

SECTION 1: GENERAL INFORMATION

This section provides general information on the funded activity.

1. Funded Activity Title:	Africa Hydromet program - Strengthening Climate Resilience in Sub-Saharan Africa: Mali country project
2. Funding Proposal Number:	FP012
3. Date of Board approval - Board Meeting Number:	June 30, 2016 B.13/23
4. Accredited Entity:	The World Bank
5. Focal Point of the Accredited Entity for this Project:	Koffi Hounkpe khounkpe@worldbank.org
6. Executing Entity(ies):	Republic of Mali, Ministry of Security and Civil Protection
7. Implementation Period:	From: January 17, 2020 To: January 17, 2025
8. Current year of Implementation:	Year 1
9. Date of Submission of the Report:	February 28, 2021
10. Annual Reporting period covered in this report:	From: January 17, 2020 To: December 31, 2020
11. Total Project Budget²:	Grant: USD 31,000,000
12. Total amount of GCF Proceeds Approved:	Grant: USD 22,750,000
13. Total amount of GCF Proceeds disbursed (cumulative) to the Accredited Entity:	Grant: USD 0 (GCF)

²Total project budget including co-financing as reflected in the relevant Funded Activity Agreement

SECTION 2: IMPLEMENTATION PROGRESS

2.1 OVERALL (SUMMARY) PROJECT PROGRESS (*less than one (1) page*³).

The *Africa Hydromet program - Strengthening Climate Resilience in Sub-Saharan Africa: Mali country project* is one of the key projects in Mali enabling adaptation to climate change by strengthening and modernizing the national meteorological services (Mali Meteo), national hydrological services (DNH), as well as early warning and civil protection services (DGPC and SAP). The project has the objective to improve the provision of and the access to, Mali's hydro-meteorological, early warning and emergency response services.

The project has a total budget of USD 31 million, of which USD 22.75 million are financed through a GCF grant and USD 8.25 million by the World Bank (IDA grant). In addition, the Government of Mali provides USD 2 million as co-financing to the project. It is implemented along three main components 1: Capacity Building and Institutional Development, 2: Improvement of Hydromet and Early Warning Infrastructure, 3: Enhancement of Service Delivery and Warnings to Communities as well as 4: Project Management. The project was approved in June 2016 by the Board of GCF and in May 2019 by the Board of the World Bank. The IDA grant is effective since September 2019 and the GCF grant since January 17, 2020. As of December 31, 2020, USD 0.97 million of the IDA grant was disbursed.

With a head start of the project in 2019 and early 2020 the project implementation unit (PIU) was established under the Ministry of Security and Civil Protection. The different positions for the PIU were recruited including project coordinator, monitoring and evaluation specialist, procurement specialist, project accountant as well as safeguards specialists. Project activities focussed in the first quarter of the reporting period on the preparation of baseline studies, terms of reference for the recruitment of technical experts, architectural and design studies for the modernization of the operations center of DGPC. With regard to monitoring and evaluation, the project developed a detailed monitoring and evaluation plan for all indicators, including GCF and IDA specific indicators.

The coup d'état on August 18, 2020 and the absence of the legitimate government since then as well as the COVID-19 pandemic substantially impacted the overall implementation of the project. Since March 2020 a strict protocol on health precautions related to the COVID-19 pandemic is followed. The combined impact of these events led to restrictions for field travel, cancellation of all face-to-face meetings throughout the countries, including consultation and training workshops, cancellations of travel abroad, limiting access of experts and consultants as well as challenges with the procurement of goods, which are not commonly available on the market. This has caused a substantial delay in the implementation of the project and may require several changes to the project milestones.

To support coping with the pandemic and provide assistance in response during the flood season, the project coordination unit in close collaboration with the government and the World Bank put in place a number of actions to facilitate the countries response to COVID-19, including support to the production and distribution of personal protective equipment to women in markets as well as production and installation of handwashing devices at the entrance of markets. A public awareness campaigns were also initiated with a traditional communicator being recruited to promote awareness in public places, especially in the markets. In addition to the urgent actions relating to Covid-19, the project also supported preparing for the 2020 rain season through the cleaning of four km of city gutters and collectors to reduce flood risk in Bamako city. The project is currently establishing a contingency plan to support the coordination of activities under the current limitations of the COVID-19 pandemic and volatile security situation. To address the specific constraints of project monitoring and evaluation under the given constraints, the project has instead pioneered remote supervision and monitoring through the Geo-Enabling initiative for Monitoring and Supervision (GEMS) that for example facilitates surveys through cell phone-based applications.

However, the project is committed to ensure a timely implementation of all activities as soon as the restrictions to the pandemic have been lifted and the necessary security measures can be put in place.

³Please remove text below to fit report to one page. Additional reports can be provided as other attachment to the APR.

2.2 Performance against the GCF Investment Criteria (summary) (max two (2) pages).

Provide a narrative report describing the progress on the funded activity's performance against [the GCF investment criteria framework](#). The performance should be compared against the initial assessment provided in the Board-approved Funding Proposal (section E). The list of the investment criteria as per the current framework is provided below.

For each investment criteria outlined below, please include an assessment of current status, changes, progress and impact of the project as well as any impact of project context on the project during this reporting period against the initial baseline scenario and planned activities as per the assessment presented in the approved Funding Proposal.

2.2.1 Impact Potential (max one (1) page).

As per the initial assessment against the investment criteria provided in the Funding Proposal approved by the GCF Board, please provide an assessment of the performance of the funded activity during the relevant reporting period against the investment criteria "Impact Potential".

The project impact potential is measured against the impact of the project on the population vulnerable to extreme weather and climate events in Mali. The project proposal, which was approved by the board of GCF in June 2016, defines the target beneficiaries as the population vulnerable to one or more hydro-meteorological hazards, such as droughts and floods. It is estimated at about 5.3 million people. Direct beneficiaries are estimated at 2.7 million people, who would directly benefit from the project through agrometeorological services, flood early warning services, or other meteorological, hydrological and early warning services. In addition, indirect beneficiaries, estimated at 2.6 million people, are defined as having access to enhanced hydro-meteorological information on a voluntary basis. These figures also correspond with the about 2.3 million people live in flood-prone areas and are expected to be able to leverage more optimal benefits from the floods, while reducing related damages and losses and the estimated 3 million to 4.5 million people affected by food insecurity.

