





Terminal Evaluation Strengthening climate information and early warning systems for climate resilient development and adaptation to climate change in Guinea



Final Report

Country : Region : GEF Focal Area : GEF Agency : Executing Agency : TE timeframe: Guinea Africa Climate Change Adaptation (GEF-6) United Nations Development Programme (UNDP) Ministry of Infrastructure and Transport (MIT) April - August 2023

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Disclaimer : The opinions expressed in this publication do not necessarily reflect the United Nations Development Programme (UNDP) views. They are those of the external and independent consultant who conducted this exercise and assumes full responsibility for any shortcomings or discrepancies there may be.

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Acronyms

| CAD | Development Aid Committee |
|-------------|--|
| CDR | Combined Delivery Report |
| CIPS | Climate and Information Products and Services / Produits et Services d'Information Climatique |
| CNGCUES | Service National de Gestion des Catastrophes et des Urgences Environnementales (National Service |
| | for Disaster and Environmental Emergency Management) |
| CNTComité | National de Transition |
| СО | Country Office / Bureau Pays (UNDP) |
| COM | Communication |
| CPDD | Country Program Document |
| EA | Executing Agency / Agence d'Exécution |
| ENV | Environment |
| EPA | Autonomous Public Establishment |
| FAO | Food and Agriculture Organisation |
| GEF | Global Environment Facility |
| GIRE | Integrated Water Resources Management |
| IA | Implementing Agency / Agence de Mise en œuvre |
| ID | Identification |
| MAE | Ministry of Agriculture and Livestock |
| MAS&PF | Ministry of Social Action, Promotion of Women and Children |
| MDAT | Ministry of Decentralization and Territorial Administration |
| MEDD | French Ministry of the Environment and Sustainable Development |
| MEFP | Ministry of the Economy, Finance and Planning |
| MEHH | Ministry of Energy, Hydrology and Hydrocarbons |
| MESRSI | Ministry of Higher Education, Scientific Research and Innovation |
| MHEWS | Multi Climate Hazards Early Warning System |
| MIT | Ministry of Infrastructure and Transport |
| MoU | Memorandum of Understanding / Protocole d'Entente |
| WMO | World Meteorological Organization |
| PGIRE | Programme de Renforcement de la Gestion Intégrée des Ressources en Eau et de Développement des |
| | Usages Multiples dans le Bassin du Fleuve Sénégal (Program to strengthen integrated water resource |
| | management and develop multiple uses in the Senegal River Basin) |
| PIMS | Project Information Management System (UNDP) |
| UNDAFUnited | Nations Development Assistance Framework |
| UNDP | United Nations Development Programme |
| ProDoc | Project Document |
| ΡΤΑΡ | Annual Work Plan |
| SAP | Early Warning System |
| SESP | Social and Environmental Screening Procedure |
| SIS | Information System |
| SICAP | Early Warning Climate Information System |
| SMART | Specific, Measurable, Accessible, Realistic, Timely |
| SWOT | Strengths, Weaknesses, Opportunities and Threats / Forces, Faiblesses, Opportunités, Menaces |
| ТОС | Theory of Change |
| TRAC | Target Resource Assignment from the Core |
| UGP | Project Management Unit |

1. Executive Summary

1.1. Project Information table

| Project details | | Project Milesto | ones | | | | | | | | | | | | | | | | | |
|---|---|--------------------------------------|----------------------|--------------------------------------|--|--------------------------------------|--|--------------------------------------|--|--------------------------------------|--|--------------------------------------|--|--------------------------------------|--|--------------------------------------|--|--------------------------------------|--|---------|
| Project title: | Strengthening climate information and early warning systems for climate resilient development and adaptation to climate change in Guinea | PIF approval da | ate: | 02/03/2017 | | | | | | | | | | | | | | | | |
| GEF Project ID: | 8023 | CEO endorsem | ent date: | 06/03/2019 | | | | | | | | | | | | | | | | |
| ID PIMS PNUD: | 5552 | Prodoc signatu | re date : | 09/07/2019 | | | | | | | | | | | | | | | | |
| Operqtion Unit, UNDP Project ID in Atlas (Award and Output) | GIN10 00094688 00098781 | Date project manager is hired: | | Date project manager is hired: | | Date project manager is hired: | | 01/08/2019 | | | | | | | | | | | | |
| Countries: | Guinea | Inception work | shop: | 07/08/2019 | | | | | | | | | | | | | | | | |
| Region: | Africa | Mid-term evalu | uation: | 16/12/2022 | | | | | | | | | | | | | | | | |
| Focal Area: | Climate Change - Adaptation | Terminal evaluation completion date: | | Terminal evaluation completion date: | | Terminal evaluation completion date: | | Terminal evaluation completion date: | | Terminal evaluation completion date: | | Terminal evaluation completion date: | | Terminal evaluation completion date: | | Terminal evaluation completion date: | | Terminal evaluation completion date: | | 08/2023 |
| GEF Operational Porgramme or Strategic Priorities/Objectives: | Adapting to climate change | Expected date operational clo | of sure: | 09/07/2023 | | | | | | | | | | | | | | | | |
| Trust Funds: | LDCF | | | | | | | | | | | | | | | | | | | |
| lamentinging partner (GEF executing entity): | Ministry of Infrastructure and | Transport (MIT) | | | | | | | | | | | | | | | | | | |
| Financial Information | | | | | | | | | | | | | | | | | | | | |
| PDF/PPG | At approval (USE |)) | At I | PDF/PPG completion (USD) | | | | | | | | | | | | | | | | |
| GEF funds for project preparation | | 150.000 | | 149,883.84 | | | | | | | | | | | | | | | | |
| Co-financing for project preparation | 0 | | | 0 | | | | | | | | | | | | | | | | |
| Project | At CEO Endorsement (USD) | | | At TE (USD) | | | | | | | | | | | | | | | | |
| [1] UNDP contribution: | 350,000 | | | 331.837 | | | | | | | | | | | | | | | | |
| [2] Government : | 31,887,300 | | | 705.645 | | | | | | | | | | | | | | | | |
| [3] Multi/Bilateral : | 450,000 | | | Not communicated | | | | | | | | | | | | | | | | |
| [4] Private Sector : | 120,000 | | 120,000 | | | | | | | | | | | | | | | | | |
| [5] Agronomic research centers : | | 240,000 |),000 Not communicat | | | | | | | | | | | | | | | | | |
| [6] Total [1+2+3+4+5] : | | 33,047,300 | | | | | | | | | | | | | | | | | | |
| [7] GEF funding: 5,000,000 | | | 4.864.379,17 | | | | | | | | | | | | | | | | | |
| [8] Total project funding [6+7] | | 38.047.300 - | | | | | | | | | | | | | | | | | | |

Table 1. Project Information Table

1.2. Brief project description

The project "Strengthening climate information and early warning systems for climate resilient development and adaptation to climate change in Guinea" began in 2019 for an implementation period of four years. The project had two expected outcomes:

- **Effect 1:** The capacity of national hydrometeorological services to monitor extreme weather events and climate change is strengthened.
- **Outcome 2:** Climate products and services are accessible and used efficiently and effectively to produce warnings for producers and to draw up medium- and long-term climate-resilient development plans.

The first component aims to rehabilitate the hydrometeorological network (and bring it up to WMO standards) and build the capacity of the staff of institutions involved in climate risk analysis (DNM, DNH and CNGCUE).

The second component aims to operationalize an EWS and integrate climate risk into the strategic and planning documents of institutions in charge of sectors potentially affected by climate change.

In April 2023, an independent consultant carried out a final evaluation of the project. This final evaluation - both retrospective and summative - assesses the relevance and progress of the actions implemented and the project management process to draw out best practices and lessons learned to inform the development of similar programs/projects in the future.

The evaluation is based on the criteria of Relevance, Efficiency, Effectiveness, Sustainability and Gender.

This evaluation adopts a mixed-methods approach. The primary data collected is mainly qualitative, although quantitative secondary data was gathered from progress reports, and documents produced by the project and other climate change actors in Guinea. The data were triangulated with the results of bibliographic research and interviews for validation. The methodology adopted for this evaluation is based on the following six points:

- 1. Scoping meeting with UNDP
- 2. Documentary review
- 3. Start-up report
- 4. Collecting data
- 5. Drafting and submission of the interim report
- 6. Final report submitted.

The evaluation was conducted per the strict ethical standards of the United Nations Evaluation Group (UNEG), which aim to protect the rights and confidentiality of information providers, interviewees and stakeholders. Measures were taken to ensure data collection and communication complied with legal and other relevant codes.

1.3. Evaluation ratings

The following table gives the overall rating of the project after the final evaluation:

| 1. | Monitoring and evaluation | Rating ¹ |
|----|---|---------------------|
| | Monitoring and evaluation design at entry | S |
| | Implementation of the monitoring and evaluation plan | MS |
| | Overall quality of monitoring and evaluation | MS |
| 2. | Implementing Agency (IA) Implementation & Executing Agency (EA) | Patina |
| | Execution | Ruting |
| | Quality of UNDP implementation/oversight | S |
| | Quality of execution: Implementing Partner | MS |

¹ The scale:100% or more: Very Satisfactory (HS), no shortcomings;95 to 99%: Satisfactory (S), minor shortcomings;80 to 94%: Moderately Satisfactory (MS); 50 to 79%: Moderately Unsatisfactory (MI), major shortcomings;40 to 49%: Unsatisfactory (I), major problems; Less than 40%: Very Unsatisfactory (TI), serious problems.

| Overall quality of implementation and execution | MS |
|--|----------------------------|
| 3. Assessment of Outcomes | Rating |
| Relevance | S |
| Effectiveness | MS |
| Efficiency | MS |
| Overall rating of the project | MS |
| | |
| 4. Sustainability | Rating |
| 4. Sustainability Financial resources | Rating U |
| 4. Sustainability Financial resources Socio-politic | Rating U P |
| 4. Sustainability Financial resources Socio-politic Institutional framework and governance | Rating U P P |
| 4. Sustainability Financial resources Socio-politic Institutional framework and governance Environmental | Rating U P P P |

Table 2 : Evaluation Ratings Table

1.4. Findings, conclusions and lessons learned

The West African country of Guinea faces various climate risks, such as droughts, floods and reduced rainfall, which have led to lower agricultural production and water-borne diseases. The community's vulnerability to climate risks in Guinea is attributed to its inability to cope with the adverse effects of these hazards, particularly the lack of reliable real-time warnings. Five sectors have been identified as priorities to strengthen the community's resilience to climate risks: crops and livestock, water, coastal zones and forest areas. These sectors will be targeted in the areas most exposed to climate risks in Guinea's bioclimatic zones.

Under the project, component 1 aims to strengthen the hydrometeorological network's capacity to monitor and adapt to the effects of climate change, incorporating extreme weather conditions. The project's second component seeks to develop the capacity of the hydrometeorological network to produce and use climate information and services for men and women, meeting the needs of end-users. The project aims to support the government in providing populations, including farmers and decision-makers, with reliable, quality climate information and services to anticipate the effects of climate change and take appropriate measures to cope with these climate risks. The project also aims to encourage effective access to and use of climate information and early warning products for different users, both men and women.

Thus, The SAP project aims to modernize the climate change early warning system by focusing on two poorly or unconnected types: providing processed climate data and information and using this data to respond to a potential ongoing risk. The project is a key element of Guinea's second Five-Year Economic and Social Development Plan (PNDES), which focuses on sustainable natural capital management and the primary sector's resilience. Through its new cycle of cooperation with the Guinean government, UNDP aims to strengthen climate information and early warning systems for Guinea's climate-resilient development and climate change adaptation.

The SAP project promises a technological leap forward through the automation of data collection, nearreal-time transmission, digital storage and analysis, and synchronization between the institutions to the CNGCUE for key decision-making in the event of alerts/warnings. Unlike other projects that have failed to sustain results under national funding, the overall strategy of the SAP project is to strengthen the three institutions to force the government to direct substantial financial resources to them. Unfortunately, this strategy had not been achieved during this evaluation.

The project contributes to SDGs 1, 2, 9, 12, 13 and 15 and is aligned with national priorities PNDES 2016-2020, United Nations Development Assistance Frameworks (UNDAF 2018-2022), UNDP Strategic Plans (SP 2018-2021, SP 2022-2015), UNDP Guinea Country Programme Documents (CPD 2018-2022) and UNDP Solution Signatures (Resilience and Environment).

Under Component 1: 89 local development plans (PDL) - 15 new plans compared with the baseline - were revised to include adaptation to climate change. The SAP project strengthened hydrological monitoring and data collection to provide reliable hydrological information. This was achieved by purchasing and installing a hydrological station at the port of Conakry. The station can provide a set of nine parameters that can be used by boats and other interested parties. The staff working there have been briefly trained in using the data collected. In addition, the data collected by the station is sent directly to the supplier's server, located outside Guinea. In addition, the project has installed a set of 22 meteorological stations spread across the country, providing a range of climatic parameters that various players can use. This represents more than half of the stations budgeted for in the Prodoc. Price increases between the planning phase and the time of purchase explain the difference. The project also provided an airport-level aerological station, which now generates several parameters used by aircraft for their flight plans. At the time of this evaluation, very little training had been carried out to enable field staff to handle basic maintenance tasks.

Regarding Component 2: The project set up a summary training plan and trained a number of people from DNM, DH and CNGUE. More men than women were trained, due to an initial imbalance in the number of men and women in these departments. The stations set up by the project can produce reliable data that a wide range of players can use. For example, the meteorological stations currently provide the climatic parameters used for weather reports, while the aerological station provides vital data for establishing flight plans for aircraft flying over Guinea. Finally, the hydrological station provides parameters on the level and chemical characteristics of the water used for navigation. The project was much less successful in sustainably strengthening the capacity of the CNGUE to deal with emergencies. Similarly, the project could not set up an integrated early warning system based on the data produced and processed.

The implementation of this project has yielded several important lessons. Firstly, the significant impact of COVID-19 on project capacity was a major challenge. Equipment costs far exceeded initial forecasts, largely due to the global logistical disruption and inflation in the price of goods on the international market caused by the pandemic. As a result, the number of climate stations purchased was reduced and their installation delayed. In addition, restrictions on movement prevented training courses requiring international experts, forcing the project to rely mainly on local experts. This underlines the importance of flexible planning and constant revision of planning documents in response to unforeseen events.

Secondly, the new government's plans to use the space for a public garden compromised the initiative to rehabilitate the DNM buildings to serve as the project's headquarters. This demonstrates the importance of a regularly updated risk analysis, capable of anticipating and adapting to unforeseen changes.

Finally, the absence of an exit strategy established sufficiently early in the project cycle can threaten the sustainability of its achievements. For example, the climate station system rehabilitated by the project requires recurring maintenance, training and connection costs that the government was not yet able to cover at the end of the project. This underlines the importance of developing and implementing an exit strategy from the outset of a project to ensure the sustainability of its benefits once the initial funding has ended.

1.5. Recommendations

At the end of this evaluation, the following Recommendations were made to the stakeholders to increase the benefits of the project or improve the performance of similar projects in the future:

| Ν | Recommendation | Recipients | Importance | Priority | Delay |
|---|---|---------------|------------|----------|--------|
| 1 | Immediately draw up a consensual plan for the exit and handover of facilities to management. | UGP/PNUD | High | High | Urgent |
| 2 | Provide assistance to the three directorates by providing project materials to enable them to sustain relevant activities even after the project's completion, in addition to any funding they may receive from WMO. | UGP/PNUD | High | High | Urgent |
| 3 | Reconstitute the project's documentation base (in particular, the list and characteristics of the stations and of the people trained) and provide it to management. | DNM/DNH/CNGUE | High | High | Urgent |
| 4 | Finalize the training plan for field staff, at least for the maintenance of equipment that has been commissioned | DNM/DNH/CNGUE | High | High | Urgent |
| 5 | Ensure that the data collected by all stations (particularly the hydrological station, whose data is stored outside Guinea) are kept in databases to which the relevant departments have access. | UGP/PNUD | High | High | Urgent |

| 6 | Finalize the interconnection between different systems for an integrated early warning system | DNM | High | High | Urgent |
|---|---|------|------|------|--------|
| 7 | For future projects, increase a package of activities to support the institutional and financial sustainability of the project | UNDP | High | High | Medium |
| 8 | For future projects, a simple system for monitoring and accounting for co-financing should be put in place right from the start. | UNDP | High | High | Medium |
| 9 | For future projects, include a component on the creation of a 'favorable institutional environment" that addresses institutional underfunding in similar environments | UNDP | High | High | Medium |

Table 3 : Recommendations Table

2. Introduction

2.1. Purpose of the Evaluation

The evaluation assignment described in the Terms of Reference (ToR) clarifies the purpose of this assignment. It is a "final" evaluation on behalf of UNDP-Guinea as the sponsor, and concerns the Early Warning System (EWS) project.

2.2. Scope of the Evaluation

This final evaluation - which is retrospective and summative² - enables us to assess the relevance and progress of the actions implemented and the project management process to draw out best practices and lessons learned to feed into the development of similar programs/projects in the future.

The evaluation is based on the criteria of Relevance, Efficiency, Effectiveness, Sustainability and Gender.

