réduction de la pauvreté, CSCRP). This marked a step change in the integration of environmental considerations in all policy areas and provided a strong basis for addressing the challenges posed by environmental degradation and climate change, including dedicating one of ten challenges to adaptation (Zamudio, 2016). Moreover, the CSCRP aims to improve the resilience of agricultural livelihoods by promoting climate-smart production techniques, rainwater retention, reforestation, and the implementation of an investment framework for sustainable land management (Republique du Mali, 2011).

### 3.2. Climate policy, strategy, and action plan

The national development strategies set the stage for the formulation of a PNCC (published in 2011 and approved in 2014), a corresponding National Strategy for Climate Change (SNCC) developed in consultation with public and private sector partners, and a National Climate Change Action Plan (PANC).

The PNCC has six specific objectives, including building adaptive capacity; contributing to global efforts to reduce emissions; enhancing national capacity on the scientific and policy responses to climate change; facilitating mainstreaming of climate change across policy areas; strengthening Mali's capacity to prevent and manage climate risks and disasters, and promoting research and technology transfer (MAEDD and AEDD, 2011). It, therefore, provides the reference framework for improving coordination and synergies between the different climate change interventions and their integration into sectoral policies.

While the PNCC provides a vision for climate action, the SNCC operationalizes it, and the PANC translates the objectives of the SNCC into concrete actions. The SNCC is framed around eight axes to advance the institutional framework for climate change, attract funding from international climate funds, enhance research capacity, mainstream across sectors and sub-national policy domains, and engage the private sector. The SNCC also includes a five-yearly review mechanism to ensure that the 2025 policy goals are met.

The PANC integrates eight strategic axes that mirror the PNCC and build on the priority adaptation needs identified in the NAPA. It outlines a total of 148 actions, the largest share of which are dedicated to adaptation, and focus on the agricultural and livestock sectors. For example, the PANC proposes greater adoption of climate-resilient plant and livestock species, the development and deployment of improved early warning systems, income diversification, land restoration, and overall sustainable intensification of the livestock sector (MAEDD and AEDD, 2011).

Unfortunately, the implementation of these frameworks was significantly curtailed as a military coup in 2012 led to the suspension of overseas development assistance and a fall in capital spending by 90 percent. Total government spending fell by over a third and the budget allocation to the MEADD shrunk by 90 percent (Drakenberg and Cesar, 2013).



### 3.3. Climate action for post-conflict recovery: The Strategic Framework for Economic Recovery and Sustainable Development

Nevertheless, the pervasive nature of climate impacts and their significance for economic growth saw the environment and climate change integrated into post-2012 planning processes and in the development of the Strategic Framework for Economic Recovery and Sustainable Development of Mali (CREDD, 2016-2018). CREDD is the guiding document for development policies in Mali. It provides the framework for developing, implementing, and monitoring policies and strategies at the national and sectoral levels that promote sustainable development, poverty reduction, and peace. Framed with reference to the Sustainable Development Goals (SDGs), CREDD addresses issues of resilience and adaptation and integrates elements relevant to the different dimensions of the agricultural sector, food security, and climate change. These dimensions were also emphasized in the next iteration of CREDD covering the period 2019-2023. CREDD 2019-2023 is articulated around five major axes, with the fourth aiming to protect the environment and strengthen resilience to climate change (World Bank, 2021).

### 3.4. Complementing climate adaptation with disaster risk management

Disaster risk management can be a strong complementary mechanism to support climate adaptation. Mali has designed a robust disaster risk prevention, reduction, and management framework, including numerous new laws which set out specific institutional arrangements to implement them. Among these are the 2016 National Strategy for Disaster Risk Reduction (SNRCC), an Action Plan for Implementation of the National Strategy for Disaster Risk Reduction in Mali 2014-2018, and the National Contingency Plan (PNC), adopted in 2021 which covers the 2022-2026 period. The overall objective of the PNC is to contribute to the food and nutrition security of vulnerable groups. Recognizing climate change as a root cause of natural disasters, including droughts, floods, and locust invasions, the PNC contains both preventive and responsive objectives, including mobilizing the necessary resources to meet the needs of people and their livestock. Despite the potential synergy between disaster risk management and building resilience,

the PNC does not address climate adaptation directly. Moreover, although there is a reference to the establishment of a contingency fund to support disaster risk management activities, this has yet to be implemented (Casquete, 2022). Although the Action Plan includes specific activities related to climate adaptation, there is no evidence of it having been approved or implemented (Zamudio, 2016). Moreover, this integration is not matched in the more recent PNC.