Benefits would span across the following areas: i) receiving advice from agro-meteorological information systems about the optimal date for cropping, the most profitable crops, how to avoid crop losses from drought, pests and diseases, as well as yield and post-yield conservation techniques; ii) being identified more accurately as vulnerable through the food security and nutrition warning system, and subsequently receive support in terms of cash, vouchers, free food or subsidized food; or (iii) receiving flood warnings along with various types of support, ranging from preventive evacuation, and protection of livelihoods from flooding damages, to emergency rescue and humanitarian support.

The project aims to target specifically the poorest and most climate sensitive groups are typically among (i) food insecure households; (ii) rain fed crop producers; (iii) small livestock herders; (iv) artisanal fishermen; (v) artisanal miners and (vi) urban and peri-urban flood-prone dwellers. The users will be supported for optimal use of improved hydromet services for resilience through strengthening the capacity of existing delivery mechanisms including civil protection (primarily targeting flood-prone households in urban areas) and food security early warning system (primarily targeting poorest households in rural areas). The targeting of the beneficiaries is related to the ongoing food security national surveys (conducted annually) combined.

The benefits below are considered impacts from the integrated approach of the project and are not been segregated by component. In the review of the monitoring and evaluation framework, the final target and mid-term targets have been confirmed. However, current number of beneficiaries has not yet departed beyond the baseline data of 300,000 direct and indirect beneficiaries. This is mainly caused by the delays related to the COVID-19 pandemic and combined effects of the volatile security situation and mutiny of August 2020. As for the reporting year, the planned beneficiary survey was also not conducted. Nevertheless, as the pandemic and volatile security situation are still ongoing, the total impact of this situation on the project is not yet foreseeable so that any corrections to the total beneficiaries would only be decided by the mid-term review.

2.2.2 Paradigm shift potential (max one (1) page).

As per the initial assessment against the investment criteria provided in the Funding Proposal approved by the GCF Board, please provide an assessment of the performance of the funded activity during the relevant reporting period against the investment criteria "Paradigm shift potential".

The project was formulated and designed with a paradigm shift potential focusing on the potential for scaling up and replication, potential for knowledge sharing and learning, contribution to enabling environment, and contribution to regulatory framework and policies. The project has in fact, despite the overall implementation challenges due to the COVID-19 pandemic and political instability, proven to deliver on its paradigm shift potential:

Potential for scaling up and replication:

- In Mali itself the project has leveraged additional technical assistance support through the CREWS initiative (Climate Resilience and Early Warning Systems) a joint initiative of World Bank, WMO and UNDRR. USD 2.5 million have been made available to support complementary capacity building and technical assistance.
- At the city level in Bamako, the planned urban resilience project (project code, estimated budget, under preparation) for an amount USD 250 million, is closely aligned with the Mali Hydromet Project, by supporting flood management applications and infrastructure development (such as drainage lines and dredging applications) the project builds directly on the recommendations of the Mali Hydromet Project. Also, at the regional level, the regional agricultural support program (USD 57.8 million for Mali part), which is currently under preparation, will focus on scaling up the project concept in the region, with a specific focus on agro-meteorological applications.

Potential for knowledge sharing and learning:

Contribution to enabling environment:

Hydromet services are critical for providing information that supports economic development across many sectors, including disaster risk reduction and management, water, agriculture, transport, energy, public health and aviation safety and security. The Project has therefore focused on strengthening cooperation across agencies to connect national hydromet services with expertise, data, and forecasting products. In addition, the project formulates a communication service development strategy to enable a targeting of communication products and services as well as potential for income generation and sustaining of services. An example of such a collaboration is the Raincell application, currently under development in partnership with Orange Telecom.

Contribution to regulatory framework and policies:

The Project supports the implementation and operationalization of several key national policies, including the NAPA, the National Climate Change Policy (PNCC), the National Climate Change Strategy (SNCC), and the draft National Strategy for Disaster Risk Reduction. In all of these policies, strengthening climate information and warning services is stated as a priority area required to improve climate-responsive planning and development. Through component 1 the project supports the formulation of standard operating procedures for the exchange of information between Mali-Meteo, DNH and DGPC as well SAP and will in this way contribute directly to the formulation of new regulatory policies.

2.2.3 Sustainable development potential (max one (1) page).

As per the initial assessment against the investment criteria provided in the Funding Proposal approved by the GCF Board, please provide an assessment of the performance of the funded activity during the relevant reporting period against the investment criteria "Sustainable development potential".

The sustainable development potential is defined in the project proposal with regard to the impact on reducing the economic losses caused by floods as well as reduced losses from droughts combined with increased agricultural productivity and improvements to the efficiency on the distribution of food assistance and humanitarian assistance. The reduced economic losses from floods were estimated in the proposal at USD 2.6 million annually over a period of 10 years and based on annual average losses of USD 52 million. With regard to the drought losses the impact was estimated in the proposal at USD 19.5 million annually based on the assumption that improved seasonal forecasting, agro-meteorological information systems and enhanced food security early warning system would improve farmer productivity and reduce crop losses. Environmental co-benefits relate to the benefits of efficient water use, whereas social benefits relate to the reduced mortality from floods and droughts and improved access to information for women. During the flood season 2020, the project supported emergency drainage works and

channel cleaning. In addition, support was provided for supplying personal protective equipment as well as communication on health and hygiene supporting Mali's efforts in response to the COVID-19 pandemic. These activities were supported by the IDA grant and illustrate the project's co-benefits with regard to health, environment and security.

The project supported a model based analysis of the economic impacts of droughts and floods as well as the total number of people affected. This model based analysis was conducted to support the baseline analysis for indicator A.1.1 of the results framework. It is based on a flood and drought risk assessment and estimations regional models such as OPIDIN to estimate the potential impacts of the service in terms of avoided losses and increased resilience of communities. Assumptions about service effectiveness through time have been developed on the base of literature to provide a quantification of these benefits. According to these data and assumptions, this study estimates how the EWS implementation can reduce damage and losses induced to people, crops and properties by river floods and droughts. Estimated average annual losses related to floods are estimated at USD 360 million in the flood model and USD 52 million on reported losses as well as 0.5 million affected people. With regard to droughts, depending in the severity of the droughts the impact ranges from 2.8% to 13% of agricultural GDP and potentially avoided losses between USD 30 and USD 130 million, depending on drought severity.