2.3. Methodology

This evaluation adopts a mixed-methods approach. The primary data collected is mainly qualitative, although quantitative secondary data was gathered from progress reports, and documents produced by the project and other climate change actors in Guinea. The data were triangulated with the results of bibliographic research and interviews for validation. The methodology adopted for this evaluation is based on the following six points:

- 1. Scoping meeting with UNDP
- 2. Documentary review
- 3. Start-up report
- 4. Collecting data
- 5. Drafting and submission of the interim report
- 6. Final report submitted.

Scoping meeting with UNDP team

The scoping meeting was held on the first day of the consultant's assignment. It took place with the project coordinator. This meeting served as a framework for discussing the project, its context, results and challenges. The meeting also provided an opportunity to identify exactly which project stakeholders would meet as part of the final evaluation. Prior to this, the project documents had been forwarded by the UNDP Evaluation Officer. The scoping meeting also ensured a common understanding of the terms of reference, and enabled the consultants to outline their understanding of the assignment and discuss the timetable.

² - i.e. evaluation, which analyzes the effects of the program in order to draw lessons from them (according to the DAC)

Documentary review

The document review covered all documents received from the project. It covered planning documents, annual reports, protocols and other documents dealing with climate change in Guinea. Project performance reports such as PIRs and annual reports were scrupulously consulted to analyze the project's performance over time and better understand its challenges.

Preparing the start-up report

Following the document review, an inception report was drawn up and shared with the project and UNDP. This report summarized all the previous stages and set out the next steps in the process. Once approved by the project and UNDP, the inception report guided the framework to be followed for the evaluation.

2.4. Data collection and analysis

This was followed by data collection in the field. This took the form of interviews with representatives of stakeholders and direct beneficiaries. The consultant met with the project coordinator, UNDP Guinea staff and representatives of the three departments involved in the project, namely the Direction Nationale de la Météorologie (DNM), the Direction de l'Hydraulique (DH) and the Service National de Gestion des Catastrophes et des Urgences Environnementales (SNGCUE). The consultant met in the field with the regional and prefectoral services in Meteorology and Hydrology.

Data was collected in the field and by telephone after the field visits for verification purposes (confirmation or denial of certain information or perceptions). In addition, the Regional Technical Advisor responsible for monitoring the project at regional level was consulted by telephone following the field mission.

The consultant then triangulated the data:

- Triangulation of sources: by comparing information from different sources for example, perspectives from different stakeholder groups, documentation and observation.
- Triangulation of methods: by comparing the information gathered by different methods (interviews, document review, focus groups, direct observation).
- Geographical triangulation: by comparing information gathered in intervention areas to ensure differentiation between results that can be generalized and results that are limited to a particular context.

The results of the field phase were triangulated and validated through consultations with key stakeholders.

The consultant then wrote a first draft of the evaluation report, which was shared with UNDP and stakeholders. Comments from this sharing will be integrated to produce the final report.

2.5.Ethics

The evaluation approach adhered to strict ethical standards in full compliance with the ethical principles of the United Nations Evaluation Group (UNEG), including the protection of the rights and confidentiality of information providers, interviewees and stakeholders through measures to ensure compliance with legal and other relevant codes governing data collection and reporting.

The consultant has ensured the security of the information collected before and after the evaluation and of the protocols, aiming to guarantee the anonymity and confidentiality of the sources of information. Knowledge and data collected as part of the evaluation process will also be used solely for the evaluation and not for any other purpose without the express authorization of UNDP and its partners.

2.6. Limitations to the evaluation

The evaluation's limitations are both natural and operational. The natural limits relate to the methodology adopted, which means that the context of the evaluation and the nature of the tools adopted imply a possible divergence in the points of view of those interviewed. These divergences may sometimes stem from the diversity of the stakeholders' experiences, or from the bias that one or other party may have. To remedy this problem, the consultant made several triangulations of the interview results in order to draw conclusions representative of the situation.

The consultant was only able to visit two intervention zones outside Conakry due to time constraints during the field phase. Achievements in these areas were identified directly, while those in other areas were identified through interviews and activity reports.

The lack of a consolidated database, especially for training beneficiaries, is an obstacle that has made it impossible to verify all the figures on training numbers, trainees, and their appreciation and use of training.

2.7. Structure of the TE report

The content of the TE report is summarized below:

Basic Report Information: The report begins with general project details like its title, associated numbers, evaluation dates, geographical area, operational focus, executing partners, and evaluation team members. A note of thanks is included.

Acronyms and Abbreviations: A glossary of abbreviated terms used in the report.

Summary: An overview that includes a project information table, project description, progress summary, performance evaluation, conclusions, and recommendations.

Introduction: Details the purpose, objectives, scope, methodology, and structure of the final evaluation.

Project Description and Background: Discusses the developmental context, problems addressed, project strategy, implementation agreements, timeline, milestones, and key stakeholders.

Results: A comprehensive section divided into four sub-parts covering the project strategy, progress towards results, project implementation, and sustainability aspects.

Conclusions and Recommendations: Balanced, evidence-based statements summarizing the project's strengths, weaknesses, and outcomes, along with corrective measures and future directions.

Appendices: Additional materials like the terms of reference, evaluation matrix, questionnaire or interview guide, evaluation scales, mission itinerary, list of interviewees and documents reviewed, co-financing table, conduct and approval forms, and references to documents containing comments on the draft report.

3. Project description

3.1. Project start, duration and milestones

The project began in October 2019 and with a 4-year term. The following table shows the project's milestones:

| Type of activity | Expected time | Real |
|---------------------|---|---------------------------------|
| Project signature | July 2019 | July 2019 |
| Inception workshop | Before October 2019 | August 2019 |
| Periodic reporting | Periodicity not specified | On a quarterly and annual basis |
| PIR ₃ | Annual | June 2021, 2022 |
| Mid-term evaluation | Before July 2022 (Between 2nd and 3rd PIR) | July 2022 - December 2022 |
| Terminal Evaluation | April 2023 | August 2023 |
| Operational Closure | July 2023 | - |

Table 4 : project milestones

3.2. Development context

The Republic of Guinea, a country located in West Africa, is often called the "water tower of Africa" due to its numerous rivers. Yet, despite this abundance of water, the country faces serious socio-economic and environmental challenges exacerbated by climate change's effects.

Historically, Guinea has benefited from flourishing agriculture, fishing and livestock breeding, thanks to its fertile soils, abundant rainfall and vast pastures. However, since the 1970s, extreme climatic phenomena such as recurrent droughts and frequent floods have seriously affected these sectors, representing the source of subsistence for most of the rural population. These changes have led to the drying up of many watercourses, soil exhaustion, destruction of vegetation cover and a drop in agricultural, pastoral and fisheries production.

³ Project Implementation Review

Over the past ten years, Guinea has experienced significant effects of climate change that have had profound impacts on various sectors:

Agriculture: Guinea is largely agricultural, and climate change has caused variations in the rainy season, making it difficult to predict the weather for planting and harvesting. Frequent droughts and floods have also led to massive crop losses. Soil depletion due to unsustainable farming practices and climate change has also reduced agricultural productivity.

Livestock farming: Recurrent droughts and insufficient drinking water have affected animal health, leading to a drop in productivity and, consequently, economic losses for livestock farmers.

Fishing: Climate change has altered marine and river ecosystems, affecting fish populations. Temperature rises and pollution have disrupted fish reproduction cycles and growth, reducing catches for fishermen.

Water resources: Despite its reputation as "Africa's water tower", Guinea has experienced water shortages due to reduced rainfall and drying rivers.

Health: Climate change has contributed to an increase in water-related and vector-borne diseases such as malaria and dengue fever. Heat waves and droughts have also increased the risk of malnutrition.

Infrastructure: Frequent flooding has damaged infrastructure such as roads, bridges and buildings, resulting in high repair costs and hampering development.

Environment : Climate change has led to the destruction of vegetation cover, soil erosion and loss of biodiversity. The combined effects of these impacts have threatened ecosystems and the livelihoods that depend on them.

Faced with these challenges, Guinea has begun to take steps to mitigate the effects of climate change and adapt to its inevitable impacts. This includes developing national climate change strategies, strengthening early warning systems and implementing adaptation and resilience projects. In this challenging context, the project "Strengthening the climate information and early warning system for resilient development and climate change adaptation in Guinea (SAP)" was conceived.

3.3. Problems addressed by the project

Guinea, located in West Africa, has a diverse climate, reflected in four bioclimatic zones. The country has prioritized five sectors for resilience-building due to their vulnerability to climate risks, namely crops and livestock, water, coastal zones and forest areas. These sectors will be targeted in the areas most exposed to climate risks in each of Guinea's bioclimatic zones. Priorities were established through consultations with institutional players, communities and civil society.

According to the Programme d'Action National d'Adaptation (PANA), Guinea is likely to experience varying degrees of warming, with temperature rises of 0.3-2.2°C to 0.5-4.8°C in the north-west and north-east of the country, depending on the sensitivity scenario. In the south-west and south-east, the temperature rise will be between 0.2 and 1.8°C for the 1.5°C sensitivity scenario, and between 0.3 and 3.9°C for the 4.5°C sensitivity scenario. These projections are in line with the Intergovernmental Panel on Climate Change (IPCC) projections for global warming in Africa. Guinea is also experiencing recurrent droughts, reduced rainfall and frequent flooding, among other climatic disruptions that have led to lower agricultural production and water-borne diseases. The community's vulnerability to climate risks in Guinea is attributed to its inability to cope with the adverse effects of these hazards.

The country's hydrometeorological network is outdated and lacks the appropriate forecasting, simulation and impact modeling technology, expertise, personnel and operations to provide reliable climate information and early warning products needed for resilience and adaptation. This lack of reliable realtime warnings hampers the community's ability to promptly organize and plan appropriate and effective responses.

During a participatory planning meeting, obstacles to implementing inclusive resilience and promoting the integration of adaptation into policy and planning processes in Guinea were identified. These obstacles include the lack of reliable real-time warnings, insufficient resources and inadequate technical capacity. In addition, there is a need to coordinate different stakeholders, such as civil society, communities and government, to remove obstacles to implementing resilience-building measures in Guinea.

In this context, the GEF project has addressed the following problems:

- Lack of systematic monitoring of watersheds (except for regional rivers), dilapidated hydrometeorological equipment with essentially manual transmission of hydrometeorological data; no national meteorological coverage; many sites without agents; insufficient modelling and forecasting expertise on a national basis; lack of generalized real-time data transmission.

RESPONSE: re-equipping the hydrometeorological network to effectively monitor extreme weather events; in particular, modernization and automation to WMO standards and/or upgrading of current equipment.

- Limited expertise in flood modelling, meteorology at regional level and skills in developing climate products adapted to different sectors

RESPONSE: strengthen skills in forecasting, modelling and developing products that meet the expectations of sectors affected by climate variability.

- Lack of systematic feedback of hydrometeorological data and qualitative regional information to disaster management bodies

RESPONSE: implementing a modern EWS with automatic transmission of information (hydrological, meteorological) to disaster management authorities and mechanisms for effectively disseminating climate information at regional/local level.

- Low awareness among decision-makers of the importance of climate information, insufficient development and coordination of policy, institutional and regulatory frameworks

RESPONSE: update national policies and strategies and local planning to integrate climate risk into decision-making

- Lack of autonomy and financial viability of national hydrological, meteorological and EWS services **RESPONSE**: proposals for better funding of institutions to better meet user needs

To this end, Guinea plans to set up a reliable integrated information system including at least a bank of climatological and socio-economic data to reduce vulnerability and better guide adaptation actions accordingly.

3.4. Immediate and development objectives

The "Strengthening the climate information and early warning system for resilient development and adaptation to climate change in Guinea (SAP)" project aims to strengthen Guinea's resilience to the effects of climate change.

The project's main aim is to integrate climate change adaptation into the medium and long-term planning of priority climate-sensitive sectors. These include agriculture, livestock, water, coastal zones and forestry, which are vital to the majority of the population living in rural areas. The project also aims to establish a reliable integrated information system, including a climate and socio-economic database, to guide adaptation actions.

The SAP project strategy focuses on three main areas:

Strengthening climate information systems: The project aims to set up reliable systems, including weather stations, climate monitoring and modeling systems, and climate and socio-economic databases.

Integrating climate change adaptation into sectoral planning: The project works with relevant ministries and departments to integrate climate considerations into the planning and budgeting of their activities. This includes assessing climate risks, identifying adaptation options and implementing adaptation measures.

Capacity building: The project focuses on building the capacity of local actors, including government officials, local communities, NGOs and private companies, to understand and respond to climate change. This includes training in climate management tools and techniques, exchange of best practices and support for the implementation of adaptation projects.

3.5. Expected results

The specific results of the project were :

Outcome 1: The capacity of national hydro-meteorological services to monitor extreme weather events and climate change is strengthened.

Output 1.1: The hydrological network is strengthened for hydrological monitoring and data collection to provide reliable hydrological information.

Output 1.2: The meteorological network is strengthened for climate monitoring, providing reliable climate information and products, and early warnings with options for adaptation to the adverse effects of climate risks.

Output 1.3: Meteorological Radar proxies to be used to monitor severe weather phenomena using lightning sensors are strengthened.

Output 1.4: A national climate database is up and running

Output 1.5: Satellite data/images are coupled with climate network data to provide the climate information and products needed for simulation.

Output 1.6: Female and male DNM, DNH and DNAGR staff are empowered to use and maintain equipment.

Outcome 2: Climate products and services are accessible and used efficiently and effectively to produce warnings for producers and to draw up medium- and long-term climate-resilient development plans.

Output 2.1: Capacities to develop and use climate products and services are created among men and women.

Output 2.2: Climate products and services that meet end-users' needs (men and women) are developed.

Output 2.3: Capacities to integrate climate products and services into development planning processes are created for the benefit of female and male staff involved in planning and the most vulnerable sectors.

Output 2.4: Institutional capacities for coordinating early warning systems and sharing climate information and products are strengthened.

Output 2.5: A strategy for the financial sustainability of the EWS and for the production and dissemination of climate information is developed.

Output 2.6: Access to and use of early warning climate information and products for the benefit of diverse users of both sexes is promoted.

3.6. Main stakeholders

The PRODOC includes a detailed assessment of planned and potential stakeholders in the project (government institutions, local and international NGOs, beneficiaries), namely:

Note that no external institutions (e.g. international institutions) potentially active in the project's subsectors are mentioned.

- Government :
 - Ministry of Infrastructure and Transport (MIT)
 - Ministry of Energy, Hydrology and Hydrocarbons (MEHH)
 - Ministry of the Environment, Water and Forests (MEEF)
 - Ministry of Economy, Finance and Planning (MEFP), formerly Ministry of Economy and Finance, and Ministry of Planning
 - Ministry of Territorial Administration and Decentralization (MATD)
 - National Meteorological Directorate (DNM)
 - Direction Nationale de l'Hydrologie
 - Direction Nationale de l'Environnement
 - Ministry of Decentralization and Territorial Administration (MDAT)
 - Prefectures and town halls
- Others :
 - NGOs and civil society
 - Focal points of the Environmental Conventions
 - Grassroots community organizations and agricultural associations

In the course of implementation, and in line with political changes, the names and responsibilities of most of the ministries will change considerably, with the consequent substitution of key personnel, which will pose many problems in terms of governance (see chapter **Error! Reference source not found.** on

Stakeholders) and will complicate the implementation of communication/coordination mechanisms between institutions.

3.7. Theory of change

The project's theory of change is based on the premise that a better-equipped administration with adequate technical infrastructure and solid technicians training will help set up an early warning system for future emergencies and disasters.

As part of Component 1 of the "Technology transfer for monitoring climate and environmental infrastructures" project, the first desired result is as follows: "Enhanced capacity of the hydrometeorological network to monitor and adapt to the effects of climate change incorporating extreme weather conditions".

Building on a solid foundation of the above-mentioned projects and the equipment that these ongoing projects have put in place, LDCF resources will be able to extend the project to the national level, install the appropriate infrastructure, and improve access to climate information for an efficient and reliable EWS. It aims to support the DNM in providing populations, including farmers and decision-makers, with reliable, quality climate information and services to anticipate the effects of climate change and take appropriate measures to cope with these climate risks.

With the project's second component, LDCF funds will be used to develop the capacity of the hydrometeorological network to produce and use climate information and services for men and women, meeting the needs of end-users. In addition, a strategy will be implemented to encourage effective access to and use of climate information and early warning products for different users, both men and women. Through this project's second component, LDCF funds will be used to help the Guinean government integrate climate change into ongoing sectoral development at national, regional and local levels. Indeed, it has become clear that, given the recurrence of climate risks and their adverse effects on efforts made to date, any development planning, to be effective today, must first and foremost integrate climate risks. By focusing on the second category of barriers to adaptation (Figure 3), Component 2 of the project will create the optimum conditions for effective and judicious use of the climate products resulting from Component 1.

4. Findings

4.1. Project Design/Formulation

4.1.1. Analysis of results framework: project logic, strategy and indicators

Project logic and strategy

As part of the project's programming in 2016, Guinea adopted the second Five-Year Economic and Social Development Plan (PNDES 2016-2020), considered by the government as an operational planning document for Vision Guinea 2040.