### 3.5. The National Agricultural Sector Investment Program, 2015-2025 (PNISA)

Mali's agricultural sector program (PNISA) provides a comprehensive framework for public and private investments over 10 years. Adopted in 2016, the PNISA includes ambitions to foster a bottom-up approach to agricultural development, including the creation of new technologies and skills to meet the challenges posed by climate change; improve water management including irrigation solutions; and strengthening downstream value chain segments with investments in rural infrastructure and improving the business environment. The PNISA is also aligned with Mali's regional and international commitments and covers the sub-sectors of agriculture, livestock, fisheries, aquaculture, and environmental management. It was operationalized through a near-term five-year plan, the National Agricultural Sector Priority Investment Programme (PNIP-SA), which defined targets to increase the production of cereals, livestock, and fisheries; reduce poverty among farmers, and improve nutrition and health outcomes among the five million farmers who were directly targeted by it. PNIP-SA was costed at approximately US\$ 712 million over five years, 35 percent of which was expected to be financed from the national budget and beneficiaries. Since Mali's previous public sector allocations to its agricultural sector had regularly approached the Malabo Declaration target of 10 percent, it was able to leverage additional funds from other development partners and private sector actors. For example, with support from the Global Agriculture and Food Security Programme (GAFSP), the country successfully mobilized US\$ 214 million from a consortium of ten donors to implement the Baní and Sélingué Areas Irrigation Development Project, and US\$ 80 million from IDA, EU, IFAD, and UNDP for the Agricultural Productivity Enhancement Project in Mali (PAPAM) (Ministry of Agriculture General Secretariat, 2013).





### 3.6. Nationally Determined Contribution

MEADD led the drafting of Mali's Nationally Determined Contribution (NDC). The first draft was completed in 2016 and a revised NDC was submitted in 2021. The revised NDC includes ambitions to strengthen the role of the Ministry of Economy and Finance in addressing climate change, including identifying new sources of finance, and attracting private sector participation. Although it is only responsible for 0.09 percent of global emissions, Mali's NDC proposes to cut its GHG emissions by 31 percent in the energy sector, 29 percent in agriculture, and 21 percent in land and forest use by 2030 (NDC Partnership, 2017). The total cost of implementing all its mitigation plans are estimated to amount to US\$ 34.68 billion, of which US\$ 20.6 billion is allocated for agriculture, and US\$ 12.92 billion is allocated for forests. In comparison, the total cost of identified adaptation priorities was estimated to amount to approximately US\$ 1.06 billion – only 3 percent of the value of mitigation activities (AfDB, 2018). However, several actions identified for mitigation in the agricultural sector also have potential adaptation co-benefits. For example, sustainable land management, the uptake of organic manure and urea for micro-dosing, careful water management for rice production, and improving the performance of agricultural production processes, can enhance soil quality and improve income generation and diversification, both of which are key elements for building resilience. These are boosted by complementary adaptation actions, such as combating desertification and silting, forest management, rainwater harvesting, and the development of climate-resilient plant and livestock varieties (NDC Partnership, 2020). Working with the NDC Partnership, Mali's Ministry of Economy and Finance has developed a NDC Partnership Plan that translates commitments into a priority investment plan including both mitigation and adaptation and resilience-building activities with a total funding requirement of US\$ 320 million. In addition, efforts to mobilize key private sector actors, relevant ministries, and financial and banking institutions are aimed at designing more economically viable and financially attractive projects. Thus, while Mali is working to accelerate the implementation of its NDC, it is simultaneously working on revising and raising its ambitions (NDC Partnership, 2020).

## 4. PROGRAMMATIC INTERVENTIONS

In addition to the institutional and policy innovations outlined above, the Government of Mali has implemented several programs often in collaboration with partners to develop adaptation and resilience in the agricultural sector and food systems more broadly. Some of the key programs are outlined in this section.