With regard to the sustainability potential and the impact on reducing losses from floods and droughts the conducted model based analysis confirmed and increased the estimations of the project proposal. A training program is being developed to transfer the model to the experts from DGPC, SAP, DNH and Mali Meteo and enable them to provide regular updates to the model as part of the monitoring and evaluation efforts of the project.

2.2.4 Needs of the recipient (max one (1) page).

As per the initial assessment against the investment criteria provided in the Funding Proposal approved by the GCF Board, please provide an assessment of the performance of the funded activity during the relevant reporting period against the investment criteria "Needs of the recipient".

The project proposal relates the needs of the population to poverty and food security and the strong correlation with climate change vulnerability in Mali. As such the indicator presented in the project proposal have not changed, whereas the situation for the vulnerable population in Mali has become more severe due to the compounded impacts of political instability, volatile security situation and the COVID-19 pandemic. On the key poverty data, little has changed so far. The poverty level in Mali is high with over half (50.6%) of the population living on less than USD1.90 a day. Mali ranks 182 out of 189 on 2017 the Human Development Index with one of the highest Gender Inequality Index (0.678) and lowest Gender development Index (0.811). 90% of poor people live in rural areas, relying on rain-fed agriculture and agro-pastoralism. Such households are highly vulnerable to shocks such as drought, which can erode their productive assets and output (livestock, crop production etc.). Successive droughts and conflict in the country's northern region have also contributed to the rapid expansion of Mali's urban population, with urban growth rates of 4.7% (2010). From 1980 to 2014, more than 7 million people were affected by 28 drought and flood events.

The impacts of the COVID-19 pandemic on the Malian economy is difficult to estimate. As a net oil importer, the country is benefiting from the low prices of crude oil. Mali's main export item is gold, a traditional safe haven in times of crisis. At the same time, Mali faces the risk of a collapse in the prices of its agricultural exports and lower demand in the Euro zone. In addition, strong uncertainty remains on the end of the COVID-19 pandemic and return to civilian rule. Considering the multitude of factors and uncertainly, an impact of the project on reducing poverty and impacts on the vulnerable population remains difficult to estimate.

2.2.5 Country Ownership (max one (1) page).

As per the initial assessment against the investment criteria provided in the Funding Proposal approved by the GCF Board, please provide an assessment of the performance of the funded activity during the relevant reporting period against the investment criteria "Country Ownership".

With regard to country ownership, the project proposal refers to the overall priorities on climate change adaptation as defined in the general reporting commitments of the government under UNFCC and notably the Nationally Determined Contributions. Mali has adopted a climate change framework to guide climate and disaster resilience activities. It is signatory to the UNFCCC, the Kyoto Protocol and the Paris Agreement and is currently formulating a

National Adaptation Plan (NAP) for medium- and long-term adaptation planning. Mali has strengthened its institutional and policy framework for climate adaptation and mitigation. It set up the Environment and Sustainable Development Agency (AEDD) in 2010 for coordinating national environmental policy and as the national secretariat on climate change. It supported the development of the National Climate Change Policy (PNCC), the National Climate Change Strategy (SNCC), and the Action Plan for Implementation (PANC), which were adopted in July 2011. In September 2016 Mali ratified the Paris Agreement. Climate change is one of the main pillars of the Strategic Framework for Economic Recovery and Sustainable Development (CREDD) 2019 - 2023, with priority given to resilience and adaptation to climate change. The project is an important contribution of Mali in its commitments with this regard.

As with regard to those policies, no substantial changes have been made. The project remains a central part of Mali's strategy for climate change adaptation. The project team regularly briefs the National Designated Authority on the progress of the project and ensures close coordination with other partners in Mali.

2.2.6 Efficiency and Effectiveness (max one (1) page).

As per the initial assessment against the investment criteria provided in the Funding Proposal approved by the GCF Board, please provide an assessment of the performance of the funded activity during the relevant reporting period against the investment criteria "Efficiency and Effectiveness".

The project proposal relates the efficiency and effectiveness to the overall benefits from investing and modernizing hydromet services. As the proposal highlights, strengthening hydromet services has indeed been considered cost effective in many cases. A recent overview of the socio-economic studies has clearly indicated that the benefit to cost ratio of investing in hydromet is high, with returns of 3:1 to 15:1. It's important to note that achieving benefits with hydro-meteorological services requires a minimum level of capacities, which can only be achieved in relation with a sizeable and multi-year investment program. The benefit to cost ratio of investments in hydro-meteorological services overpasses 1 only when these investments are enough to secure improvements critical for delivery of customized services responding to the requirements of different user groups from different sectors.

Considering the short implementation timeframe and limited results due to the ongoing COVID-19 pandemic, an update on the efficiency and effectiveness is not yet possible. Overall, the results from the model-based analysis of economic impacts for indicator A.1.1 indicate rather high impacts due to reduced losses from droughts and floods and tend to confirm the assumptions made in the proposal.

2.3 PROJECT OUTPUTS IMPLEMENTATION STATUS				
Project Output	Project Activity	Status	Implementation progress (%)	
Output 1 Capacity Building and Institutional Development	Project Activity 1.1 Institutional strengthening for core hydro-meteorological services		Activity started but progress delayed	5%
	<p>A capacity building plan for Mali Meteo and DNH is currently under development with a focus to identify capacity building needs, issues for retaining qualified staff and prioritizing training in either virtual format or with travel in the West Africa region to limit the impact of the COVID-19 pandemic.</p> <p>The TOR for the review of the operating framework and quality management system of Mali Meteo and DNH are under preparation by the project. An introduction to the concept of operations (CONOPS) and introductory training on the establishment of a CONOPS was provided in December.</p>	<p>Conditional on removal of the current restrictions related to COVID-19, the following activities will be rolled out:</p> <ul style="list-style-type: none"> X Stakeholder meetings on CONOPS (Q2); X Guidance note for operational framework (Q3) X 2nd Stakeholder meeting and review of frameworks (Q4) X 1st Stakeholder meeting on QMS (Q2); X Training needs assessment and plan available (Q2); X Training courses for forecasters, engineers, tech (Q4); 		
	Project Activity 1.2 Institutional strengthening and capacity building for flood early warning services and emergency preparedness and response		Activity started but progress delayed	5%
	<p>A capacity building plan for DGPC is currently under development with a focus to identify capacity building needs, issues for retaining qualified staff and prioritizing training in either virtual format or with travel in the West Africa region to limit the impact of the COVID-19 pandemic.</p> <p>An introduction to the concept of operations (CONOPS) and introductory training on the establishment of a CONOPS was provided in December 2020 with the aim to roll out and improve the standard operating procedures for early warning emergency response. The TOR to roll out CONOPS development and a quality management system are under preparation.</p>	<p>Conditional on removal of the current restrictions related to COVID-19, the following activities will be rolled out:</p> <ul style="list-style-type: none"> X Stakeholder meetings on CONOPS; X Guidance note for operational framework (CONOPS) (Q3) X Stakeholder and review meeting of existing alert (Q2) X Simulation Exercises (Q3) X National alert protocol updated (Q4) X 1st Stakeholder meeting on QMS1 (Q3) X Training Plan and gender workshop (Q2); X Start training batch (Q3); 		