The SAP project, by providing end-users with priority climate products and services and building their capacity to use these climate services, contributes to the resilience of the primary sector and therefore de facto to the achievement of Outcome 2 of Pillar 4 of the PNDES - Sustainable management of natural capital The UNDP, through its new cooperation cycle with the Guinean government for the period 2018-

2022 which coincides with the SAP project, focuses on reducing vulnerability, building resilience and promoting inclusive adaptation. This will involve strengthening climate information and early warning systems for climate-resilient development and climate change adaptation in Guinea.

The project's strategy aims to modernize the Guinean EWS, focusing on two types of institutions that until now have had little or no connection: (i) the provision of processed climate data and information (DNM and DNH) and (ii) the use of this data and information to respond to a potential ongoing risk/emergency (CNGCUE).

The project promotes a technological leap forward with automated data collection, (near) real-time transmission, digital storage and analysis, and synchronization between institutions to the CNGCUE for key decision-making in the event of an alert/warning.

An alternative might have been a gradual improvement in services over the longer term, based on the actual capacities of the institutions (which have certainly been strengthened), since the key problem in this type of project is the ability to maintain the results within the framework of national funding once the project has ended. This has not had the desired results, as there has been no ownership of the project results by the institutions concerned, nor additional financial resources from the state to ensure sustainability.

The approach proposed in the SAP project is based on a comprehensive strategy to strengthen the three institutions. Indirectly, therefore, the project seeks to induce the government to direct substantial financial resources to the institutions, without which there is a risk of the project's achievements collapsing spectacularly.

In terms of design, the features that set us apart from many other GEF projects are, on the one hand, the simplicity of the design: two well-defined components (component 1 on capacity building - equipment and HR - and component 2 on services - implementation of SAP, integration of ACC into policies -), and on the other hand, the maximum simplification of monitoring with a limited number of indicators (the multiplication of indicators is problematic as it is time-consuming for the PMU and distracts it from the operational aspects of implementation).

The Theory of Change describes the project strategy (see Appendix 5). Setting up equipment maintenance plans, scheduling site visits, supervising local HR, etc.).

Failure to address the problem of institutional underfunding (and indirectly the insufficient financial commitment of the State), a well-known problem in Guinea, which would have merited an entire component to this effect through the formulation of a 'favorable institutional environment' on institutional reorganization, formalization of inter-institutional links within the framework of a SAP and any necessary institutional changes, definition of specific financial commitments in return for project resources, prioritization and rehabilitation of key infrastructures...).

The project strongly emphasizes gender equality and relies on the representation and participation of women, both at the institutional level and in the targeting of final beneficiaries. The approach proposed by the project (based on quotas at indicator level for the inclusion of women in project activities) is highly inappropriate as the gender balance at institutional level is heavily skewed in favor of men (89%) and cannot be improved by project activities but only by internal recruitment policies at civil service level.

Finally, the project has not adequately focused on the sustainability of its outcomes or the management of its knowledge, despite these being significant risk areas: the project provides for (i) substantial but unspecified co-financing, and (ii) only one activity (component 2 - outcome 2.4) has been formulated to devise a strategy for the financial sustainability of the institutions.

Results and indicators

The SAP project is in line with national and international strategic reference frameworks. Indeed, through its objectives, it is in phase with the National Strategy to combat the effects of climate change (SNCC). Indeed, the country is highly vulnerable to the effects of climate change. The country submitted an updated NDC (Nationally Determined Contribution) in July 2021, which underlines the need for significant action to reduce greenhouse gas emissions and adapt to the impacts of climate change.

Guinea has a tropical climate (group A) with wet and dry seasons, depending on the region. However, it is experiencing significant changes in weather patterns, notably a decrease in rainfall, which has disrupted incomes, agriculture and river regimes. The SAP project takes into account the fact that one of the most significant climate risks for Guinea is drought, the frequency and intensity of which is expected to increase according to several projections that have been made. In response to these risks, the project is helping to develop adaptation and mitigation strategies to cope with the impacts of climate change. At the time the project was drawn up, for example, it was recognized that the country was still facing major challenges in collecting and disseminating meteorological information. The country's observation network remained limited, particularly in remote areas, which could lead to gaps in data collection. In addition, DNM faced funding problems that hampered its ability to develop its services and infrastructure.

In terms of emergency management, Guinea has been confronted with various natural disasters, including floods and droughts, due to its geographical location and the effects of climate change. The Guinean government attempted to implement several disaster risk management strategies to mitigate the impact of disasters on the country's population and infrastructure. According to government representatives, one of Guinea's disaster management and risk reduction strategies included community preparedness and risk reduction. The government had stressed the importance of identifying local hazards, risks, vulnerabilities and capacities as part of developing disaster risk management plans and establishing early warning systems for floods and other natural disasters. All these strategies have been identified in the SAP project document for implementation.

A SMART analysis grid was applied to the project's indicators along with their associated targets. This analysis grid allows for the assessment of the quality of the indicators through the use of the SMART criteria (Specific, Measurable, Achievable, Realistic, and Time-bound). The majority of the performance indicators used by the project are SMART. While most indicators were smart, some of them could have better targets. This overestimation arises from the fact that the prices of aerological equipment were significantly underestimated from the outset, with the crisis caused by COVID adding to it later on. Regarding the last indicator on mining plans, it was clarified from the beginning that the next revision of this plan would not take place during the project but rather in 2025..

Yellow: Criterion partially aligned with SMART quality Red: Criterion not aligned with SMART quality

| Description | Indicator description | Target level | Specific4 | Measurable | Reachable | Realistic | Temporal |
|--|---|--|-----------|------------|-----------|-----------|----------|
| Objective : Strengthen climate monitoring capacities, early warning & information systems to respond to climate shocks & plan adaptation to climate change in Guinea Component 1: Technology transfer for monitoring climate & environmental infrastructure Effect 1: The capacity of national hydrometeorological services to monitor extreme weather events & climate change is strengthened | (1) Number of communes that have integrated resilience & adaptation practices into their local development plans (2) Number of direct beneficiaries using climate information & products that integrate priority adaptation actions a1: Number of direct beneficiaries a2: % of women (3) Number of climate stations regularly supplying reliable climate information & products b1: automatic hydrological stations c: weather stations c1: Weather stations c2: Number of automatic synoptic stations c3: Number of lightning detection stations c4: automatic agrometeorological stations c5: Number of automatic marine weather stations | 80 a1:100,000 a2:51,000 (51%) c1:62 c2:17 c3:24 c4:5 c5:04 c6:1 | | | | | |
| | (4) Number of climate stations monitored & maintained by qualified personnel d1: Number of weather stations d2: Number of hydrological stations (5) Number of reinforced staff capable of operating & maintaining weather stations, equipment for processing, analyzing & disseminating reliable climate information & warning products. e1: Number of managers trained e2: % of women | d1:63 d2:62 e1:294 e2:51% | | | | | |
| Component 2: Integration of climate information & early warning & adaptation products into development plans Outcome 2 - Climate products & services are accessible & used efficiently & effectively for early warning products for | (6) Number of policy-makers trained on climate change risks & able to identify & integrate priority adaptation options into development policies & plans f1: Number of decision-makers trained f2: % of women | f1 : 294 f2 : 51% | | | | | |

| producers & in the drafting of medium & long-term climate-resilient development plans Climate services & products are accessible & used efficiently & effectively for early warning products for producers, & medium & long-term climate-resilient development plans are drafted | (7) Number of development plans & policies updated during the SAP process that integrate resilience, adaptation, information & climate risks g1: regularly updated NIPA with effective integration of priority adaptation options g2: Regularly updated Sectoral Energy Policy Letter with effective integration of priority adaptation options g3: Number of mining plans/codes updated to incorporate priority adaptation actions | g1:1 g2:1 g3:1 | | | |
|--|---|----------------------|--|--|--|
|--|---|----------------------|--|--|--|

 Table 5 : Analysis of the project indicators

Although the indicators chosen to monitor and evaluate project performance could collectively give a good representation of project performance, the final targets were compromised from the outset.

4.1.2. Assumptions and risks

A risk and assumptions analysis is presented in Table 6. Nine significant risks were identified during the project's development. These risks were as follows::

- 1- Unavailability of required expertise and data
- 2- Weak expertise and IT communication infrastructure of the local mobile telecommunication network
- 3- Low Institutional support and political commitment
- 4- Lack of cooperation from key players in the successful implementation of the project
- 5- Occurrence of climate shocks during project formulation and implementation
- 6- Piecemeal progress of work with poor integration and unwillingness of departments to share data and information
- 7- Little willingness to adjust governance frameworks
- 8- Management's unwillingness to undergo training due to staff's lack of knowledge and technical expertise
- 9- Unsustainability of investments in hydrometeorological observation

Although the likelihood of these risks was considered minimal at the outset, their impact on the project was expected to be significant if they materialized. The majority of these risks subsequently manifested themselves and had a heavy impact on the project. In addition, the ensuing political and institutional instability in the government and the project's partner departments had a major impact on the progress of activities and the achievement of results (the project was also heavily impacted by (i) the consequences of the September 2021 coup d'état (halting of activities and delays in implementation) and (ii) the subsequent major turnover of senior staff in public institutions at the end of 2021/beginning of 2022, including almost all members of the Steering Committee).

A detailed risk analysis was carried out in conjunction with the mid-term review, the results of which are shown in the table below:

| Risks | Probability and impact | Project response planned | Comments |
|---|---------------------------|--|---|
| Unavailabili ty of required expertise and data | Probability 2 Impact 4 | The project has provided for capacity building of the hydrological network through Output 1.6 with Activities 1.6.1 and 1.6.2). These training activities will be reinforced by those of project output 2.3 (Activities 2.3.1 and 2.3.2). The recruitment of international consultants with staff training will accelerate the system's mastery by national staff (Outputs 1.1 and 1.2). The acquisition of simple services rather than complicated high-level systems will be preferred in all areas. Training activities for local hydrometeorological network staff will also be part of the options for reducing this risk. In addition, hydrometeorological network institutions will be encouraged to recruit, strengthen and train staff for 5 years in the station. The combined effects of these actions will reduce and eliminate this risk. | In terms of expertise, COVID-19 had a major impact due to the unavailability of regional international consultants and the need to call on national expertise, which meant, for example, using local staff (limited in number) to set up the equipment, necessitating an equipment installation program spread over several years. Data unavailability continues to be an issue, with technical and IT problems affecting data transmission and storage. |
| Weak expertise and IT communica tion infrastructu re of the local mobile telecommu nication network | Probability 2 Impact 3 | The use of the mobile telecoms network will be a priority for the observation network, as this infrastructure will provide the most robust communications power and IT equipment security over time. The use of integrated Cloud services will also be used, as an alternative option, to minimize this risk at local computer room level. The recruitment of international consultants with training in personnel action will accelerate the mastery of the system by national staff (Products 1.1 and 1.2) to mitigate or even eliminate this risk. | This risk remains very high at the time of the final evaluation, with interruptions to transfers due to lack of communication funds, IT bugs and, more generally, insufficient IT HR skills, which are not institutionalized in DNM, DNH and CNGCUE. The long-term Database project expert has been replaced by a short-term database expert who is no longer permanently present to coach IT staff. |
| Low Institutional support and political commitmen t | Probability 2 Impact 3 | The proposed project is strongly supported by the Government, stakeholders and development partners. The project, together with UNDP, will therefore take this opportunity to solicit substantial support from the Government to build strong partnerships with other development partners. Direct links with ongoing baseline actions through the Government to secure the necessary co-financing, as well as local ownership, will minimize this risk. | The problem of co-financing and government commitment remains unresolved at mid-term and at the time of the final evaluation, with a national counterpart which has not materialized and which poses real worries for DNM, DNH and CNGCUE staff as to the future of the equipment and SAP system once the project is closed. |
| Lack of cooperation from key players in the successful implementa tion of the project | Probability 2 Impact 4 | Capacity-building products (Outputs 1.6 and 2.3) in synergy with the project's national and sub-regional adaptation awareness, information and communication actions (Output 2.6) are likely to reduce or even eliminate this risk. | As much as the project provides for awareness-raising and communication actions, it is a matter of external communication to the partners and final beneficiaries of an EWS, geared more towards the international community, with little impact on the problems of communicating the benefits of an EWS to national beneficiaries (prefectures, town halls, population, etc.). |

| Occurrence of climate shocks during project formulation and implementa tion | Probability 2 Impact 3 | Capacity-building actions (Outputs 1.6 and 2.3) will raise awareness among stakeholders of the importance of taking charge of adaptation for rapid recovery in the event of a disaster. This will encourage them to continue with the project. | No major climatic shocks during project implementation |
|--|---------------------------|--|---|
| Piecemeal progress of work with poor integration and unwillingne ss of department s to share data and information | Probability 2 Impact 3 | With the guarantee that capacity building will involve all the ministerial departments concerned in the implementation of the project, a rapid change in behavior is expected for effective risk mitigation. To this end, Output 2.3 targets capacity-building for 200 decision-makers spread across all ministerial departments in the most vulnerable sectors, in addition to finance, planning and budget departments, with a particular focus on local elected representatives and members of parliament. The establishment of an official database, with the support of the highest authorities through the creation of an administrative act governing the creation, organization and operation of the database (Output 2.4), will foster synergies in data collection and updating. | This risk is almost universal for inter- institutional projects. It is usually minimized by setting up inter- institutional coordination/communication mechanisms. However, there is no evidence that such mechanisms are put in place or even discussed. |
| Little willingness to adjust governance frameworks | Probability 2 Impact 4 | Awareness-raising and involvement of high-level government decision-makers (Output 2.6) to ensure their understanding of the opportunities and benefits of integrating climate change into policies and plans. | Information activities for decision- makers remained largely insufficient in relation to the challenges and risks faced by the project (collapse of results as soon as the project is closed, due to the lack of financial commitment from the State to ensure the SAP's operation). |
| Manageme nt's unwillingne ss to undergo training due to staff's lack of | Probability 2 Impact 3 | The capacities of sectoral ministries will be strengthened (Outputs 1.6 and 2.3)) for a better understanding of the SAP process and through the provision of tools for integration into planning. Implementation of the Environmental Awareness, Training, Information and Communication Program for the popularization and inclusive mass dissemination of reliable early warning climate information and products. | This risk is small but not negligible; the interviews showed little interest in non- qualifying, short-term (1-2 weeks) and very general training courses. This dissatisfaction may also reflect the absence of international expertise (COVID-19). |
| Unsustaina bility of investment s in hydromete orological observation | Probability 3 Impact 4 | The project will consider developing the provision of paid services to cover recurring costs. This action will be envisaged through the budget entries of structures requesting climatic products. In view of the importance of this risk, a specific product has been set aside for its effective management and elimination (Product 2.5) through activities 2.5.1 to 2.5.3). | Extreme risk: none of the institutions has the operating budget to maintain the equipment in good condition; the interviews have already shown that substitution strategies are being put in place; for example, not installing all the equipment to be sure of having spare parts. |

Source: adapted from the mid-term review.

Table 6: Analysis of the project risks

There were three main hypotheses:

- **Hypothesis 1:** Efficiency in the use of climate products by direct beneficiaries in adaptation translates into strong demand for widespread use by indirect beneficiaries.
- **Hypothesis 2:** Beneficiaries find the training sessions useful in integrating priority adaptation actions into plans and policies to effectively strengthen inclusive resilience.
- Hypothesis 3: Adaptation plans and policies focus on building resilience and inclusive growth

The first hypothesis is only valid insofar as beneficiaries are aware of climate products, hence the need for good communication. For DNM, this is indeed the case, for weather forecasts for example.

For DNH, the use of its products remains confidential (manual transfer by letter, as SAP is not yet operational).

In the case of other products (targeting agriculture, health, etc.), the project had not led to the development of new products at the mid-term or final evaluation stage.

The second hypothesis has been confirmed, following the organization of community forums at local authority level, the aim of which is to facilitate the review of LDPs while considering the aspect of adaptation to climate change. However, the mobilization of financial resources to carry out the activities included in these plans was the weak link in this product.

Regarding the third assumption, the update of the mining code could not be executed as the government altered its plans, opting to carry out this task in 2024, and more specifically in 2025. This shift in strategy happened following an institutional change in Guinea.

4.1.3. Lessons from other projects

The project to strengthen the climate information and early warning system for resilient development and adaptation to climate change in Guinea (SAP) represents a major step forward, indeed the culmination of a series of efforts, largely supported by the Global Environment Facility (GEF) and other donors. These efforts strengthen the Guinean government's capacity to anticipate and respond to extreme climatic events.

The SAP project drew on lessons learned from a series of past interventions, including various GEF-funded projects such as: building resilience and adapting to the impacts of climate change in coastal areas; strengthening decentralized environmental management - Rio Convention; building resilience and livelihoods in communities in Gaoual, Koudara and Mali; the Biogas project; and adapting vulnerable ecosystems in Upper Guinea. These projects have provided 10 meteorological stations and updated 22 Local Development Plans (PDL).

However, post-project analysis of these interventions revealed several challenges. One of the main problems is the institutionalization of the equipment by the national authorities, notably the Direction Nationale de l'Hydraulique (DNH) and the Direction Nationale de la Météorologie (DNM). The maintenance of equipment supplied as part of a sectoral intervention external to DNM or DNH has proved difficult, and most of this equipment is out of use after project closure, particularly if a transfer of ownership or use has not been finalized.