### 4.1. The Decentralizing Climate Funds (DCF) project

In 2015, the Near East Foundation, the Innovation, Environment, and Development in Africa (IED Africa), and the International Institute for Environment and Development UK (IIED) initiated the Decentralizing Climate Funds (DCF) program in Mali and Senegal over a period of five years. The project was funded under DFID's Building Resilience and Adaptation to Climate Extremes and Disasters (BRACED) program, a GBP £110 million (US\$ 93.5 million) program funded by the UK Department for International Development (DFID)<sup>‡</sup> across 13 countries in the Sahel, East Africa, and Asia. The DCF project supports community- and local authority-led adaptation initiatives to strengthen communities' resilience. Communities themselves identify and prioritize investments against a devolved climate finance budget managed by local governments. The vision of the DCF project was to build an inclusive and sustainable local financing mechanism that encourages a decentralized allocation of climate funds to improve the resilience of populations (AGRIDAPE, 2018; Near East Foundation, n.d.).

Initially, local governments were given discretionary authority over a devolved Climate Adaptation Fund (CAF) with an initial value of approximately US\$ 700,000 (£500,000) per fund. The CAFs were tasked with financing locally prioritized, public good investments identified through inclusive community consultations that ensure differentiated representation of vulnerable individuals.

In Mali, the National Agency for Local Government Investment (ANICT) was chosen as the entry point for the mechanism, while adaptation committees consisting of community and government representatives were formed to oversee the project implementation. Committees for Adaptation Planning (CAPs) established at the

<sup>‡</sup> Now the Foreign and Commonwealth Development Office (FCDO)



commune level in Mali then selected the most impactful projects based on a predefined set of criteria and implemented these using a public procurement process that built the capacity of local governments, civil society organizations, and the private sector to manage construction and operation of public good investments.

A final evaluation of the BRACED program conducted in 2020 found that local planning now takes climate information into account. More specifically, the evaluation found that it took an average of 8.5 months for households with DCF investments to achieve food security status, representing a 7.8 percent increase from the 2015 baseline, while modest increases in income from cultivation over a season were achieved by some farmers. Moreover, the evaluation found that although multi-stakeholder collaboration processes remain less advanced in Mali compared to the other project country (Senegal), the project has been integrated from national to local levels. Finally, the evaluation concluded that the DCF introduced a mechanism that promoted social inclusion in decision-making on climate finance investments in Mali. It worked with existing institutional frameworks to reinforce or improve them (Leavy et al., 2019).

#### 4.2. Science Policy Dialogue Platform

The Mali Science Policy Dialogue Platform was created by a Ministerial decision to advance evidence-based climate change adaptation and mitigation in agriculture and food security. Through the CGIAR Research Program on Climate Change, Agriculture, and Food Security

(CCAFS) scientific and technical support, the platform analyzed challenges, constraints, and opportunities for operational dialogue between researchers and decision-makers. In 2014, the platform was capacitated to facilitate the climate-smart agriculture (CSA) prioritization exercise that identified portfolios of cost-effective CSA technologies, which were brought to parliamentarians' attention. Subsequently in 2018, the platform successfully facilitated the development of a national CSA Investment Plan (CSAIP) comprising 12 investment ideas developed in concept notes. By strengthening the capacity of key stakeholders to develop bankable and eligible projects as well as access international climate finance, the Platform contributed to promoting climate-friendly agriculture and low-emission, climate-resilient development pathways. The capacity building and partnership activities over three years by the Platform culminated in the development and submission of many bankable projects, leading to the raising of US\$ 4 million in 2019 (CCAFS, 2021; Segnon et al., 2021).

#### 4.3. Mali Climate Change Adaptation Activity (MCCAA)

Between 2015 and 2020, USAID partnered with Mali's National Meteorological Agency, known as 'Mali Météo' - a financially autonomous parastatal agency since 2012 - on a US\$ 12.6 million project to create community-based systems that responded effectively to climate change. The project, the Mali Climate Change Adaptation Activity (MCCAA), worked to increase vulnerable groups' access to accurate and timely climate data and their







understanding of how to use it. In line with Mali's decentralization efforts, the MCCA worked with local governments to support their development of climate change adaptation plans and assisted them with integrating these plans into their broader five-year development plans, rendering them more bankable and hence more likely to attract international climate finance (Chemonics, 2021).

A final evaluation in 2020 reported that the MCCA established a climate-proofing committee in each of the 42 communes across the Mopti region, comprising local technical experts and commune officials. MCCA formally trained committees on climate change adaptation and served as a direct channel to the committees that develop planning documents (Plans de Développement Economique, Social et Culturel (PDESCs)) within communes. Following capacity-building efforts and intensive consultations with every village, MCCA developed climate change action plans. All 42 communes legally adopted those plans and inserted them into the communes' PDESCs. The plans clearly lay out how communes seek to overcome the effects of climate change and were subsequently distributed to the Governor of the Mopti Region, USAID, and non-USAID partners who could potentially finance activities within the plans. Between 2018 and 2020, 21 communes mobilized US\$ 52,950 to address issues defined in their commune plans (Chemonics, 2021).