¹ QMS Quality Management System



	Project Activity 1.3 Institutional strengthening and capacity building for delivery of improved food security early warning services	Activity started but progress delayed	5%
	<p>A training needs assessment and capacity building plan for SAP is currently under development with a focus to identify capacity building needs, issues for retaining qualified staff and prioritizing training in either virtual format or with travel in the West Africa region to limit the impact of the COVID-19 pandemic.</p> <p>The Standard Operating Procedures for SAP are being reviewed with a particular focus on the annual food security services to ensure that adequate climate information is collected. SAP also benefitted from the roll out of the CONOPS development in December 2020. The TOR for roll out of a quality management system are under preparation.</p>	<p>Conditional on removal of the current restrictions related to COVID-19, the following activities will be rolled out:</p> <ul style="list-style-type: none"> X Stakeholder meetings on CONOPS (Q2); X Guidance note for operational framework (CONOPS) (Q3) X Training needs assessment and plan available (Q2) X 2nd Stakeholder meeting and review of frameworks (Q4) X 1st Stakeholder meeting on QMS2 (Q3) 	
<p>Output 2</p> <p>Improvement of Hydromet and Early Warning Infrastructure</p>	<p>Project Activity 2.1 Expanding and upgrading hydrometeorological observation infrastructure and ICT for the delivery of core hydro-meteorological services</p> <p>An overview of the status of the observation network as well as specifications for the procurement of meteorological observation equipment (automatic weather stations), hydrological observation equipment and ICT (data management) infrastructure have been drafted. The procurement of the observation and ICT equipment is underway. The purchasing of specialized vehicles is also ongoing. A review of the current systems for performing meteorological, hydrological and climate modelling and forecasting is currently being prepared</p> <p>Design and architectural studies for the completion of the rehabilitation of the Mali Meteo buildings are being drafted.</p>	Activity started but progress delayed	10%
	<p>Conditional on removal of the current restrictions related to COVID-19, the following activities will be rolled out:</p> <ul style="list-style-type: none"> X Kick off rehabilitation works (Q3) X Delivery and configuration of vehicles (Q1) X Surveys, modelling and analytical completed by service provider (Q4) X Kick off equipment installation and training (Q4) X Installation completed (Q4) 		

² QMS Quality Management System



Project Activity 2.2 Modernization of physical infrastructure and ICT for the delivery of flood early warning and the management of emergency response	Activity started but progress delayed	10%
<p>Design and architectural studies for the construction of the emergency operations and emergency coordination centers are being drafted with the aim to launch the construction works in the first or second quarter of 2021. The technical design of the call forwarding center is equally under preparation. The procurement of emergency operations equipment (ambulance vehicles, pumps) was launched in the reporting period with expected delivery and put into service in the first quarter of 2021.</p> <p>In addition, several actions have been undertaken, through IDA financed activities, to facilitate the countries response to COVID-19, including support to the production and distribution of personal protective equipment to women in markets as well as production and installation of handwashing devices at the entrance of markets. The project also supported, with IDA funds, preparing for the 2020 rain season through rehabilitation works on city gutters and collectors to reduce flood risk in Bamako city.</p>	<p>Conditional on removal of the current restrictions related to COVID-19, the following activities will be rolled out:</p> <ul style="list-style-type: none"> X Start construction works of the operations center (Q3) X Ambulance vehicles procured (Q1) X Configuration of call processing center initiated (Q2); X Kick-off training (Q3) X Review and testing of operations centers (Q4) 	
Project Activity 2.3 Modernization of physical infrastructure and ICT for the delivery of food security and response capacity	Activity started but progress delayed	10%
<p>The operational procedures for the collection of food security information have been reviewed in the reporting period. Recommendations have been drawn with regard to the procurement of specialized equipment to support the data collection and communication during field surveys. The technical design for the modernization of the documentation room of SAP is under preparation. Equipment for data collection has been procured, while vehicles to support field operations are being procured.</p>	<p>Conditional on removal of the current restrictions related to COVID-19, the following activities will be rolled out:</p> <ul style="list-style-type: none"> X Delivery and configuration of vehicles (Q1) X Installation of equipment (Q3) X Completion of rehabilitation works for SAP (Q4) X Documentation room modernized (Q4) 	
Project Activity 3.1 Strengthening users and communities' access to core hydrometeorological and climate information services	Activity started but progress delayed	5%