These lessons highlighted the need for a more integrated and comprehensive approach to building resilience to climate change in Guinea. As a result, the intervention has been reformulated to focus on improving the coverage of hydrometeorological equipment and building the capacity of human resources. The aim is to ensure that the benefits of these interventions are not lost after project closure, but are institutionalized and sustained over the long term. This requires ongoing commitment and support from national authorities and development partners.

4.1.4. Planned Stakeholder participation

The project has developed a wide network of partnerships. Several stakeholders have contributed to the implementation of the SIC&SAP project, the main ones being :

| Stakeholders | Relevant function and role in the project |
|---|---|
| Ministry of Transport | The project was implemented by the Ministry of Transport (MT) through the Direction Nationale de la Météorologie (DNM). It oversees the Scientific and Technical Committee (CST) for technical decisions based on scientific and technical aspects. He is responsible for and contributes to all the results of both project components. |
| Ministry of Energy and Hydrology (MEH) | This ministerial department oversees the <i>Direction Nationale de l'Hydraulique</i> (DNH) and is therefore one of the fundamental pillars of the EWS project. It is a member of the project steering committee. All hydrological activities required to achieve the expected results of the two project components are carried out under the supervision of DNH. |
| Ministry of the Environment, Water and Forests (MEEF) | The Ministry of the Environment, Water and Forests (MEEF) is responsible for implementing environmental policy, including fisheries. It is responsible for sustainable development, which is multi-sectoral and integrated into all development sectors, including the departments responsible for agriculture, livestock, hydrology, hydrology, forestry and mining. Through its departments, including its local deconcentrated technical services, it is responsible for issues relating to environmental impact assessment, integrating economic and social aspects in accordance with the provisions of the Environmental Code. |
| Ministry of Economy and Finance (MEF) | This project will follow the National Execution Procedure (NEX), with UNDP acting as executing agency for GEF funds. UNDP and GEF funds will be managed in accordance with UNDP procedures and cash advance - using the project's Financing Authorization and Certificate of Expenditure (FACE). GEF and Ministry of Finance funds (cash co-financing) will be deposited in a dedicated bank account. |
| Ministry of Planning and International Cooperation (MPIC) | This ministerial department is responsible for the country's development planning. The revision of the PNDES 2016-2020 will provide an opportunity to effectively integrate adaptation into development planning at national, regional and local levels. The department is a member of the project's Steering Committee (SC) and Scientific and Technical Committee (STC). |
| Ministry of Agriculture (MA) | This ministerial department is involved in private sector activities that are among the most vulnerable to the adverse effects of climate change. The results of all the project components will contribute to the planning of this important department for the country's economic and social development. It will contribute to the project through activities to update the PNIA, the Poverty Reduction Strategy Paper (DSRP), local development plans (PDL) and agricultural policy, with a view to effectively rationalizing adaptation. |
| National Meteorological Directorate (DNM) | This department is one of the main pillars of the SAP project. It is responsible for producing the meteorological information and products required by SAP. Consequently, it is responsible for all activities under Outcome 1.2 and contributes to Outcomes 1.3 to 1.6. It plays an important role in Component 2 outcomes, contributing to the data bank (Outcomes 1.4 and 2.4) and to the popularization and wide dissemination of climate and early warning information and products for their effective use by relevant actors at national and sub-regional levels (Activities 2.6.1, 2.6.2 and 2.6.3.) Under the supervision of the Ministry of Transport, it coordinates the Project's Scientific and Technical Committee (STC). |

| Stakeholders | Relevant function and role in the project |
|---|---|
| National Hydrology Directorate (DNH) | This department is at the heart of the production of hydrological early warning information and products (activities 1.1.1 to 1.1.3). It ensures effective tracking of extreme hydrological events, notably by monitoring water levels, and also provides flood warnings. It contributes to the databank (outputs 1.4 and 2.4) and to the widespread dissemination of climate information and products for effective use by stakeholders (activities 2.6.1 and 2.6.2). |
| Water and Forestry | This department is under the direct technical supervision of the Ministry of the Environment, Water and |
| Department | Forests. Its mission is to coordinate actions to combat climate change in all development sectors. More specifically, the department will contribute to the production of all products needed to provide climate information, including: the climate and socio-economic data bank (Outcome 1.4); the integration of adaptation in sectors vulnerable to climate change through Outcome 2.5; and awareness-raising and dissemination of climate information and products for use by all (Outcome 2.6). |

Table 7: Project stakeholders

As a project executed to NIM standards, the project has signed several implementation protocols with state structures in the field. An evaluation of these protocols shows that the majority have been implemented as agreed. Within the framework of this project, UNDP staff played a monitoring and control role in relation to the activities of the protocol signatories. Payments under these protocols were made after verification that the activities had been carried out.

4.1.5. Linkagess with other projects in the sector

The project is the culmination of a series of efforts, mainly by the GEF but also by other donors, to improve the Guinean government's ability to predict and respond to extreme events.

The project was based on the experience of a series of past interventions, namely the following projects financed by the GEF :

- Building resilience & adapting to the negative impacts of climate change in coastal areas
- Strengthening decentralized environmental management Rio Convention -
- Strengthening community resilience and livelihoods in the prefectures of Gaoual, Koudara and Mali
- The project to promote the use of biogas
- Ecosystem-based adaptation in Upper Guinea

These projects involved the supply of 28 weather stations and the updating of 76 PDLs.

Ongoing or post-project analysis of these interventions has shown that the institutionalization of equipment by national authorities (DNH and DNM) remains very difficult, and that the maintenance of equipment supplied as part of a sectoral intervention external to DNM or DNH disappears with the closure of the project if a transfer of ownership/use has not been finalized in the meantime.

We must admit that most of this equipment is out of use.

For this reason, a more integrated and comprehensive approach was developed, leading to the formulation of the intervention: upgrading hydrometeorological equipment coverage rates and HR capabilities.

4.2. Project implementation

4.2.1. Adaptive management

The project was managed under the National Implementation Modality (NIM/NEX Assisted). The fact that the project's financial management was integrated into the Environment program and steered from the UNDP greatly facilitated rigorous management in compliance with standards and procedures.

Although the PMU has direct, real-time access to the project's financial situation, the physical distance between the ENV program's 'finance' unit and project coordination can make it more difficult for each party to exchange information or request clarification, which can lead to delays in processing financial data (in practice, the new DNM, DNH and CNGCUE directors appointed in early 2022 did not initially have a clear picture of the project's finances).

In terms of adaptive management, there have been several major events (partly related) requiring adaptive measures:

- Underestimation of equipment budgets: firstly, PRODOC only took into account the cost of the equipment, even though certain lines had been set aside for its installation, since this was ideally covered by co-financing; in reality, it would have been necessary to refurbish almost all the adjacent infrastructure and protective measures for each piece of equipment; ad-hoc solutions were found with the partner, but the additional investments still put a strain on the budget; secondly, there were (usual) price increases for the equipment (between formulation and implementation), but significant ones in the case of the marine equipment, which prevented the purchase of the planned quantities (also due to the very high associated costs)
- A series of measures had to be taken as a result of COVID-19, which led to adaptation measures enabling the project to continue in a context of great operational difficulties (containment), but also with less impacting results (or even their eventual abandonment).

For example :

- 1. The changeover from international to national consultants as part of the "HR capacity building" product did not allow for advanced technical training but general training.
- 2. The abandonment of face-to-face interaction (technical meetings, training sessions, Steering Committee meetings) for over a year and the switch to remote interaction in a context of very uncertain internet connection has reduced the quality of interaction between stakeholders, while DNM, DNH and CNGCUE staff are not very digitalized.
- 3. The resulting ban on field visits and remote monitoring by telephone/Internet made it difficult to effectively monitor infrastructure rehabilitation, equipment installation, SICAP monitoring and support for users...
- 4. International co-financing (e.g. IRD) was abandoned following the partner's withdrawal...
- The appreciation of the Guinean Franc since 2020 (+30%) has put a strain on the budgets of all national activities, in particular national consultants (replacing international consultants) and other national service providers (infrastructure, purchase of local equipment, etc.), with a quantitative reduction in training courses and a reduction in budgets for certain field activities. One example among many is the case of the national consultants recruited as part of the training strategy, which was also aimed at identifying suitable training modules for meteorology. The budget allocated to the 4 consultants was insufficient, so a national workshop was organized to gather the information needed to develop the training strategy.
- The coup d'état in 09/2021 led to a (temporary) halt in activities, but was above all followed by an overhaul of state structures culminating in early 2022 with a systematic change in the technical

and/or political decision-making staff of the ministries involved in the project (e.g. 1. Almost all the members of the Steering Committee have been replaced and are not familiar with the project in detail, e.g. 2. the management of the 3 key institutions have been replaced). The result was a period of uncertainty between 09/2021 and 03/2022, during which the project continued (and even accelerated) implementation, but in a context of great uncertainty and even the departure of key people from the beneficiary institutions (and less involvement), thus undermining ownership of the project's results.

In conclusion, the PMU's good adaptive management in a difficult context has enabled the project to move forward with exceptional delivery to date. It is regrettable, however, that all the measures taken in the wake of these events have inevitably degraded the project's level of quality, with a real risk in terms of ownership.

ADAPTIVE MANAGEMENT RATING: Moderately Satisfactory (MS)

4.2.2. Actual stakeholder participation and partnership arrangements

The commitment of key stakeholders (DNM, DNH and CNGCUE) was entirely adequate for this project; interviews showed great interest in the involvement of technical and management staff in both the development and implementation of project activities.

Concrete examples include :

- Involvement of technical staff in drawing up technical specifications for equipment
- Drawing up training participant lists and effective participation
- Participation in PDL updating forums
- Support in setting up watch units

In practice, however, we need to put things into perspective and take into account the extremely unfavorable working environment for long-term staff retention, with a systematic flight to the private sector or other projects. The institutions are under-equipped, the workplaces are very run-down, sometimes temporary, even non-existent in the regions, the staff hired do not have the sector's skills for many of them, and the official status of many staff in the regions is not systematized (employee, volunteer-retired...). Finally, as there is no policy aimed at improving the working conditions of staff, their motivation remains low, and it is against this backdrop that the project supports the introduction of SAP. Every support, action and communication from the PMU is subject to bureaucratic processes within the institutions, which slow down the project's effectiveness.

The political situation also had a negative impact on institutional commitment, as the large-scale personnel changes at the start of 2022 upset the level of institutional involvement, with new staff unfamiliar with the project (DNH, DNM and CNGCUE management, as well as most Steering Committee members).

Guinea has several conventions and frameworks for combating climate change:

Firstly, Guinea has developed a national climate change profile that provides a better understanding of the environmental challenges and impacts of climate change on the country. In addition, Guinea adopted the Paris Climate Agreement in 2015, whose objective is to limit global warming to 2 degrees Celsius, with a preference of 1.5 degrees, compared to pre-industrial levels. Finally, Guinea is surrounded by countries with which it shares borders, such as Guinea-Bissau, Senegal and Mali to the

north, and Sierra Leone, Liberia and Côte d'Ivoire to the south. These countries are also exposed to environmental challenges and the impacts of climate change, reinforcing the importance of regional cooperation to combat climate change.

4.2.3. Finance and co-finance

The project had a budget of US\$5,350,000, of which US\$5,000,000 came from the GEF and US\$350,000 from UNDP TRAC funds.

Thanks to a first Steering Committee meeting very soon (August 2019) after the signing of the project and therefore the first PTA (2019), and the recruitment of the Coordinator, the project was able to get off the ground very quickly, committing substantial funds without any real period of hesitation, so typical of UNDP projects.

Analysis of <u>Table Table 8</u> clearly shows a negative impact of COVID-19 on project progress in 2020 (confinement effect) and a latency before the project adjusts to the new situation (% actual expenditure / PTA: 97% in 2019, 66% in 2020; 84% in 2021; 71 and 69% in 2022 and 2023). However, the coup d'état in September 2021 appears to have had no impact on implementation.

| Year | PRODOC (US\$) years 1, 2, 3, 4 | PRODOC (US\$) adjusted (August start-up) | AWP (US\$) | Annual expenditure (US\$) | % Expenditure/A WP | Expenses / Adjusted PRODOC |
|-------|-----------------------------------|--|--------------|---------------------------------|--------------------------|----------------------------------|
| 2019 | 1.917.658,00 | 639.219,33 | 371.400,00 | 360.889,82 | 97 | 56 |
| 2020 | 2.521.344,00 | 2.118.886,67 | 2.715.924,00 | 1.790.919,35 | 66 | 85 |
| 2021 | 455.001,00 | 1.832.563,00 | 1.875.295,00 | 1.579.599,76 | 84 | 86 |
| 2022 | 455.997,00 | 455.333,00 | 1 164 438,50 | 825.004,195 | 71 | 181 |
| 2023 | - | 303.998,00 | 448 848,23 | 307 966,05 | 69 | 101 |
| Total | 5.350.000,00 | 5.350.000 | 6 461 145,34 | 4 864 379,19 | 75 | 91 |

Table 8: Annual work plans vs. actual expenditure

The <u>Table_Table_</u> combining TRAC and GEF funds also shows a very high completion rate (compared to many other UNDP projects) - in any case never below 60% -, logically the consequence of the project having committed very substantial resources to procurement, activities relatively easier to implement than anything to do with capacity building, logistically more constraining.

The project has made good progress with component 1 (91% of the budget spent), whereas component 2 is behind schedule (76%), which was perfectly reflected in the interviews. The operationalization of component 1 (in particular the installation of equipment) has been particularly delayed by COVID-19, but also by the lack of capacity of the DNM and DNH institutions.

⁵ Amount set in August 2022

| | 2019 | 2020 | 2021 | 2022 | 2023 | Total spent | Total planned PRODOC | % spent / planned PRODOC |
|--|------------|--------------|--------------|------------|------------|--------------|----------------------------|--------------------------------|
| Total allocated (GEF+TRAC) (adjusted) | 639.219,33 | 2.118.886,67 | 1.832.563,00 | 455.333,00 | 448.848.00 | | 5.350.000 | - |
| Total spent | 360.889,82 | 1.790.919,35 | 1.579.599,76 | 825.004,19 | 307.966,05 | 4.864.379,19 | | 91 |
| Component 1 | 333.187,03 | 1.532.596,83 | 1.137.924,79 | 676.504,01 | 193.386,05 | 3.680.212,66 | 4.039.893,00 | 91 |
| Component 2 | 6.486,87 | 118.803,62 | 420.035,96 | 151.983,82 | 114.580,00 | 697.310,27 | 920.977,00 | 76 |
| Project management costs + gains/losses | 21.215,92 | 139.518,90 | 21.839,01 | -3.483,64 | - | 179.090,19 | 389.130,00 | 46 |

| Т | abl | е | 9 | : | Pro | iect | comp | letion | rate |
|---|-----|---|---|---|-----|------|------|--------|------|
| | | - | - | | | , | | | |

The PMU only recorded co-financing amounts for DNM and DNH, SOGUIPAH and UNDP.

Table 10 shows the expected co-financing. There are no details in the PRODOC of the breakdown of co-financing, either by component or year by year.

| Co-financier | Amount over 4 years | Effective amount (06/2023) | Description |
|---|------------------------|-------------------------------|---|
| Ministry of Agriculture | 30.000.000 | Not communicated | Agricultural investments (rice growing, salt production, other IGAs) and sustainable management activities to strengthen the resilience of vulnerable populations |
| Direction Nationale de la Météorologie | 1.103.000 | 571.140 | Synergy with DataRescue and EarthNetworks projects, project monitoring activities, complementary equipment, UGP offices |
| Direction Nationale de l'Hydrologie | 384.300 | 134.505 | Synergies with IWRMP II, Inner Delta Sustainable Development Program and IWRM projects |
| Agricultural Research Institute | 240.000 | Not communicated | Maintenance and guarding of the agrometeorological station |
| SOGUIPAH | 120.000 | 120.000 | Integration of the SOGUIPAH weather station into the national network |
| Development Research Institute | 450.000 | Not communicated | Coordination consulting (long-term assignments: researchers, engineers, technicians) |
| UNDP | 350.000 | 331,837 | TRAC funds (already integrated into PRODOC) |

Table 10 : Projected co-financing

Co-financing is important for ensuring the sustainability, effectiveness and impact of GEF projects and programs. The GEF expected the ratio of mobilized investment to GEF funding to be at least 5:1, which is largely the case for this project, although a large part of the amount from the Ministry of Agriculture

(productive investments) is questionable.

Co-financing should also take into account the in-kind portion mobilized by beneficiaries. The project had no method of accounting for this counterpart during implementation. This in-kind counterpart should include the cost of labor provided by the beneficiaries, the cost of land and other benefits provided by the State through the mobilization of its agents, etc.

4.2.4. Monitoring and evaluation

The monitoring and evaluation plan initially recommended for the project includes: the inception report, project implementation reviews, quarterly and annual implementation reports, a mid-term evaluation and a final evaluation. The project had put in place a series of tools to ensure adequate M&E:

- Start-up workshop (almost immediately after signing the PRODOC)
- Periodic (quarterly) monitoring of PTAs by UNDP
- Steering Committee (annual)
- Restricted/ad-hoc Steering Committee, on request (+/- the equivalent of a technical committee)
- Periodic field visits PMU/ implementing partners and UNDP
- SESP monitoring and updating if necessary (*a priori* by PMU and UNDP)
- Annual PIRs (Three at time of final assessment)
- Independent mid-term and final evaluations

An informal Restricted Steering Committee meets on an *ad-hoc basis*, apparently at the request of the PMU, to discuss any implementation problems and clarifications.