#### 4.4. Local Climate Adaptive Living (LoCAL) Facility

The Local Climate Adaptive Living (LoCAL) Facility was set up to support local government authorities to access climate finance, alongside capacity-building activities, and technical support to effectively respond and adapt to climate change. The facility is an internationally recognized mechanism designed and hosted by the UN Capital Development Fund (UNCDF). LoCAL directives are aligned with the objectives and priorities of Mali's strategic framework, UN Development Assistance Framework (UNDAF) 2020-2024, and the NDCs (UNCDF, 2020). LoCAL-Mali amplifies the role of communes in promoting local climate change adaptation and resilience-building measures by integrating climate funding in budget transfer mechanisms and the allocation of local resources. Specifically, it aims to strengthen technical and

institutional capacities in the communes and promote increased awareness among commune councilors and local communities about the impacts of climate change and the relevance of local approaches and solutions. The Environment and Sustainable Development Agency (AEDD) is responsible for administering the LoCAL program in partnership with the other members of the National Steering Committee, using the ANICT structure for funding the communes. This is done with technical support from UNCDF and under the general direction of the Ministry of Territorial Administration and Decentralization. According to LoCAL's annual report of 2019, the following achievements have been made in Mali so far:

- Oversight and monitoring mechanisms were established and are fully operational, including a UNCDF National Coordination Team; a LoCAL-Mali Technical Committee under the authority of the Ministry of the Environment, Sanitation and Sustainable Development; a local Support and Orientation Committee established at the circle level and presided over by the circle's prefect; and a Commune Committee for Technical Support and Orientation.
- The first two performance-based climate resilience grant (PBCRG) cycles were completed and successfully evaluated in 2016 and 2017. The communes are now preparing for the implementation of adaptation activities slated for the third year of the LoCAL mechanism with the grants selected in the first phase.
- The government granted financing through the AEDD to LoCAL over the 2016-2018 period and pledged further support over the next years. The design of LoCAL Phase II was developed between 2016 and 2017 and has been peer reviewed and validated by the Government of Mali.
- ANICT was nominated as a national implementing entity and is pursuing efforts for accreditation to the Green Climate Fund (GCF), to scale up LoCAL.
- Following its nomination, LoCAL supported ANICT in organizing a national workshop in which 179 participants learned about how the GCF works and what kinds of interventions can be financed through it. Subsequently, LoCAL and ANICT made a joint submission to the Mali National Climate Funds to scale up LoCAL Phase II and gain the necessary experience to access GCF resources.



- In 2019, LoCAL signed a letter of agreement with ANICT to provide technical and financial assistance to the Government of Mali (ANICT, AEDD) to support its GCF accreditation.

## 5. CONCLUSION

The progress that Mali has made in developing and implementing a climate finance structure is remarkable given the uncertain political environment the country has faced over the last decade. Between 2011 and 2020, Mali received nearly US\$ 555 million in bilateral, multilateral, and private sector funds for adaptation. While this amount places Mali among the top 7 recipients of finance for adaptation on the continent during the period 2011 to 2020, it still falls significantly short of its needs, as described above. Nevertheless, if recent developments are maintained and commitments adhered to, the existing institutions and policy frameworks have the capacity mobilize more finance for adaptation for Mali's food systems.

Perhaps due to the instability, the policy development and implementation processes have largely been top-down and led by consultants,

followed by "validation" processes by sectoral and sub-national stakeholders. As the country looks to rebuild from the turmoil, it will benefit immensely from revitalizing engagement forums at the sub-national and community levels that are already in place (Traoré et al., 2016). Adapting and strengthening the dynamics in existing ones can build on prevailing knowledge and experience. A bottom-up and decentralized approach to updating adaptation plans for food systems can become the focal point around which communities can galvanize. This in turn must be supported with greater investments in building and mobilizing national capacity to generate scientific evidence as well as develop and implements policy, thereby amplifying the impact of interventions. Current sectoral and institutional contexts are characterized by fragmented approaches to development and a plethora of competing frameworks, without clear institutional coordination, as well as overlapping mandates and at times conflicting objectives. Sectoral ministries tend to operate in isolation and address issues such as climate change, climate-biodiversity interaction, and land management in a piecemeal fashion (World Bank, 2021).

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