<p>Output 3</p> <p>Enhancement of Service Delivery and Warnings to Communities</p>	<p>A review on the communication needs of different beneficiary groups has been rolled out aimed at a better targeting of the different services of Mali Meteo and DNH (through web applications, radio, TV, newspaper). TOR for the development of flood forecasting systems and agro-meteorological applications are under preparation. The design of an open source platform to share and exchange data was discussed by DNH, Mali Meteo, DGPC, and SAP. Nevertheless, due to the COVID-19 pandemic and volatile security situation the planned roll out of the beneficiary survey and survey of the communications needs has not yet been conducted, delaying the further rollout of this project activity.</p>	<p>Conditional on removal of the current restrictions related to COVID-19, the following activities will be rolled out:</p> <ul style="list-style-type: none"> X Agro-meteorology service products defined (Q3) X Communication products developed (Q4) X Technical study with sectoral working groups (Q3) X Prototype of services (Q4) 	
	<p>Project Activity 3.2 Building users and communities' access to flood early warning services and response</p>	<p>Activity started but progress delayed</p>	<p>15%</p>
	<p>The TOR for the development and roll out of flood forecasting and flood guidance and early warning systems for Bamako and other urban areas in Mali are have been drafted and are currently under review. TOR for flood risk mapping in greater Bamako and a plan for the roll out of contingency planning are being prepared. Nevertheless, due to the COVID-19 pandemic and volatile security situation the planned roll out of a survey for areas outside of Bamako has not yet been conducted.</p> <p>Due to the ongoing COVID-19 pandemic, with IDA funds, the project implementation unit focussed on the roll out of a public awareness campaigns with a traditional communicator to promote awareness in public places on COVID-19 health precautions.</p>	<p>Conditional on removal of the current restrictions related to COVID-19, the following activities will be rolled out:</p> <ul style="list-style-type: none"> X Simulation exercises based on risk assessments (Q3) X Lessons learnt of simulation exercise (Q4) X Kick-off technical studies on flood risk assessment and EWS (Q3) X TOR for risk mapping available (Q1) X Kick-off risk assessments (Q3) 	
	<p>Project Activity 3.3 Strengthening users and communities' access to food security information services and response</p>	<p>Activity started but progress delayed</p>	<p>5%</p>
<p>Guidance was provided to the effective rollout of food security surveys and the integration of relevant hydrological and meteorological information. Agro-meteorological assistance groups have been supported through SAP to enable the roll out of agro-meteorological information to farmers and chronically food insecure communities. Trainings were launched on the roll out of surveys and participation of local communities in data collection relevant for vulnerability surveys and agricultural monitoring. A first gender workshop was conducted in September 2019. Due to the COVID-19 pandemic no survey has been conducted, limiting the anticipated impacts under the project component.</p>	<p>Conditional on removal of the current restrictions related to COVID-19, the following activities will be rolled out:</p> <ul style="list-style-type: none"> X TOR for equipment and software available (Q2) X Installation completed and reviewed (Q4) X Agro-meteorology service products (Q3) X Review of annual food security surveys and monit.(Q3) X Training plan and gender workshop (Q2) X Stakeholder consultations (Q3) X Kick-off training (Q4) 		

<i>Output 4</i> Project Management	Project Activity 4.1 Project Management		Activity started progress on track	<i>25%</i>
	<p>On overall project management, the project has progressed well despite the challenges related to the COVID-19 pandemic and volatile security situation. The project implementation unit has been recruited with the core positions assigned and / or recruited (project coordination, safeguards specialist procurement specialists, monitoring and evaluation specialists).</p> <p>The estimations of unit costs was completed and communicated to GCF as part of the reporting requirements under the project. The procurement of equipment and vehicles for the project implementation unit has been completed.</p>	<p>Conditional on removal of the current restrictions related to COVID-19, the following activities will be rolled out:</p> <ul style="list-style-type: none"> X Training and support as necessary X Update safeguard documents; X Audit report available; X Interim Evaluation (Q4) 		

2.4 PROGRESS UPDATE ON THE LOGIC FRAMEWORK INDICATORS

2.4.1 PROGRESS UPDATE ON FUND-LEVEL IMPACT INDICATORS OF THE LOGIC FRAMEWORK

Fund-level impact indicators¹¹ (Adaptation)	Baseline	Current value¹²	Target (mid-term)	Target (final)	Remarks (including changes¹³, if any)
Adaptation Core Indicator Expected total number of direct and indirect beneficiaries, disaggregated by gender	DIRECT 300,000 INDIRECT 300,000	DIRECT 300,000 INDIRECT 300,000	DIRECT 1.6 million INDIRECT 1.6 million	DIRECT 2.7 million INDIRECT 2.6 million	Due to the COVID-19 related restrictions and security concerns no surveys were conducted in the reporting period.
Number of total beneficiaries relative to total population Number of beneficiaries relative to total population, disaggregated by gender	DIRECT 2% population 5.5% of vulnerable population INDIRECT 2% population 5.5% of vulnerable Population GENDER 50% men, 50% women Year: 2016	DIRECT 2% population 5.5% of vulnerable population INDIRECT 2% population 5.5% of vulnerable Population GENDER 50% men, 50% women Year: 2020	DIRECT 11% population 30% of vulnerable Population INDIRECT 11% population 30% of vulnerable. Population GENDER 50% men, 50% women Year: 2022	DIRECT 20% population 50% of vulnerable Population INDIRECT 20%population 50% of vulnerable Population GENDER 50% men, 50% women Year: 2024	Due to the COVID-19 related restrictions and security concerns no surveys were conducted in the reporting period.
Adaptation Impact Indicator 1 A.1.1 Change in expected losses of lives and economic assets (USD) due to the impact of extreme climate-related disasters in the geographic area of the GCF intervention.	Population affected by floods: 500,000 By droughts: 400,000 Av. annual losses floods: USD 360M To drought: USD 180 M	Population affected by floods: 500,000 By droughts: 400,000 Av annual losses to floods: USD 360 millions To drought: USD 180 million	Reduction by 1 % Population affected by floods: 495,000 By droughts: 396,000 Av. annual losses to floods: USD 356 millions To drought: USD 178 million	Reduction by 5 % Population affected by floods: 475,000 By droughts: 380,000 Av. annual losses to floods: USD 342millions To drought: USD 171 million	A model based analysis was prepared, on which the data are based.
Adaptation Impact Indicator 2 A.1.2 Number of males and females benefiting from the adoption of diversified, climate resilient livelihood options	TBD	TBD	Baseline +5%	Baseline +10%	A dedicated baseline survey was not conducted due to COVID-19 pandemic and security restrictions.
Adaptation Impact Indicator 3 A.2.2 Number of food-secure households (in areas/periods at risk of climate change impacts)	2 million	2 million	2.05 million	2.2 million	ENSAN 2020 survey not yet evaluated. NB: Number of food secure HH depends on many factors, including market factors, conflict and accessibility
Adaptation Impact Indicator 4 A.3.1 Number and value of physical assets made more resilient to climate variability and change, cons. human benefits	USD 0 million 0 people	USD 0 million 0 people	USD 35 million 1.5 million people	USD 100 million 5.3 million people	

¹¹ As per the relevant indicators established in the Funding Proposal and the Performance Measurement Framework, including relevant updates agreed with GCF, if applicable.

¹² As of 31 December of the relevant year.