In practice, the UNDP Environment Unit carries out most monitoring and evaluation. In Guinea, UNDP provides a dedicated monitoring-evaluation unit within UNDP, which monitors all the Environment Unit's projects.

Historically, experience has shown that the quality of individual intra-project monitoring by dedicated HR is variable (depending on the profiles recruited). UNDP has pooled the resources allocated to this function for all environmental program projects (ditto for finance and communication).

The major advantage of this approach is that the PMU and UNDP have a global view of the program's progress and each project in progress, its difficulties, and where and when to intervene according to schedules and deadlines. This system makes it possible to intervene very rapidly in the event of a problem ("adaptive management solutions").

This approach, which bypasses project HR in monitoring-evaluation, also has certain limitations; indeed, the interviews showed that the implementing partner - MIT (as well as the key beneficiaries, DNM, DNH, CNGCUE) are more distant from the monitoring-evaluation center of their project: monitoring-evaluation interactions take place between the PMU and UNDP, whereas in a project where the function is located within the project, triangular interactions between the implementing partner - UNDP - PMU enable better dialogue on implementation and better involvement or information, at the very least, of the national side. In practice, this system, combined with a change in decision-making HR at the beginning of 2022, meant that the 3 institutions were out of step in their understanding of the project's progress. Their only official source of information is the next Steering Committee meeting at the end of 2022.

Despite this, the commitment of the three institutions remains constant, with good participation in activities.

A project kick-off workshop was held within the first two months of the project's start-up, with parties having assigned roles in the project's organizational structure.

A Project Steering Committee (PSC) was set up to serve as the project's coordinating and decision-making body. The PSC is chaired by the Ministry of Transport or its representative in its role as "executive" of the project. The role of the "executive" is to ensure that the project is focused on achieving the desired results and adopting a cost-conscious approach.

On an annual basis, the project team prepares the annual work plan (AWP) and annual budget plan (ABP) for the project. The PSC approved the AWP and ABP at the beginning of each year. These plans served as the basis for allocating resources to planned activities.

Progress was monitored quarterly via the UNDP's improved results-based management platform. During the project's life, risks were monitored and updated in an atlas. Each year, the project provided an annual project implementation report (RAP/REP): this key report is prepared to track progress made since the start of the project and in particular for the previous reference period

Periodic monitoring occurred irregularly, but in most cases was documented. As the project lasted 4 years, the mid-term evaluation took place during the 3^{ème} year in November 2022, four months before the final evaluation. The mid-term evaluation recommendations were still being implemented at the time of this final evaluation.

Activities are reported on an annual basis at two levels:

- PMU report: end-of-year annual report; description of activities carried out in relation to the annual work plan approved a year earlier; this type of report therefore focuses on activities and not results; it is the document that guides the following annual planning by comparing what has been achieved with the activities planned in the PRODOC; the document is not very explanatory on results and it seems that the monitoring of results by indicators is supervised by the UNDP (monitoring and evaluation expert for the Environment program), which provides support in this area to the PMU for the preparation of the annual IRP.
- PIR: annual report in June of each year in GEF format, which focuses on the analysis of results using PRODOC indicators; this helps to understand the progress of the project in relation to the envisaged targets and to assess implementation better.

Other documents such as Steering Committee minutes and field visit reports are also available.

In practice, the two types of document complement each other perfectly. The interviews did not really reveal a space, time and place for dialogue between UNDP, PMU and implementing partner to discuss, as activities are implemented, the need to modify and amend them and work plans in line with actual conditions. The governance structure makes no formal provision for this. This function could be performed through *ad-hoc* meetings.

Nevertheless, the formalization of technical meetings (monthly, fortnightly or even weekly) is an effective mechanism for ensuring clear communication between stakeholders, transparency as to implementation methods/difficulties, and responsiveness to immediate problems, thus avoiding potential negative knock-on effects if such periodic meetings are not established on a routine basis.

In order to rationally assess the overall quality of the monitoring-evaluation system, we implemented and used the "Quality Satisfaction Coefficient" (QSC) indicator. This indicator breaks down into two factors (a, b). It is rated on a scale of 1 to 6, with the following interpretation grid: 6=Very Satisfactory (TS), 5=Satisfactory (S), 4=Moderately Satisfactory (MS), 3=Moderately Unsatisfactory (MI), 2=Insatisfactory (I), 1=Very Unsatisfactory (TI).
| Monitoring & Evaluation System | Rating |
|------------------------------------|------------|
| (a) Initial M&E system design | 5/6 (S) |
| (b) Implementation of the M&E plan | 4/6 (MS) |
| Overall M&E quality | 4.5/6 (MS) |

| Table 11: W&E rating | 11: M&E rating | g |
|----------------------|----------------|---|
|----------------------|----------------|---|

Based on the overall assessment, the **overall quality of the monitoring-evaluation system is rated as moderately satisfactory (MS)**.

4.2.5. UNDP Implementation/oversight

UNDP recruited the PMU. The PMU received ongoing support from UNDP Guinea and the regional office during implementation. This support took the form of assistance in drawing up annual work plans and project performance reports. In addition, supervisory missions to the Environment portfolio provided an opportunity to review results and challenges with the project. UNDP managed the relationship with the Ministry through regular meetings between the representation and government members. At the time of this evaluation, for example, UNDP was finalizing negotiations concerning the project's infrastructure, which was located on ANAM premises. Similarly, the regular discussions held with the authorities enabled the project to resolve a number of misunderstandings arising from the institutional changes that occurred during implementation.

| UNDP Implementation/Oversight & Implementing Partner Execution | Rating |
|--|--------|
| Quality of UNDP Implementation/Oversight | S |
| Quality of Implementing Partner Execution | MS |
| Overall quality of Implementation/Oversight and Execution | MS |

Table 12: Implementation/oversight rating

Implementation and supervision by UNDP is considered satisfactory (S)

4.2.6. Risk management

Risk management was based on the initial risks identified during project development. Every quarter, the risk register was updated with an assessment of their importance, and the probability of their occurrence. On this basis, the project defined the accompanying measures to be implemented to mitigate or avoid them. The project kept the risk register up to date on atlas.

4.3. Progress Results and Impacts

4.3.1. Progress towards objective and expected outcomes

The tables below provide information according to the July 2022 PIR and the 2022 annual report. As the mid-term and final evaluations are very close (four months apart), the values reported by the mid-term

evaluation have been verified and new data since that evaluation have been integrated. The progress ratings below are based on the existing indicators and targets as described in the results framework.

The indicators do not correspond exactly to the original PRODOC indicators, but reflect the adaptations incorporated into the PIRs.

Analysis of progress towards targets

The progress of the project in relation to its objective and expected effects was analyzed. The usual trafficlight system6 is used to accompany progress ratings.

⁶ The GEF traffic light system is: Green=Target achieved, Yellow=On track to be achieved/according to plan, Red=Target not on track to be achieved, Grey=Cannot be assessed or not being followed.

| Objective: Strengthen climate monitoring capacities, early warning and information systems to respond to climate shocks and plan adaptation to climate change in Guinea. | | | |
|--|--|---|--------|
| Indicator | Baseline / mid-term target / end of project | Level of progress and rating justification | Rating |
| (1) Number of communes that have integrated resilience and adaptation practices into their local development plans | 74 / 80 / 90 | 89 local development plans (PDL) - 15 new plans compared to the baseline - have been revised to include adaptation to climate change. The communes covered by this activity are : Tanènè and Kollaboui in Boké prefecture; Tougnifily and Tamita in Boffa prefecture; Tanènè and Ouassou in Dubréka prefecture; Lélouma and Lafou in Lélouma prefecture; Ditinn in Dalaba prefecture; Bouliwel in Mamou prefecture; Moribayah in Forécariah prefecture; and the urban communes of Dubréka, Matoto, Dixinn and Matam.Overall, more than 300 communes have LDPs, but fewer than 100 (via various funding sources) incorporate climate risk; the main problem remains the implementation of more costly (short-term) measures within closed financial envelopes, with the risk that proposals will be outdated because they are not financed within the LDP cycle (4 years). | |
| (2) Number of direct beneficiaries using climate information and products that integrate priority adaptation actions a1: Number of direct beneficiaries a2: % of women | a1 : - / 100.000 / 200.000 a2 : - / 51,000 (51%) / 102,000 (51%) | This target has not been reached, as the data collection, processing and transmission system is not yet operational. This indicator is also problematic because it is difficult to identify any direct effect of the project on the beneficiary populations: in fact, it is only in emergencies that SAP reveals its full effectiveness, and there have been no major extreme events in recent years. At the time of this evaluation, it is estimated that about half of this target had been reached through training, data collected and shared with pilots, boat personnel and TV weather broadcasts. The main target, producers, has not been specifically reached. | |

Table 13 : Assessment of progress towards project objective

OBJECTIVE RATING: Moderately Satisfactory (MS)

Tables 13, 14 and 15show the progress made for each of the two components (effects).

| Indicator | Baseline / mid-term target / end of project | Level of progress and rating justification | Rating |
|---|---|--|--------|
| | | Targets for the number of stations to be installed were not met due to the underestimation of station prices at the time the project was drawn up, the impact of covid on the price of electronic components, and the lack of mobilization of the national counterpart. The project had to purchase the stations with the GEF budget at actual market cost, which often exceeded budget by 100%. | |
| (3) Number of climate stations that regularly provide reliable climate information & products: | | A major problem for most of the facilities (especially meteorological ones) was the lack / poor condition of the infrastructure that was to house the new equipment; as co-financing did not materialize, the project invested much larger amounts than planned in this heading, without which there was no sense in installing new equipment in unsafe locations; these investments varied considerably, from simple site clean-ups to the placement of protective fencing or the reconstruction of infrastructure. Another major obstacle remains data transmission: with widespread automation, a substantial mobile data budget is required to ensure service, which is currently taken into account by the project; however, subscription / SIM card changes have caused transmission to be interrupted, and SIM card changes that have to be carried out manually have not been made everywhere, resulting in interrupted data flows. | |
| b1: automatic hydrological stations | b1: 20 / 22 / 42 | b1: 22 installed /22 acquired | |
| b2: automatic hydrological stations | b2: 7 / 12/ 22 | b2: 9 installed / 20 acquired | |
| c: weather stations | | | |
| c1: Weather stations | c1: 20 /62 / 62 | c1: 12 installed /12 acquired | |
| c2: Number of automatic synoptic stations | c2:0/17/17 | c2: 9 installed / 9 acquired | |

| c3: Number of lightning detection stations | c3: 12 / 24 / 24 | c3: 12 installed / 12 acquired (disparate performance) | |
|---|--------------------------------------|---|--|
| c4: automatic agro- meteorological stations | c4: 0 / 5 / 5 | c4: 5 installed/ 5 acquired | |
| c5: Number of automatic marine weather stations | c5: 0 / 4 / 4 | c5: 1 installed / 1 acquired (2 planned in PRODOC but the budget only allowed the purchase of 1 marine station; supplier awaiting technical information (location, installation conditions, etc.) to start installation) | |
| c6: Number of functional aerological stations | c6:0/1/1 | c6 : 1 acquired / 1 installed | |
| (4) Number of climate stations monitored and maintained by qualified personnel | d 1:0/63/63 | This target has not been met, as the number of stations installed is lower than the number planned as indicated above. For the stations that have been installed, only one person at the DNM seems to be responsible and capable of carrying out maintenance. The field supervisors in charge of the stations have not been trained to perform basic maintenance tasks. During field visits, it was mentioned that field staff would be trained in maintenance tasks. | |
| e1: Number of managers trained | e1 (formerly d1): 251 / 294 / 294 | At the start of the project, the staff of the partner directorates had no basic knowledge of the environment, climate, hydrology and even less of SAP. This situation led the project to offer a range of general management/administration and technical training courses (GIS, climatology, limnimetry and flowmetering, computer networks, database management and computer programming, climate risk management, etc.). While the training courses (all very short - from a few days to 1-2 weeks) were well received, the specialists reiterated their need for qualifying training courses (which were not provided for in PRODOC), the only ones they felt would enhance the technical expertise of the 3 institutions. In fact, the project did not really offer in-depth training in the more advanced technical fields (GIS, modelling); on the one hand, COVID-19 and the delays in implementation meant that experts from regional technical institutions (AGRYMET, ACMAD and others) could not be sent to Guinea to carry out more technical training. | |
| e2: % of women | e2 (formerly d2): 19.5 / 51 / 51 | Not all training reports were available, as the project coordinator lost the computer in which most of the data was stored. The training reports available contained disaggregation by gender. Totals could not be retrieved and verified. | |

Table 14 : Assessment of progress towards achieving Outcome 1

NOTATION of Result 1: Moderately Satisfactory (MS)

Component 2: Integration of climate information & early warning & adaptation products into development plans

Outcome 2: Climate products & services are accessible & used efficiently & effectively for the production of early warnings for producers & in the drafting of medium & long term climate resilient development plans Climate services & products are accessible & used efficiently & effectively for the production of early warnings for producers, & medium & long term climate resilient development plans are drafted

| Indicator | Baseline / mid-term target / end of project | Level of progress and rating justification | Rating |
|---|---|--|--------|
| (5) Number of climate information products and services (CIPS) produced and accessible to end users | | Flight records are now available for aircraft arriving or departing from Guinea, particularly Conakry. The production of these flight records is an ongoing task. At the port, the hydrological station constantly generates hydro-climatic parameters that are made available to requesting parties. The parameters produced and shared are indeed limited, but the process is a hig step forward in Guinea, given that the | |
| e1: Number of meteorological and hydrological forecasts per day | e1:0/2/6 | equipment at the airport had become obsolete and produced almost nothing locally before the project. As for the port, the station is a first, and a major step forward for the country. At DNM level, weather reports are regularly produced and televised every day. It's true that, in the spirit of the project, climate products were primarily intended to benefit producers, but | |
| e2: Specific CIPS per month on request | e2:0/5/10 | aircraft operators and port stakeholders are equally important beneficiaries. | |
| (5) Number of policy-makers trained on climate change risks & able to identify & integrate priority adaptation options into development policies & plans | | 50 decision-makers trained, 12% of them women. A virtual workshop was held with members of the Ministry of Agriculture. Given the gender imbalances in the civil service (at least for higher training positions), it is impossible to envisage 50% participation without compromising the relevance of the female profiles who could participate. This activity is particularly underdeveloped, despite the fact that informing political decision-makers is key to ensuring the project's sustainability via refinancing from these institutions. This activity needs to be | |
| f1: Number of decision- makers trained | f1:0/100/200 | reviewed in its entirety, and resources urgently allocated before the end of the project, in order to raise awareness among political decision-makers of the need to have a functional SAP in Guinea, which means | |
| f2: % of women | f2: 0 / 51 / 51 | targeting a much wider audience - not just the sectoral ministries, but also the legislature and all the other non-sectoral ministries involved in the planning and administration of financial resources. | |
| (6) Number of development plans & policies updated during the SAP process that integrate resilience, adaptation, information & | | The NIPA and the energy policy letter were revised with the help of the project. With regard to gl and g2 There has been no activity to review the mining code. According to a project representative, it was clarified from the outset that the mining code would only be revised in 2024/2025, apes the project. | |

| g1: regularly updated NIPA with effective integration of priority adaptation options | g1: 0 / 1/ 1 |
|--|--------------|
| g2: regularly updated Energy Sector Policy Letter with effective integration of priority adaptation options | g2 : 0/ 1/ 1 |
| g3: Number of mining plans/codes updated ⁷ to incorporate priority adaptation actions | g3:0/1/1 |

Table 15: Assessment of progress towards achieving Outcome 2

NOTATION of Result 2: Satisfactory (S)

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⁷ The process was not initiated because of a change of dirction from the government side

4.3.2. Relevance

The Republic of Guinea, located in West Africa, is characterized by a rich biodiversity, with a variety of ecosystems ranging from tropical rainforests to savannahs. However, in recent decades, Guinea has faced a number of environmental challenges, including climate change. In response to these challenges, Guinea drew up its National Adaptation Program of Action (NAPA) in July 2007, following a consultation process carried out between 2005 and 2006 to identify short-term priority actions.

Guinea's NAPA has identified ten priority options for climate change adaptation. Of these ten options, the project "Strengthening the climate information and early warning system for resilient development and climate change adaptation in Guinea (SAP)", financed by the Least Developed Countries Fund (LDCF), has integrated nine of these priorities, extending their implementation to the medium and long term.

These priority actions include :

- promoting agroforestry to strengthen the resilience of agricultural systems to climate variations;
- harnessing positive endogenous knowledge and practices to capitalize on local expertise in adapting to climate change;
- the adoption of appropriate adaptation technologies to improve community resilience in the face of climate challenges;
- bushfire management and fencing to protect the natural environment and support the livelihoods of rural communities;
- protecting and restoring fragile ecosystems to conserve biodiversity and support ecosystem services;
- information, education and communication to raise awareness of climate change impacts and adaptation strategies;
- development and integrated management of small hydraulic structures to support irrigation and improve resilience to rainfall variability;
- protecting spawning grounds to support sustainable fishing and aquatic biodiversity;
- and hydro-agricultural development of plains and lowlands to improve agricultural productivity.

By implementing these actions, the SAP project seeks to strengthen the resilience of Guinea's socio-ecological systems to the impacts of climate change.

2016 Guinea adopted the second Five-Year Economic and Social Development Plan (PNDES 2016-2020). The government saw this plan as the operational planning document for Vision Guinea 2040, which aims to transform the country into a sustainable and inclusive emerging economy.

In this context, the SAP project plays a key role in providing end-users with priority climate products and services, and building their capacity to use these services. This contributes to the resilience of the primary sector of Guinea's economy, notably agriculture, fisheries and livestock, which are essential for food security and the livelihoods of rural populations.

The SAP project also contributes to the achievement of effect 2 of the 4th pillar - Sustainable Management of Natural Capital - of the PNDES. By strengthening the resilience of natural systems to the impacts of climate change, the SAP project supports the conservation of biodiversity, the protection of ecosystem services and the sustainable management of natural resources.

The SAP project aligns with the United Nations Development Programme's (UNDP) cooperation cycle with the Guinean government for the period 2018-2022. The project's pilot actions, including the development of Ecovillages, focus on improving ecosystem services and the productivity of production systems, particularly in sites in Middle and Upper Guinea.

The project is consistent with national priorities as defined in existing national planning instruments (Vision Guinée 2040, PNDES 2016-2020, CDN, PANA and the SAP roadmap). It contributes to all ongoing initiatives at strategic and policy levels. It aims to facilitate the integration of climate change adaptation into medium- and long-term planning and budgeting for priority climate-sensitive sectors in the most vulnerable areas.

NOTATION on Relevance: Satisfactory (S)

4.3.3. Effectiveness

With regard to the first component of the SAP project in Guinea, substantial progress has been made with the revision of 89 local development plans (PDL) to incorporate climate change adaptation measures. This represents an increase of 15 plans over the initial baseline. These revisions reflect a growing recognition of the need to incorporate a climate perspective into local planning and development.

One of the project's highlights was the strengthening of hydrological monitoring and data collection, key factors in providing accurate and reliable hydrological information. The project enabled the acquisition and installation of a hydrological station in Conakry, capable of producing a set of nine parameters essential for maritime navigation and other potential users. The station's staff also received initial training to ensure efficient use of the data collected.

In addition, a network of 22 weather stations has been set up across the country. These provide a range of climatic parameters useful to a variety of players. Despite an increase in costs between the planning and acquisition phases, more than half of the stations planned in the Prodoc have been installed.

In addition, the project has helped to improve air traffic forecasting and safety by installing an aerological station at the airport. This station now generates valuable data used for flight planning. However, it should be noted that more training is needed to ensure that field staff are able to carry out basic maintenance tasks.

The project's second component enabled the implementation of a preliminary training plan, benefiting a group of individuals from DNM, DH and CNGUE. However, an initial gender imbalance resulted in an over-representation of males among the training beneficiaries.

The stations installed as part of the project produce reliable data used by a variety of players. For example, the meteorological stations currently feed weather reports, the aerological station

contributes to aircraft flight plans, and the hydrological station provides information on water levels and their chemical characteristics, essential for navigation.

Unfortunately, the project encountered difficulties in sustainably building the capacity of the CNGUE in charge of emergencies. In addition, despite data collection and processing advances, the project has not succeeded in setting up an integrated early warning system. These challenges highlight areas of potential improvement for the future of the SAP initiative in Guinea. **Effectiveness RATING: Moderately Satisfactory (MS)**

4.3.4. Efficiency

Project efficiency refers to the extent to which resources/inputs (funds, expertise, time, etc.) have been converted into results. At the tie of this evaluation, it was noted that, there was:

- Use of resources: The project succeeded in installing a hydrological station, an aerological station and 22 meteorological stations across the country. These installations represent a concrete use of financial resources. However, the price increase between the planning phase and the purchase limited the number of installed meteorological stations compared with what was initially planned in the Prodoc. This difference could indicate a certain inefficiency in terms of planning and financial management.
- Training results: The project has implemented a preliminary training plan and trained individuals from DNM, DH and CNGUE. However, it was mentioned that little training has been carried out for field staff to handle basic maintenance tasks, which could affect the long-term operational efficiency of the facilities.
- Project implementation: The project succeeded in revising 89 local development plans to include climate change adaptation. However, it encountered difficulties in building the capacity of the CNGUE and failed to set up an integrated early warning system. These challenges could point to inefficiencies in achieving the project's objectives.
- Gender equity: The project trained more men than women, which may indicate inefficiency in terms of integrating gender equity into project implementation.

Although the SAP project in Guinea has made significant progress in some areas, analysis of its efficiency suggests that there are areas for improvement, particularly in terms of financial management, training, achievement of project objectives and gender mainstreaming. It would be advisable to carry out a more in-depth and detailed evaluation to confirm these conclusions and identify appropriate corrective measures.

EFFICIENCY RATING: Moderately Satisfactory (MS)

4.3.5. Overall Project Outcome

At the time of this evaluation, it was possible to note a series of positive impacts, as well as some major challenges to the SAP project:

Positive effects included :

- Improved data collection: Thanks to the installation of a hydrological station in Conakry, an aerological station at the airport and 22 meteorological stations across the country, the ability to collect and monitor essential environmental information has been significantly improved.
- Inclusion of climate change in local planning: The project succeeded in revising 89 local development plans to incorporate climate change adaptation. This is an important step towards more resilient and sustainable local planning.
- Training and capacity building: The project has trained individuals from DNM, DH and CNGUE. This made it possible to strengthen institutional and technical capacities.

In terms of problems to overcome, there were :

- Financial management: rising costs between the planning and purchasing phases led to a lower-than-expected installation of weather stations. This raises questions about financial management and project planning.
- Maintenance and training: Little training has been carried out to enable field staff to handle basic maintenance tasks. This could affect the Installed stations' sustainability and the data's reliability.
- Gender Equality: There was a disproportion in training between men and women, which highlights a challenge in terms of gender equity in project implementation.
- Capacity building: The project encountered difficulties in building the capacity of the CNGUE on a sustainable basis. It also failed to set up an integrated early warning system.

The project has supplied important equipment to the structures in charge of meteorology and hydrology in Guinea. At the time of this evaluation, the installations had just been finalized, and the project will need to train the technicians in charge of the equipment to maintain it and extract the data they need. Similarly, it will be necessary to ensure that data from the various stations is integrated at the central level and that complete climatic information reaches users. Finally, given that there is a notable lack of investment in the sector, the finalization of the agreement with the World Meteorological Organization should help to ensure a certain level of financial viability for the project. This agreement is in the process of being finalized and could help in this respect.

| Assessment of Outcomes | Rating |
|--------------------------------|--------|
| Relevance | S |
| Effectiveness | MS |
| Efficiiency | MS |
| Overall Project Outcome rating | MS |

Table 16: Outcomes ratings

4.3.6. Sustainability: financial (*), socio-political (*), institutional framework and governance (*), environmental (*), and overall likelihood (*)

Financial risks for sustainability

At the time of this evaluation, the project was not generating income from the climatic products made available to those concerned. The mid-term evaluation recommended that the project immediately initiate studies and consultations aimed at analyzing the possibilities of DNM and DNH becoming financially autonomous, and more generally of an SAP. At the time of this assessment, DNM had begun to transform itself into an agency, following a restructuring process. This will enable it to be more autonomous in its management style and search for funding. Other services are free of charge. Finally, the budget earmarked for the project's partner structures is far too low to be able to help maintain equipment, continue training courses and ensure the Internet connection needed for data transmission. In the absence of immediate action, the results of the SAP project risk not lasting because of the lack of maintenance and training.⁸

Socio-economic risks for sustainability

At the time of this evaluation, the stations were installed on government-owned plots of land. In most cases, the technicians in charge of the stations lived in them, to avoid vandalism and to ensure easy access to the data should the need arise. From a social point of view, the project presented no risk. From an economic point of view, the WMO decided to support a certain number of stations so that they could participate in making its data available on dedicated and broader platforms. This helps to reduce the financial risk attached to the project. The disaster management databases are not yet operational and will not be in the short term, due to the lack of a clear strategy to finalize them.

Institutional framework and governance risks for sustainability

Except for the purchase of installed stations, most activities were directly implemented by state structures in the field. The three departments changed directors after the coup d'état in 2021. These changes in directors led to some misunderstandings with the project management and slowed down some of the activities as compromises were sought. At the time of this evaluation, the three departments were unclear about the next steps, even though they knew the project's end was in sight. The under-funding of meteorology, hydrology and emergency management is still an issue.

We used the "Sustainability Coefficient" (SC) indicator for this sustainability criterion. This coefficient is broken down into six factors (a, b, c, d, e). It is rated on a scale of 1 to 4, and is calculated as follows:

⁸ During the time of this evaluation, the project was in talks with the World Meteorological Organisation for a partnership under the Special Operations Funds Facility (SOFF). This would involve funding a portion of the system in exchange for consistently providing data to a meteorological database network. These discussions were not yet concluded, but if successful, they could significantly enhance the project's financial sustainability.

| Factors for assessing the project's level of sustainability | Scoring |
|---|---------|
| a" factor: economic viability | 0/1 |
| Factor "b": environmental considerations | 0.5/0.5 |
| Factor "c": degree of ownership and stakeholder involvement | 0,5/1 |
| d" factors: Institutional anchoring of the project and involvement of the authorities | 1/1 |
| e" factor: taking gender equality into account | 0,5/0.5 |

Table 16: Sustainability rating

The Sustainability Coefficient (DC) is calculated as follows:

CD = 0 + 0.5+ 0.5 + 1+0.5 = 2.5/4

The score interpretation grid is as follows:

4: Probable (P): negligible risk to Sustainability;

3: Moderately probable (MP): moderate risk;

2: Moderately Unprobable (MU): significant risks;

1; Unlikely (U): serious risk.

Based on this concept, the sustainability of the project's achievements appears to be **moderately probable (MP).** In fact, the project has not put in place a strategy for covering the recurring operating costs of investments. Actions to promote positive discrimination against women have been taken, but there is no strategy to ensure their sustainability.

| Sustainability | Rating |
|---|--------|
| Financial resources | U |
| Socio-political | Р |
| Instituitional framework and governance | Р |
| Environmental | Р |
| Overall Likelihood of Sustainability | MP |

Table 17: Sustainability rating

4.3.7. Country ownership

At the central level, several institutional players are involved in planning and implementing project activities. These are mainly the three directorates involved in the project. Infrastructure management is the responsibility of DNM and DH staff in the field. These staff have not been sufficiently trained for this, although they are interested in receiving more training. The project supports the three partner departments in fulfilling their missions. Interviews with staff from these institutions show that they are fully involved in equipment management and maintenance. However, the staff suffer from problems linked to insufficient human resources, training and motivation. The staff of these departments have no idea what to do next once the project is over.

4.3.8. Gender equality and women's empowerment

Gender monitoring is carried out both by the Ministry in charge of women's affairs, through its participation in the Steering Committees, and by the UNDP - indirectly - through the Gender Programme Officer.

PRODOC emphasized the need to increase the proportion of women as direct beneficiaries of the project, both at macro level via a functional SAP benefiting both men and women in the event of an emergency, and at operational level in the use of equipment or training programs.

With an extremely low participation rate of women in the DNM, DNH and CNGCUE (<20%), the project has encouraged the participation of women in project activities. This approach has its limits, as the number of women remains low, without which the female profiles become irrelevant.

This led to awareness-raising campaigns to get women more involved and/or encourage them to attend training courses, but the coverage rate never reached (nor could it have reached) the hoped-for 50%. However, as far as possible, the project aimed for 20-30% female involvement in project activities (training courses in particular).

In fact, gender inequality in technical ministries is a systemic problem that can hardly be solved (or even tackled) by this type of project. Solutions involve efforts well upstream in higher and even secondary education to interest girls in scientific careers and targeted recruitment policies in the civil service sector. The project has tried to reach out to women and men, but there is an imbalance in the number of men and women in these three departments. The targets of 50% men and women for all activities could not be reached because of this problem. At the time of this evaluation, the situation was still the same and does not seem likely to change in the short to medium term.

4.3.9. Cross-cutting issues

As part of the promotion of human rights, the SAP project has tried wherever possible to stimulate the active and meaningful participation of all stakeholders, including marginalized or vulnerable groups such as women and producers. This was demonstrated, for example, by their involvement in the management of equipment set up at the community level. However, the voice of the beneficiary communities was not solicited during the planning process.

To further include vulnerable groups, the project tried to meet their climate information needs by providing them with the means to participate fully in the project. Thus, at community level, locally collected climate information was shared with them. This helped them to make decisions about their production systems, for example.

For the "do no harm" principle: it was integrated into the SAP project by ensuring that the project did not create conflicts or cause unexpected harm. This included updating the project's risk management table throughout implementation.

4.3.10. GEF additionality

The GEF's additionality to the SAP project in Guinea was demonstrated in several ways:

Funding: The GEF provided additional financial resources that might not be available for the SAP project. These funds helped expand the project's scope, finance expensive equipment such as hydrological and meteorological stations, and support training and capacity building. Guinea gained access to national and international expertise in environmental and climate change management through this funding. Through this support, the GEF facilitated the formulation of best practice advice, supported the development of methodologies, and assisted in the analysis and interpretation of climate data in Guinea.

GEF funding has also been important in **building institutional and human capacity in Guinea**. This has resulted in the training of Guinean professionals in fields such as meteorology, hydrology and climate change management, and has helped to improve data collection and analysis systems.

This funding has also helped to facilitate the **partnership with the World Meteorological Organization** through additional funding that would be given to Guinea for the maintenance of certain SAP-financed stations.

Support from Guinea's other meteorological and hydrological partners can be based on the station models already purchased. Similarly, future purchases of stations by the government can be inspired by these models. The need for replication is there, because there aren't enough stations, but no clear strategy is currently available.

4.3.11. Catalytic/Replication Effect

The SAP project in Guinea, funded by the Least Developed Countries Fund (LDCF), has integrated nine priority actions from Guinea's National Adaptation Program of Action (NAPA) to address climate change challenges. It aligns with national priorities, contributing to sustainable development goals in agriculture, fisheries, and livestock sectors. The project has made progress in improving data collection through hydrological and meteorological stations and incorporating climate change in local planning by revising 89 development plans. Despite successes, challenges in financial management, training, and gender mainstreaming have been identified for future improvement. The project has catalytic effects by strengthening resilience to climate change impacts and supporting sustainable natural resource management. Replication potential lies in successful data collection, local planning integration, and capacity building initiatives.

4.3.12. Progress towards impact

The SAP project in Guinea aims to significantly impact several aspects of development and environmental management in the country. While there may be many potential impacts, the following should be noted:

- Strengthening institutional capacity: The project aimed to improve the capacity of Guinean institutions to collect and analyze climate and environmental data. This in turn could help improve decision-making on development and climate change adaptation.

- Improving climate resilience: By integrating climate change adaptation into local development plans, the project aimed to improve community resilience to the effects of climate change.
- Enhanced safety: The reinforcement of hydrological monitoring and data collection, as well as the installation of meteorological and aerological stations, were aimed at improving safety by providing accurate information for maritime and air navigation, and for climate-related risk management.
- Promoting gender equality: Although there was an initial imbalance in training, the aim was to promote gender equality by involving more women in training and giving them a greater role in environmental management.
- Improved emergency management: Although the project did not succeed in sustainably strengthening CNGUE's capacity, the aim was to improve emergency response and disaster management.
- Finally, setting up an early warning system: Despite the challenges encountered, the project aimed to set up an integrated early warning system to help prevent and manage climate-related disasters.

4.3.13. Environmental risks for sustainability

Improving climate resilience involves assessing and managing the risks associated with climate change. This is an essential prerequisite for climate-resilient development. This is where Global Environmental Benefits come into their own.

The SAP project contributes to these in several ways:

- Increased awareness of the impacts of climate change, vulnerability and adaptation: a whole series of training courses have been organized for decision-makers in technical ministries, but this is still not enough, particularly for decision-makers at the political (legislative) level.
- Improving access to better climate information and early warning systems: the project is making a major contribution to this through the refurbishment of equipment and the setting up of a monitoring center and SAP; however, very little has been achieved in terms of offering tailored solutions/products aimed at sectors potentially at high risk from climate change.
- Strengthening institutional and technical capacities and human skills to define, prioritize, implement, monitor and evaluate adaptation strategies and measures: this is the core of the project, with component 1 on equipment and capacity building for DNM, DNH and CNGCUE staff.
- Establishing and strengthening institutional arrangements to lead, coordinate and support the integration of climate change adaptation into relevant policies, plans and associated processes: certain actions are foreseen in the project, such as the financial empowerment of institutions involved in the EWS, so that they can propose an offer adapted to the realities of sectors vulnerable to climate change; to date, the options have not really been analyzed in detail; moreover, the integration of adaptation at the level of an EWS necessarily requires a fluid flow of information, if not data, between key

institutions; yet nothing concrete has been done to set up formalized mechanisms aimed at interconnection between institutions

- The development and strengthening of policies, plans and associated processes for defining, prioritizing and integrating adaptation strategies and measures: the project makes an important contribution to this through the updating of national policies and strategies (e.g. Agriculture, Energy); we regret the absence of the mining sector, but also of other sectors that were not included in the project (e.g. education, health, private sector, etc.).