¹³ Related to the approved indicators and targets in the Logic Framework.

2.4.2 PROGRESS UPDATE ON PROJECT/PROGRAMME LEVEL INDICATORS OF THE LOGIC FRAMEWORK¹⁴					
Project/Programme indicators (Mitigation/Adaptation)	Baseline	Current value¹⁵	Target (mid-term)	Target (final)	Remarks (including changes¹⁶, if any)
Indicator Adaptation 5.1: Institutional and regulatory systems that improve incentives for climate resilience and their effective implementation	0	0	1	2	
Indicator Adaptation 6.1: Use of climate information products/ services in decision-making in climate-sensitive sectors	0	0	1 public sector services (food security, or civil protection)	2 public sector services (food security, and civil protection)	
Indicator Adaptation 7.1: Use by vulnerable households, communities, businesses and public-sector services of Fund-supported tools, instruments, strategies and activities to respond to climate change and variability	0	0	200,000	400,000	Beneficiaries receiving early warning and production specific (agriculture) information. Final target is only related to agricultural beneficiaries and thus reduced from 2 million to 400,000. Mid-term target is also reduced from 500,000 to 200,000;
Indicator Adaptation 7.2: Number of males and females reached by [or total geographic coverage of] climate-related early warning systems and other risk reduction measures established/ strengthened	1 million males, 1 million females	1 million males, 1 million females	1.5 million males, 1.5 million females	2.6 million males, 2.7 million females	As field surveys were not yet conducted due to the restrictions related to COVID-19 an estimation of the current values and gender disaggregation is not yet possible.
Indicator Adaptation 8.1 Number of males and females made aware of climate threats and related appropriate responses	1 million males, 1 million females	1 million males, 1 million females	1.5 million males, 1.5 million females	2.6 million males, 2.7 million females	As field surveys were not yet conducted due to the restrictions related to COVID-19 an estimation of the current values and gender disaggregation is not yet possible.
Indicator 1 (Output level): Number of products and services delivered by MALI METEO and DNH (number)	17	17	21	35	Number of service/products that are developed by MALI METEO and DNH and described in an operational template.
Indicator 2.1 (Output level): Number of food security community early warning systems established	100	100	125	175	
Indicator 2.2 (Output level): Number of female head of community early warning systems	20	20	30	45	
Indicator 3 (Output level): Reduction of mean emergency response lead time for flood (percentage)	0	0	30	50	

¹⁴ As per the relevant indicators established in the Funding Proposal and the Performance Measurement Framework, including relevant updates agreed with GCF, if applicable.

¹⁵ As of 31 December of the relevant calendar year.

¹⁶ Related to the approved indicators and targets in the Logic Framework or relevant FAA.

2.5 REPORT ON CHANGES DURING IMPLEMENTATION (include actual and expected changes)

Describe changes to the project during the reporting period. In particular, the report should cover elements such as change of beneficial ownership structure, management changes of the Accredited Entity, policies and other elements relevant for the project, and any other material change that could influence the overall outcome of the project.

No specific management changes, either with the task team of the World Bank (Accredited Entity) or the Government of Mali (Executing Entity) have been reported in the project period.

The project was designed in such a way that both IDA and GCF grants finance the same activities in different proportions. As the IDA grant was effective before the GCF grant, a restructuring was necessary to adjust the co-financing percentages between IDA and GCF proceeds. Due to the mutiny events of August 2020 the negotiations on the grant agreement for the GCF financed part had to be postponed until December 10, 2020. The originally planned first disbursement from GCF could therefore not happen as planned in September 2020. Upon the request of the World Bank, the date for the first disbursement from GCF was postponed to May 2021. Negotiations with the government on the GCF financed part of the project took place on December 10, 2020, and the GCF grant agreement has been signed, however a legal opinion is still pending and thus preventing the effectiveness of the GCF proceeds. It is expected that this will be completed in February 2021.

2.6 IMPLEMENTATION CHALLENGES AND LESSONS LEARNED

Describe implementation challenges faced during the last reporting period, including measures adopted and lessons learned. If any issues have arisen in the last twelve (12) months of implementation that may result in a change to the scope and/or timing of the project, please provide a description of those items and how they have impacted the implementation period and final targets.

Challenge encountered	Type ¹⁷	Measures adopted	Impact on the project implementation ¹⁸	Lessons learned and Other Remarks
A mutiny in the armed services led to the departure of the government and currently there is an unclear governance structure through all hierarchies of the government. Main operations are "on hold" in Mali, which is impacting project disbursements and likelihood of project negotiation with the government, among other issues.	Political.	Project negotiations were relaunched in December 2020 and successfully completed. A strict security protocol was put in place to ensure the safety of all staff and limit any impacts on the project.	High	The situation is still evolving. It has however been agreed to proceed with a number of critical operations to deliver for the affected communities.
The ongoing COVID-19 pandemic limits the possibilities for travelling and meetings and require the implementation of a strict health protocol. Field surveys and engagements in form of face-to-face meetings are currently not possible	Social.	A strict health protocol (PPE, social distancing, hygiene measures) to allow proceeding with limited project implementation.	High	The situation is evolving and it is not clear when activities would return back to normal.

¹⁷ Implementation; Legal; Financial; Environmental/Social; Political; Procurement; Other; AML/CFT; Sanctions; Prohibited Practices.

¹⁸ Minor/Solved; Moderate; High.

SECTION 4: REPORT PROJECT SPECIFIC ON ENVIRONMENTAL AND SOCIAL SAFEGUARDS & GENDER

4.1 IMPLEMENTATION OF ENVIRONMENTAL AND SOCIAL SAFEGUARDS AND GENDER ELEMENTS

(max 1 page)

Social safeguards: The Project is not expected to have any negative social impacts or risks related to social safeguards. No land will be acquired that would lead to economic or physical displacement of people; construction of new hydro-met installations will be limited to public lands or buildings where they do not affect users' livelihoods or habitation; no project activities will take place on lands traditionally occupied by villagers of project zone. However, OP/BP 4.12 has been triggered as precautionary measure and the borrower has prepared an RPF to take in account any impact which can happen during project implementation.