Compliance with UNDP SES policy: The Environmental and Social Review Procedure (SESP) identified two risks, namely :

- R1: Potential risks to the safety of local communities posed by elements of the construction, operation and maintenance of infrastructures required for the construction and/or reinforcement of networks linked to climate observation. This risk proved irrelevant.
- R2: Failure of structural elements of the infrastructure needed to build/enhance the climate observation network, posing a risk to communities.
 This risk was irrelevant during the project, as none of the project's activities adversely impacted the environment.

On the other hand, a social risk that was present but not considered in this project was the repossession of sites where (abandoned) equipment had been installed and which had been invaded by communities. This was a more pressing and common problem for DNM.

The project also rehabilitated premises (office, conference room and restaurant) to compensate for the lack of infrastructure. These renovations were carried out before the coup d'état, and the new authorities decided to redevelop the entire area where these infrastructures are located. This redevelopment would destroy all the buildings and infrastructure there, including those rehabilitated by the project. At the time of this evaluation, the SESP did not contain any analysis of the situation, and the UNDP was in discussion with the Government to find a solution.

As the project is designed to mitigate the adverse effects of climate change, we can say that environmental aspects are generally considered. Investments in meteorological, hydrological and environmental emergency management equipment are relevant, given the authorities' lack of significant interest in these sectors prior to the project.

5. Key findings, conclusions, recommendations and lessons learned

5.1. Key findings

The project is highly relevant to climate change adaptation in Guinea. However, the acquisition of primary hydrological and meteorological data remains partial and generally not up to international standards. Data quality and the ability to transform it into relevant information are essential to anticipate the direct effects of climate change on the country in the form of extreme

events, and to understand the long-term trends of these phenomena (frequency and intensity). Consequently, the implementation of a modern early warning system (EWS) based on (near) realtime information, in line with international standards, is necessary to assess climate risks and provide decision-makers with information enabling them to better respond to emergencies and anticipate future trends with appropriate adaptation measures.

Several local impact projects have included specific capacity-building components in terms of human resources and equipment for climate data analysis and response to extreme events. However, it has been difficult to reintegrate equipment and expertise into the institutions responsible for climate data analysis (DNM and DNH) and response to extreme events (CNGCUE). The SAP project adopts a more holistic and integrated approach, offering more systematic support to build human resources and equipment capacity.

However, this type of project is more complex to implement, as it involves institutions directly dependent on three different ministries. The project was highly relevant to climate change adaptation in Guinea. Still, its project design did not sufficiently consider the difficulties of coordinating information flows between institutions to make the EWS work in Guinea. It would have been preferable to include an additional component to support institutional aspects of SAP, such as financial empowerment of institutions and institutional arrangements to process and transmit information between DNM, DNH and CNGCUE. Although most of the equipment has been installed, and staff have been strengthened in technical skills, there is little evidence that (formalized) mechanisms for transmitting information between institutions have been put in place.

The overall objective and component scores are satisfactory. The project has acquired and installed various hydrological and meteorological stations nationwide. Despite difficulties linked to the pandemic and political instability, it has successfully entered its third year of implementation. While Component 1 was generally well executed, Component 2 experienced delays due to political and health problems.

The project acquired and installed automatic recorders and limnimeters to improve the hydrological network in Guinea. Contracts were signed with the Ministry of Local Development and the Ministry of Energy for integrating climate change adaptation into 15 PDLs and revising the LPSE, respectively. Populations and authorities in 5 regions, 7 prefectures and the city of Conakry supported the LDP revision program. 542 people, including 104 women, took part in 15 communal forums and identified adaptation actions to be integrated into the PDLs. The communities identified 280 actions to reduce the negative effects of climate risks on ecosystems and production systems.

The project has made significant progress in terms of effective implementation, but there is still work to be done to resolve technical problems of data transmission, finalize equipment installations and establish inter-institutional coordination for SAP.

The project has contributed to global environmental benefits through increased awareness of climate change impacts, improved access to climate information and early warning systems, and institutional and technical capacity building. The project was confronted with several events requiring adaptive management.

The following table gives the separate and consolidated rating for the SAP project:

| 1- Monitoring and evaluation | Rating ⁹ |
|--|---------------------|
| Monitoring and evaluation design at entry | S |
| Implementation of the monitoring and evaluation plan | MS |
| Overall quality of monitoring and evaluation | MS |
| 2- Execution/realization agency | Rating |
| Quality of UNDP implementation | S |
| Quality of execution: execution agency | MS |
| Overall quality of implementation and execution | MS |
| 3- Evaluation of results | Rating |
| Relevance | S |
| Efficiency | MS |
| Efficiency | MS |
| Overall rating of the project | MS |
| 4- Sustainability | Rating |
| Financial resources | U |
| Sociopolitics | Р |
| Institutional framework and governance | Р |
| Environmental | Р |
| Overall probability of sustainability : | MP |

| Table | 18: | Conso | lidated | ratings |
|-------|-----|-------|---------|---------|
|-------|-----|-------|---------|---------|

5.2. Lessons learned

At the end of the project, several lessons were learned.

Significant impact of COVID-19 on project capacity: Equipment costs far exceeded Prodoc forecasts. With the advent of COVID-19, planning in the Prodoc proved insufficient. The closure of borders and global logistical disruptions led to a sharp rise in the price of goods on the international market. The number of climate stations to be purchased was reduced and their installation delayed. Similarly, the training courses that were to have mobilized international experts could not be held because of the restrictions on movement. The project had to rely on local experts for the majority of tasks. The advent of a crisis on the scale of covid was not

⁹ The scale:100% or more: Very Satisfactory (HS), no shortcomings;95 to 99%: Satisfactory (S), minor shortcomings;80 to 94%: Moderately Satisfactory (MS); 50 to 79%: Moderately Unsatisfactory (MI), major shortcomings;40 to 49%: Unsatisfactory (I), major problems; Less than 40%: Very Unsatisfactory (TI), serious problems.

anticipated in the Prodoc risk analysis. During the implementation of the project, the risk dashboard was diligently updated on a regular basis to ensure effective risk management. Several meetings were organized specifically for this purpose, bringing together key stakeholders to assess and address potential risks proactively. The risk dashboard served as a vital tool in identifying and prioritizing risks, enabling the project team to take timely and informed actions to mitigate their impact.

Amid the challenges posed by the COVID-19 pandemic, the project demonstrated adaptability and resilience by diverting some funds to support essential prevention measures. Recognizing the significance of safeguarding the health and well-being of project participants and the wider community, these diverted funds were utilized to implement necessary COVID-19 prevention protocols. This proactive approach contributed to maintaining the continuity of project activities while safeguarding the health of personnel and beneficiaries.

It is important to always revisit planning documents following such events (which are unforeseen).

Rehabilitating the DNM buildings to house a project headquarters with a meeting room and refectory was initially a good initiative. It was difficult for the project to find good offices, which is why this decision was made. The refurbishment was also intended to help strengthen the DNM's infrastructure, but unfortunately the new government's plans to use the space for a public garden disrupted this objective. It would have been difficult for the project to know this, given that the rehabilitation of these buildings preceded the advent of the new government. It is important, however, to always update the risk analysis table in case of a change of this nature to be prepared for any eventuality.

The lack of an exit strategy put in place sufficiently before the end of the project may compromise its sustainability. The project has undertaken to support Guinea in rehabilitating its network of climate stations. The system set up requires recurring maintenance, training and connection costs that the government had not yet covered by the end of the project. This threatens the very sustainability of the project's achievements. It is important to put in place and implement an exit/perpetuation strategy from the outset of project activities, to ensure that the benefits can be sustained for as long as possible, following the cessation of initial funding.

5.3. Recommendations

At the end of this evaluation, the following Recommendations were made to the stakeholders to increase the benefits of the project or improve the performance of similar projects in the future:

| Ν | Recommendation | Recipients | Importance | Priority | Delay |
|---|---|------------|------------|----------|--------|
| 1 | Immediately draw up a consensual plan for the exit and handover of facilities to management. | UGP/PNUD | High | High | Urgent |
| 2 | Provide assistance to the three directorates by providing | UGP/PNUD | High | High | Urgent |

| project m them to | aterials to enable sustain relevant | | | | |
|----------------------|--|---------------|------|------|--------|
| activities | even after the | | | | |
| project's | completion, in | | | | |
| addition t | o any funding they | | | | |
| may receiv | <u>e from WMO.</u> | | | | |
| 3 Reconstitu | te the project's | | | | |
| aocument | the list and | | | | |
| characteri | stics of the stations | DNM/DNH/CNGUE | High | High | Urgent |
| and of the | neonle trained) and | | | | |
| provide it | to management. | | | | |
| 4 Finalize th | e training plan for | | | | |
| field staff | , at least for the | | | | |
| maintenar | ice of equipment | DNM/DNH/CNGUE | High | High | Urgent |
| that has be | en commissioned | | | | |
| 5 Ensure that | t the data collected | | | | |
| by all stati | ons (particularly the | | | | |
| hydrologic | al station, whose | | | | |
| data is sto | red outside Guinea) | UGP/PNUD | High | High | Urgent |
| are kept ir | databases to which | | | | |
| the releva | it departments have | | | | |
| access. | ha interconnection | | | | |
| between c | lifferent systems for | | | | |
| an integr | ated early warning | DNM | High | High | Urgent |
| system | ated early warning | | | | |
| 7 For future | projects, increase a | | | | |
| package of | activities to support | | | | |
| the institu | tional and financial | UNDP | High | High | Medium |
| sustainabi | ity of the project | | | | |
| 8 For future | projects, a simple | | | | |
| system fo | or monitoring and | | | | |
| accounting | g for co-financing | UNDP | High | High | Medium |
| should be | put in place right | | | | |
| from the s | tart. | | | | |
| 9 For future | projects, include a | | | | |
| componen | t on the creation of | | | | |
| d Tavor | able institutional | UNDP | High | High | Medium |
| institution | int that addresses | | 1 | | |
| monulun | al underfunding in | | | | |

Table 19 : Recommendations

6. Appendices

Annex 1: Terms of reference

Services: Final evaluation of the SAP project

Project title: Strengthening the climate information and early warning system for resilient development and adaptation to climate change in Guinea - SAP".

Title of the consultation: Final evaluation of the project "Strengthening the climate information and early warning system for resilient development and adaptation to climate change in Guinea - SAP".

Place of employment: At home and in Guinea (Conakry and inland) Duration: 25 working days

Scheduled start date: February 27, 2023

1. INTRODUCTION

In accordance with UNDP and GEF monitoring and evaluation policies and procedures, all medium and large-scale projects supported by UNDP and funded by GEF must undergo a final evaluation (FE) at the end of the project. The present Terms of Reference (ToR) set out the expectations associated with the FE of the project entitled "Strengthening the Climate Information and Early Warning System for Resilient Development and Adaptation to Climate Change in Guinea - SAP, PIMS 5552" implemented by the Direction Nationale de la Météorologique of the Ministry of Transport. The project started on July 09, 2019 and is currently in its 4^e year of implementation. The FE process is to follow the guidelines described in the document "<u>Guidelines for conducting final evaluations of UNDP-supported and GEF-funded projects</u>".

2. PROJECT BACKGROUND AND LOCATION

Guinea is one of the most heavily watered countries in the West African sub-region, with most countries dependent on rivers that originate there. It comprises four natural regions with different climatic and hydrographic conditions, resulting in varying degrees of vulnerability: Guinée Maritime or Basse Guinée, Moyenne Guinée, Haute Guinée and Guinée Forestière. Despite this abundance, which is strongly linked to the water resources that support farming and mining, the main pillars of the national economy and the living conditions of the mainly rural population, Guinea remains one of the poorest countries in the world, due in particular to the effects of the climatic changes that have been observed for several decades. These climatic changes include a drop in rainfall, recurrent droughts since the 1970s, and frequent early flooding (PANA, July 2007). As a result of the drying up of many watercourses, the drying up of soils, the destruction of plant cover, the drop in agricultural, pastoral and fisheries production, and the resurgence of water-borne diseases, exacerbated by unsustainable production system practices, the country's development planning efforts are struggling to produce the expected results in this country in the process of recovering from the devastating effects of the 2015 Ebola virus disease.

Despite the many efforts underway to address adaptation in the most vulnerable vital socio-economic sectors (agriculturelivestock, water, coastal zones and forestry), the country continues to face precarious living conditions in rural areas, based on a primary sector that is still mainly rain-dependent. This sector is severely affected by low production and crop losses due to poor forecasting, preparedness, response and adaptation capacities (PANA, July 2007). The Strengthening the Climate Information and Early Warning System for Development Resilience and Adaptation to Climate Change in Guinea (SAP) project aims to facilitate the integration of climate change adaptation into the medium- and long-term planning and budgeting of priority climate-sensitive sectors in the most vulnerable areas.

It is against this backdrop that Guinea plans, as an alternative option, to set up a reliable integrated information system (including a climate and socio-economic database) to remove this barrier and guide adaptation actions. This alternative will make it possible to provide reliable climate information and products in the form of forecasts, alerts and targeted adaptation options. These adaptation actions will then be integrated into sectoral and local planning and budgeting. The system set up to monitor and evaluate adaptation processes and practices will enable us to capitalize on the most appropriate techniques and technologies, based on risk assessments. Overall, by helping to remove barriers through a reliable system of climatic and socio-economic information and capacity-building for stakeholders, the project will provide ongoing actions with greater effectiveness in forecasting, anticipating, preparing for, responding to and adapting to hazards, for inclusive and sustainable development.

Despite the many efforts undertaken to manage the risks associated with climate change in the most vulnerable and vital socioeconomic sectors (agriculture, livestock, water, coastal and forestry areas), the country continues to face precarious living conditions in rural areas that depend on a primary sector that is still mainly rain-dependent. This sector is severely affected by obstacles linked to low production and crop losses due to weak forecasting, preparedness, response and adaptation capacities (PANA, July 2007). The aim of the project: Strengthening climate information and early warning systems for climate-resilient development and climate change adaptation in Guinea is to facilitate the integration of climate change adaptation into medium and long-term planning and budgeting for priority climate-sensitive sectors in the most vulnerable areas.

To this end, Guinea plans to set up a reliable integrated information system (including a climatological and socio-economic database) to remove this obstacle and guide adaptation actions. This alternative will provide reliable climate information and products in the form of forecasts, warnings and targeted adaptation options. These adaptation actions will then be integrated into sectoral and local planning and budgeting. The mechanism set up to monitor and evaluate adaptation processes and practices will make it possible to capitalize on the most appropriate techniques and technologies on the basis of risk analysis. Overall, by helping to remove obstacles through a reliable climate and socio-economic information system and capacity-building for stakeholders, the project will provide ongoing activities with more effective forecasting, anticipation, preparedness, response and adaptation for inclusive sustainable development.

The specific results of the project are :

- Outcome 1: The capacity of national hydro-meteorological services to monitor extreme weather events and climate change is strengthened.
- Output 1.1: The hydrological network is strengthened for hydrological monitoring and data collection to provide reliable hydrological information.
- Output 1.2: The meteorological network is strengthened for climate monitoring and the provision of reliable climate information and products and early warnings with options for adaptation to the adverse effects of climate risks.
- Output 1.3: Meteorological Radar proxies to be used to monitor severe weather phenomena using lightning sensors are strengthened.
- Output 1.4: A national climate database is up and running
- Output 1.5: Satellite data/images are coupled with climate network data to provide climate information and products required for simulation.
- Output 1.6: Female and male DNM, DNH and DNAGR staff are empowered to use and maintain equipment.
- Outcome 2: Climate products and services are accessible and used efficiently and effectively to produce warnings for producers and to draw up medium- and long-term climate-resilient development plans.
- Output 2.1: Capacities to develop and use climate products and services are created among men and women.
- Output 2.2: Climate products and services that meet the needs of end users (men and women°) are developed
- Output 2.3: Capacities to integrate climate products and services into development planning processes are created for the benefit of female and male staff involved in planning and the most vulnerable sectors.
- Output 2.4: Institutional capacities for coordinating early warning systems and sharing climate information and products are strengthened.
- Output 2.5: A strategy for the financial sustainability of the EWS and for the production and dissemination of climate information is developed.
- Output 2.6: Access to and use of early warning climate information and products for the benefit of diverse users of both sexes is promoted.

The project covers the whole country, with a total budget of US\$5,350,000, including US\$5,000,000 from GEF and US\$350,000 from UNDP.

The project contributes to SDGs 1, 2, 9, 12, 13 and 15 and is aligned with national priorities PNDES 2016-2020, United Nations Development Assistance Frameworks (UNDAF 2018-2022), UNDP Strategic Plans (SP 2018-2021, SP 2022-2015), UNDP Guinea Country Programme Documents (CPD 2018-2022) and UNDP Solution Signatures (Resilience and Environment).