Environmental safeguards: The Project is an Environmental Risk Category B investment under the Bank's Operational Policy on Environmental Assessment (OP/BP 4.01) and has a moderate environmental risk. The World Bank's (Accredited Entity) OP/BP 4.01 is the only environmental policy triggered that was triggered by the project. Impacts would primarily be associated with the installation and rehabilitation of observation equipment and any required establishment of access road or paths to these observation stations. The project mostly rehabilitates existing hydrological and meteorological stations with preference when relevant for keeping the previous/current location. Civil works associated with such investments may have potential minor risks and adverse impacts. The Executing Entity prepared and disclosed an Environmental and Social Management Framework (ESMF) to guide the selection and implementation of activities.

The Project Implementation Unit (PIU) of the Executing Entity (Government of Mali) hired a skilled and full time Social Development Specialist and Environmental Safeguard Specialist with the role and responsibility to ensure project's compliance on social and environmental safeguards. All activities are systematically subject to safeguards screening that will decide which safeguards instruments is relevant for the sub-project environmental and social risks and impacts mitigation measures. Nevertheless, the screening process for every physical activity included in the Environmental and Social Management Framework has not yet been fully applied. Although the Environmental Safeguard Specialist is recruited and specific safeguard instruments are being drafted, it is expected that works and other activities with safeguard implications will be stalled until the end of the COVID-19 pandemic as an effective oversight of safeguard policies would not be possible. The Project Implementation Manual was prepared, which provides details on the safeguards screening and mitigation process, the Gender Based Violence management and the grievance redress mechanism. The grievance redress mechanism is operational.

Status of compliance with applicable laws and regulations and the conditions and covenants under FAA

Applicable laws and regulations / conditions and covenants	Status of compliance
Condition 1	No applicable condition
Covenant (i) Contractually require the Executing Entity under the Subsidiary Agreement, to undertake and/ or put in place measures to ensure that the management of the environmental and social risks and impacts arising from the GCF Funded Activity complies with the recommendations, requirements, and procedures set forth in the Environmental and Social Management Framework ("ESMF") and the Resettlement Policy Framework ("RPF") which were provided by the Accredited Entity to the Fund before the Approval Decision, as may be updated, amended or supplemented from time to time in accordance with the Accredited Entity's policies and procedures (and in such cases, the updated, amended or supplemented ESMF and RPF shall be provided by the Accredited Entity to the Fund as soon as practicable);	The Executing Entity (Government of Mali throughout the Project Implementation Unit set up in the general directorate of civil project) had recruited two safeguard specialists, one for Environment aspect and the second to deal with all social aspects relating to the project implementation.
Covenant (j) Contractually require the Executing Entity under the Subsidiary Agreement to take (or cause to be taken) all actions to acquire as and when needed all land	There will not be new land acquisition in the scope of the project. The project will support the rehabilitation of existing hydro meteorological equipment of Mali Meteo and the

and rights in respect of land that are required to carry out the GCF Funded Activity. The Accredited Entity shall promptly furnish to the Fund, upon its request, evidence that such land and rights in respect of the land are available for the purposes of the GCF Funded Activity, if such evidence has been made available to the Accredited Entity by the Executing Entity. The Accredited Entity shall contractually require the Executing Entity under the Subsidiary Agreement to provide such evidence upon the Accredited Entity's request;	DNH. Some new hydrometeorological equipment to install will be done on the government's own sites, not on private land.
Covenant (k) Contractually require the Executing Entity under the Subsidiary Agreement that, if required under ESMF, the Executing Entity shall ensure that an Environmental and Social Management Plan ("ESMP") related to the relevant construction works or activities to be executed, is prepared prior to commencing those works or activities for the GCF Funded Activity. The Accredited Entity shall furnish to the Fund, upon request, a copy of such ESMP that has been received from the Executing Entity in accordance with the Accredited Entity's policies and procedures;	The project had prepared an updated Environmental and Social Management Plan ("ESMP") which was disclosed in the country media on March 14, 2019 before the project has gone to the World Bank Board on May 19, 2019. At the time of reporting, no works have been launched.
Law and regulation 1	In 2018, the Government had taken two decrees relating to environment impact assessment to be applied to projects. Decree N ° 2018-0991 / P-RM of December 31, 2018 Relating to the notice on the study and the environmental and social impact and Decree N ° 2018-0992 / P-RM of December 31, 2018 fixing the rules and modalities relating to environmental strategic assessment.

Implementation of management plans and programs

(i) Activities implemented during the reporting period, including monitoring	(ii) Outputs during the reporting period	(iii) Key environmental, social and gender issues, risks and impacts addressed during implementation	(iv) Any pending key environmental, social and gender issues needing Accredited Entity's actions and GCF attention
Recruitment of Social and Environmental Safeguards Specialists by Executing Entity;	Quarterly safeguard reports	The COVID-19 pandemic and security constraints impacted consultations and site visits.	Completion of actions to advance the implementation of the ESMP;
Preparation of the Operational and Procedural Manual	Operational and Procedural Manual;		
Setting up of Grievance Redress Mechanism	Complaints management manual available		
Update of the Gender Action Plan with actions for first year of implementation		The COVID-19 pandemic and security constraints impacted consultations and site visits.	Consultations and completion of Gender Action Plan

Implementation of the stakeholder engagement plan

(i) Activities implemented during the reporting period	(ii) Dates and venues of engagement activities	(iii) Information shared with stakeholders	(iv) Outputs, including issues reported during the implementation period
None	Not applicable	Not applicable	Not applicable

Implementation of the grievance redress mechanism

Description of complaints received during reporting period	Status of addressing issues and complaints
No complaints received during reporting period	Not applicable

4.2 GENDER ACTION PLAN

In Mali the gender gap is particularly higher than Sub-Saharan Africa’s average, which is characterized by high fertility rates (6.3 birth per women), high illiteracy rates (66% versus 51 % for men), and particularly in rural areas a low net primary enrolment of girls (14% versus 55% for boys). Physical, social and financial vulnerability vary according to entitlement, agency, and opportunities given to men and women, boys and girls. Gender specific vulnerability to climate shocks and disasters can be understood under three major axes: (i) production and reproduction responsibilities; (ii) gender based and other forms of violence; and (iii) lack of agency. Hydro-met services and effective early warning systems can play an important role to reduce the vulnerability of women to climate change and extreme weather and climate events leading to gender equity. The project is therefore committed to a gender sensitive development. The project will implement, monitor and constantly improve its gender actions in line with the national policies of Mali.

The project is expected to reduce gender inequalities through specific activities based on women’s needs. In particular, component 1 will ensure that all activities will support actions to increase the role and leadership of women in the operation and management of hydromet and disaster management services and component 3 will ensure that information and service delivered will be tailored to all, taking into account the additional challenges women and vulnerable populations face (such as illiteracy, language, access to communication devices etc.). Among others this will be implemented through different actions, including policy support, capacity building, surveys and an active role of women in planning and implementation of activities. For example, women associations are part of the local producer groups “SCAP-RU” which are established to facilitate decision making. Another example is the gender disaggregation of all data and surveys from SAP.

A gender assessment and the conceptual framework for the gender action plan were prepared during project preparation. Within the project implementation unit, the social safeguard expert focusses on the follow up and implementation of the gender action plan and provides guidance on the implementation of gender actions across all components. Following effectiveness of the IDA grant in September 2019, 90 women were trained the conceptual framework related to disaster risk management, weather and climate information and early warning systems, focusing on awareness raising on the implementation of gender actions, gender specific communication and considerations in the planning, design and implementation of early warning systems. Further actions spelling out gender specific indicators, baselines, targets and actions were planned for early 2020, but paused due the restrictions on meetings and travel related to the COVID-19 pandemic. An update on these indicators will be provided in 2021, conditional on the lifting of the restrictions related to COVID-19, which are currently in place.

NB: With regard the table under 4.2.1, gender actions at the time of the proposal submission were formulated in a different format. Section 4.3 provides an overview on the main activities planned with regard to the gender action plan in 2021.

4.2.1 PROGRESS ON IMPLEMENTING THE PROJECT-LEVEL GENDER ACTION PLAN SUBMITTED WITH THE FUNDING PROPOSAL.

Activities/actions	Indicators	Baseline	Targets, including sex-disaggregated targets	Budget	Report on annual progress

4.3 PLANNED ACTIVITIES ON ENVIRONMENTAL AND SOCIAL SAFEGUARDS

For the upcoming reporting period (calendar year 2021) the project will, despite the ongoing restrictions related to COVID-19 and the security situation in Mali, ensure the implementation of key environmental and social safeguard measures. With regard to the safeguard operational aspects, the safeguards specialists of the Executing Entity (Government of Mali) will carry out environmental and social screening for environmental and social studies related to the preparation and construction supervision for the construction of the National Center for Emergency Operations of Civil Protection (CNOU) as well as other construction related activities. No work will commence before the effective clearance by the safeguards specialists. Where possible, depending on the construction progress as well as potential restrictions related to COVID-19 and the security concerns, site visits will be conducted to ensure an effective monitoring of the safeguard standards. Quarterly reports will be prepared on the status of safeguard implementation, whereas consultations with stakeholders and potentially affected communities will be taken forward.

Training will be provided to construction contractors before works will commence on the application of safeguard standards, but particularly on gender-based violence prevention (GBV). Adequate training on GBV will be part of the program of any consultations, training and information dissemination related to safeguards. In line with the complaints management manual, the grievance redress mechanism will continue to be operational – with the progress on works and the implementation of activities, it is expected that potentially more attention will be provided.

Planned activities and monitoring schedule concerning environmental and social safeguards

Safeguard related activities	Timeframe	Comments, assumptions
Scoping meeting with the DNACPN technical services for the analysis of the screening sheets for the construction works of the National Center for Emergency Operations of Civil Protection (CNOU) and other planned constructions	Quarter 1 of 2021	
Preparation of TOR and recruitment of consulting firm to conduct environmental and social studies related to National Center for Emergency Operations of Civil Protection (CNOU) and other planned constructions	Quarter 1 of 2021	Recruitment of firms (expression of interest) ongoing
Conduct and complete environmental and social screening prior to the commencement of construction works of the National Center for Emergency Operations of Civil Protection (CNOU) and other planned constructions	Quarter 2 of 2021	
Training of contractors on safeguards and GBV prevention	Before commencement of construction works	
Site supervision relevant for any construction works	On demand	Discussions will be held with the technicians for the technical specificities of the installations to see the relevance of the visits.
Production of quarterly reports on environmental and social monitoring	Quarterly	
Dissemination of environmental and social safeguard documents (CGES, CPRP)	On demand	
Training and sensitization of project partners on environmental, social and GBV safeguard issues	Quarter 2 of 2021 and on demand	The partners are the local communities, customary chiefs, representatives of CAFO, decentralized technical services and representatives of youth

4.4 PLANNED ACTIVITIES ON GENDER ELEMENTS

The project will advance in the next reporting period (calendar year 2021) several actions related to the preparation and implementation of the gender action plan. Under the leadership of the Executing Entity (Government of Mali), the project will focus on consultations and updating of the gender action plan, networking of women leaders, awareness raising and capacity building on gender issues related to early warning and disaster risk reduction, training in data collection to ensure that gender informed data are adequately collected for the project. The implementation of activities is constrained by the ongoing COVID-19 pandemic and security situation, which limit the opportunity for consultations meetings and local travel. The table below provides an overview on the planned activities related to gender elements.

Planned gender activities for the next reporting period

Gender activities	Timeframe	Comments, assumptions
Consultations, preparations and completion of gender action plan	Quarter 2 of 2021	
Training of institutions and field agents of DGPC to integrate gender in all actions and technical expertise	Quarter 1 of 2021	
Training of the national SAP group on taking gender into account in all actions and technical expertise	Quarter 1 of 2021	
Training of communities in the collection of hydrometeorological data integrating indigenous knowledge (including specific knowledge of women)	Quarter 2 of 2021	Communities formed with the participation of 35% of women
Training of Women's and Youth Associations taking into account the equal opportunities offered to men and women to access jobs in DRM and in various types of technical and scientific skills.	Quarter 2 of 2021	Women's associations trained
Training of SAP agents for monitoring the agro-pastoral campaign via SA A R I models (Bamako)	Quarter 3 of 2021	SAP agents trained with the participation of at least 30% of women
Information and awareness campaign on risks and traditional warning methods	Quarter 3 of 2021	Involvement of women in the execution of activities
Raising awareness and setting up SCAP-RU	Quarter 3 of 2021	Awareness campaigns and training of SCAPs on GBV
Training of complaints management committees	Quarter 3 of 2021	Training of local complaints management committees with the participation of 35% of women