The project underwent a mid-term evaluation in 2022, whose main conclusions on project strategy, progress towards results, implementation' and responsive management, efficiency, sustainability and gender are satisfactory, despite the execution of part of the project during COVID-19.

The Covid-19 pandemic in Guinea officially started on March 12, 2020. Management measures have been enacted and are being implemented, despite the difficulties the country is experiencing. A dynamic national emergency plan has been drawn up to support these measures. Restrictive measures such as travel restrictions and grouping people together (workshops) have had an impact on certain project activities.

3. EF OBJECTIVE

The EF report should assess the achievement of project results against what was planned, and draw lessons that can both improve the sustainability of project benefits and contribute to the overall improvement of UNDP programming. The EF report promotes accountability and transparency, and assesses the extent of the project's achievements.

The main objective of the evaluation is to assess the results of the SAP project's implementation over the period 2019-2023. Specifically, this will involve: (i) assessing the program's relevance to the national context and national priorities, (ii) consistency with international standards and criteria from the point of view of taking global priorities into account, which constitutes another angle of approach (iii) assessing the project implementation strategy; (iv) assessing the effectiveness and efficiency of project implementation (v) assessing the effects and impact on the beneficiary populations and the environment. vi) examine the project strategy and the risks concerning the sustainability of project results.

4. EF APPROACH AND METHODOLOGY

The EF report must provide information based on credible, reliable and useful factual data.

The FR team should review all relevant sources of information, including documents developed during the preparation phase (such as the FIP, the UNDP Inception Plan, the UNDP/PDRES Environmental and Social Risk Detection Procedure), the project document, project reports including annual MTRs, project budget revisions, lessons learned reports, national strategic and legal documents, and any other material the team deems useful to support this assessment. The FE team should review the GEF focal area baseline and mid-term baseline indicators/monitoring tools submitted to the GEF at the time of the Director's approval and at mid-term milestones, as well as the baseline indicators/monitoring tools to be completed prior to the start of the FE field mission.

The RU team must follow a participatory and consultative approach ensuring active involvement of the project team, government counterparts (the GEF operational focal point), implementing partners, the UNDP country office, the regional technical advisor, direct beneficiaries and other stakeholders.

Stakeholder involvement is essential to the success of the FE. This engagement should consist of interviews with stakeholders who have responsibilities related to the project, including the Direction Nationale de la Météorologie, Ministry of Transport, UNDP; executing/implementing agencies (), senior civil servants and team/component leaders, key experts and consultants in the field concerned, the project steering committee, project beneficiaries, sectoral services (Direction Nationale de l'Hydrologie, Centre National de Gestion des Catastrophes et Urgences Environnementales, la Direction Nationale de la Décentralisation, la Direction Générale du Bureau de Stratégie et Développement de l'environnement, la Direction Générale du Bureau de Stratégie et Développement de Stratégie et Développement des Mines,), the academic world (ISAV de Faranah, ENATEF de Mamou, local authorities and CSOs, etc.), and the public authorities. In addition, the EF team is expected to carry out missions to project sites, notably in the country's prefectures.

The specific design and methodology of the EF should emerge from consultations between the EF team and the above parties as to what is appropriate and feasible to achieve the aim and objectives of the EF and answer the evaluation questions, given budget, time and data constraints. The FR team must use gender-sensitive methodologies and tools and ensure that gender equality and women's empowerment, as well as other cross-cutting issues and the SDGs, are integrated into the FR report. The final methodological approach, including the timing of interviews, field visits and data to be used in the evaluation, must be clearly set out in the initial FE report and thoroughly discussed and agreed between UNDP, stakeholders and the FE team. The final report should describe the overall approach adopted for the FE and the rationale for this approach, making explicit the underlying assumptions, challenges, strengths and weaknesses of the evaluation methods and approach.

Thus, any limitations encountered during the FE process and any adjusted evaluation approach/methodology, if any, that may be required to implement the evaluation effectively, including safety tips, in-depth desk reviews, the primary use of national consultants, virtual stakeholder meetings and virtual interviews by the evaluators, must be detailed in the initial inception report and the final final evaluation report.

5. DETAILED SCOPE OF EF

The FE must assess the project's performance against the expectations set out in the project's logical/results framework (see Annex A of the ToR). It must assess the results against the criteria described in the Guidelines for conducting final evaluations of UNDP-supported and GEF-funded projects:

https://erc.undp.org/pdf/TE_GuidanceforUNDP-supportedGEF-financedProjects.pdf

The findings section of the FR report should cover the topics listed below. A full outline of the content of the FR report is provided in Appendix C of the ToR.

Criteria requiring a rating are marked with an asterisk (*). Findings

- i. Project design and development
- National priorities and ownership
- Theory of change
- Gender equality and women's empowerment
- Social and environmental protection measures
- Analysis of results framework: project logic and strategy, indicators
- Assumptions and risks
- Lessons learned from other relevant projects (e.g. in the same focal area) incorporated into project design
- Planned stakeholder participation
- Links between the project and other interventions in the sector
- Management procedures
- ii. Project implementation
- Adaptive management (modification of project design and products during implementation)
- Genuine stakeholder participation and partnership agreements
- Project financing and co-financing
- Monitoring and evaluation: design at entry (*), implementation (*) and overall M&E evaluation (*)
- Implementing partner (UNDP) (*) and executing agency (*), overall project control/implementation and execution (*)
- Risk management, including environmental and social standards

iii. Project results

- Evaluate the achievement of results against indicators by reporting on the level of progress for each objective and result indicator at the time of the EF and noting final achievements
- Relevance (*), Effectiveness (*), Efficiency (*) and overall project achievement (*)
- Sustainability: financial (*), socio-political (*), institutional framework and governance (*), environmental (*) and overall probability of sustainability (*)
- Country ownership
- Gender equality and women's empowerment
- Cross-cutting issues (poverty reduction, improved governance, climate change mitigation and adaptation, disaster prevention and recovery, human rights, capacity building, South-South cooperation, knowledge management, volunteerism, etc., as appropriate)
- GEF additionality
- Catalyst role / Replication effect
- Progress towards impact
- Key findings, conclusions, recommendations and lessons learned
- The FR team must include a summary of the main findings in the FR report. Findings should be presented as statements of fact based on data analysis.
- The conclusions section is written in the light of the findings. Conclusions should be comprehensive and balanced, broadly supported by evidence, and consistent with the findings of the FE. They should highlight the project's strengths, weaknesses and achievements, answer the main evaluation questions and provide food for thought for the identification and/or resolution of significant problems or issues of relevance to project beneficiaries, UNDP and GEF, including gender equality and women's empowerment issues.
- The report should present concrete, practical, achievable recommendations for action or decisions, aimed at the target users of the assessment. Recommendations should be specifically supported by evidence and linked to findings and conclusions relating to the key issues addressed by the assessment.

- The EF report should also include lessons that can be learned from the evaluation, including best practices regarding relevance, performance and success, which can provide knowledge gained from particular circumstances (the programming and evaluation methods used, partnerships, financial levers, etc.) applicable to other GEF and UNDP interventions. Where possible, the RU team should include examples of good practice in project design and implementation.
- It is important that the conclusions, recommendations and lessons learned from the EF report integrate gender equality and women's empowerment.

The FE report will include a table of evaluation ratings, as shown below:

| ToR Table 2: Evaluation scoring table | | | |
|--|--------------------|--|--|
| Monitoring and evaluation (M&E) | Note ¹⁰ | | |
| M&E design at entry | | | |
| Implementation of the M&E plan | | | |
| Overall M&E quality | | | |
| Implementation and execution | Note | | |
| Quality of UNDP implementation/control | | | |
| Quality of execution by implementing partner | | | |
| Overall quality of implementation/execution | | | |
| Evaluation of results | Note | | |
| Relevance | | | |
| Efficiency | | | |
| Efficiency | | | |
| Overall project completion | | | |
| Sustainability | Note | | |
| Financial resources | | | |
| Socioeconomic | | | |
| Institutional and governance framework | | | |
| Environmental | | | |
| Overall probability of sustainability | | | |

6. SCHEDULE

The total duration of the FR will be 25 working days over a period of 06 weeks from the date of contract signature. The provisional schedule is as follows:

| Calendar | Activity |
|----------------------------|---|
| February 20, 2023 | Closing date for applications |
| February 24, 2023 | EF team selection |
| February 25, 2023 | EF team preparation period (communication of project documents) |
| February 27, 2023 (2 days) | Document review and preparation of initial FE report |
| March 2, 2023 | Finalization and validation of the initial FE report - no later than the start of the FE assignment |
| March 3, 2023 (12 days) | FE mission: meetings with stakeholders, interviews, site visits, etc. |
| March 15, 2022 | Mission closing meeting and presentation of initial findings - at the earliest at the end of |
| | the FE mission |
| March 20, 2023 (5 days) | Preparation of draft EF report |
| March 21, 2023 | Draft EF report circulated for comment |
| March 24, 2022 (2 days) | Integration of comments on the draft FR report into the audit trail and finalization of the FR |
| Warch 24, 2025 (2 days) | report. |
| March 25, 2023 | Feedback to stakeholders |
| March 29, 2023 (4 days) | Translation of the final evaluation report from French into English |
| March 30, 2023 | Expected date of completion of the entire FE process |

¹⁰ Achievements, effectiveness, efficiency, M&E, implementation/control and execution, relevance are rated on a six-point scale: 6=Very satisfactory (TS), 5=Satisfactory (S), 4=Moderately satisfactory (MS), 3=Moderately unsatisfactory (MI), 2=Insatisfactory (I), 1=Very unsatisfactory (TI). Sustainability is rated on a four-point scale: 4=Probable (P), 3=Moderately Probable (MP), 2=Moderately Unlikely (MI), 1=Improbable (I).

Options for site visits should be included in the initial FE report.

| • | |
|----|-----------------|
| 7. | EF DELIVERABLES |

| # | Delivery item | Description | Calendar | Responsibilities |
|---|---|---|--|--|
| 1 | Initial EF report | The EF team defines the objectives, methodology and timetable of the EF. | No later than two weeks before the EF mission: (February 27, 2023) | RU team submits initial report to commissioning unit and project management |
| 2 | Presentation | First findings | End of FE mission: (March 15, 2023) | The RU team presents its findings to the commissioning unit and project management. |
| 3 | Draft EF report | Complete draft report (drawn up using the content guidelines in Appendix C of the ToR) with appendices | Within three weeks of the end of the EF mission: (March 20, 2023) | The RU team submits the draft report to the commissioning unit; it is then reviewed by the CTR, the project coordinating unit and the GEF PFO. |
| 5 | Final EF* report in French + audit trail | Revised final report and FR audit trail in which the FR details how comments received in the final FR report have been acted upon (or not) (see template in Appendix H of ToR). | Within one week of receiving comments on the draft report: (March 25, 2023) | The RU team submits both documents to the commissioning unit. |
| | Final EF* report in English with all appendices | Final EF* report translated into English with all appendices | March 29, 2023 | EF team submits report in English |

*All final EF reports will be subjected to a quality analysis by the UNDP Independent Evaluation Office (IEO). For more details on the quality analysis of decentralized evaluations carried out by the IEO, please refer to section 6 of the UNDP Evaluation Guide¹¹

8. EF PROVISIONS

The main responsibility for managing the EF lies with the commissioning unit. The Mandating Unit for this EF project is the UNDP Guinea Country Office.

The commissioning unit will enter into a contract with the evaluators and ensure that the RU team is provided with per diems and in-country travel facilities in good time. The project team will be responsible for contacting the RU team, providing them with all necessary documents, preparing interviews with stakeholders and organizing field visits.

Country Office Monitoring & Evaluation Specialists will provide advisory support to ensure quality control and conformity of the evaluation process and report.

The team of consultants selected to carry out the evaluation will be required to submit the methodological approach, collect and analyze data, develop the draft report, the Power Point presentation and the final report, in accordance with the terms of reference. The team of consultants will be able to contact the commissioning unit for any support it may require in carrying out the evaluation.

9. EF TEAM COMPOSITION

An independent evaluator will lead the EF - a team leader with experience of projects and evaluations in other regions. The international consultant will be responsible for the overall design, data collection, writing and quality of the FE report, etc.

The evaluator must not have been involved in the preparation, formulation and/or implementation of the project (including the drafting of the Project Document), must not have carried out the mid-term evaluation of this project and must not have any conflict of interest in relation to project-related activities.

The evaluators will be selected to ensure that the team has maximum expertise in the following areas:

The International Consultant must have the following qualifications:

Education

• Graduate degree (Bac + 5) in one of the following fields: Development planning, development economics, climate change and sustainable development, or a closely related discipline or field.

Experience

¹¹ Available at: http://web.undp.org/evaluation/guideline/French/section-6.shtml

- Experience in relevant technical fields (climate change, climate information, early warning systems) for at least 10 years
- Experience in evaluating similar projects as an international consultant and team leader at least 5 times
- Relevant experience of results-based management evaluation methods
- Experience in applying SMART indicators and rebuilding or validating reference scenarios
- Adaptive management skills, as applied to the GEF Climate Change Adaptation focal area
- Proven understanding of gender issues and climate change adaptation
- Experience in gender-sensitive evaluation and analysis
- Experience of working in West African countries, good knowledge of development issues in Guinea would be an asset
- Experience in the evaluation/review of development projects within the UN system will be considered an asset.
- Experience in implementing distance assessments will be considered an asset.

Language

- Fluency in written and spoken French.
- Fluency in written and spoken English.

Evaluation grid

International Consultant

| Crite | ria | Maximum score |
|-------|--|---------------|
| | | |
| 1 | Graduate degree (Bac + 5) in one of the following fields: Development planning, development economics, climate change and sustainable development, adaptation and resilience, or in a closely related discipline or field. | 15 pts |
| 2 | Experience in relevant technical fields (climate change, climate information, early warning systems) for at least 10 years | 15 pts |
| 3 | Experience in evaluating similar projects as an international consultant and team leader at least 5 times | 20 pts |
| 4 | Relevant experience of results-based management evaluation methods | 5 pts |
| 5 | Experience in applying SMART indicators and rebuilding or validating reference scenarios | 5 pts |
| 6 | Adaptive management skills, as applied to the GEF Climate Change Adaptation focal area | 5 pts |
| 7 | Proven understanding of gender issues and climate change adaptation | 5 pts |
| 8 | Experience in gender-sensitive evaluation and analysis | 5 pts |
| 9 | Experience of working in West African countries, good knowledge of development issues in Guinea would be an asset | 5 pts |
| 10 | Proven analytical skills | 15 pts |
| 11 | Experience in the evaluation/review of development projects within the UN system would be considered an asset. | 5 pts |
| | Total | 100 pts |

10. EVALUATOR'S CODE OF ETHICS

The RU team is required to adhere to the highest ethical standards and to sign a code of conduct upon acceptance of the assignment. The evaluation will be conducted in accordance with the principles set out in the UNEG "Ethical Guidelines for Evaluation". The evaluator must protect the rights and confidentiality of informants, interviewees and stakeholders by taking steps to ensure compliance with legal and other relevant codes governing data collection and communication. The evaluator must also ensure the security of the information collected before and after the evaluation, and follow protocols to guarantee the anonymity and confidentiality of information sources where appropriate. Furthermore, information and data collected as part of the evaluation process must be used solely for the evaluation and not for any other purpose without the express authorization of UNDP and its partners.

11. PAYMENT TERMS

 20% of payment to be made upon satisfactory submission of the final version of the initial FE report and approval by the commissioning unit.

- Payment of 40% of the fee upon satisfactory submission of the draft EF report to the commissioning unit.
- 40% payment after satisfactory submission of the final EF report in French and English and approval by the commissioning unit and CTR (via signatures on the EF report approval form), and once the EF audit trail has been submitted.

Criteria for issuing the final 40% payment¹²

- Final EF reports in French and English include all the requirements set out in the EF ToR and follow the EF guidelines.
- The final EF report is clearly written, logically organized and specific to the project concerned (the text has not been copied and pasted from other mid-term and final evaluation reports).
- The audit trail includes the responses and justifications for all the comments identified.

12. APPLICATION PROCESS¹³

Recommended presentation of the proposal :

- a) Letter of confirmation of interest and availability using the <u>template¹⁴</u> provided by UNDP;
- b) **CV** and **Personal History Form** (<u>P11)</u>¹⁵;
- c) Brief description of work approach/technical proposal indicating why the person feels best placed to carry out the assignment, and proposed methodology indicating how it will approach and carry out the assignment (1 page max)
- d) Financial proposal indicating the total all-inclusive amount of the contract and all other associated travel expenses (airfare, per diem, etc.), breaking down the costs using the template attached to the <u>model Letter of Confirmation of</u> Interest. In the event that a candidate works for an organization/company/institution and foresees the invoicing by his/her employer of management fees in connection with the procedure for making him/her available to UNDP under a reimbursable loan agreement (RLA), the candidate should indicate this here and ensure that all associated costs are included in the financial proposal submitted to UNDP.

Proposal evaluation criteria: only proposals meeting the criteria will be evaluated. Proposals will be evaluated using a combined scoring method - where training and experience in similar roles will count for 70% and the proposed fee will count for 30% of the total score. The contract will be awarded to the candidate who obtains the best combined score and has accepted the UNDP's general terms and conditions.

¹² The commissioning unit is obliged to make payments to the RU team as soon as the conditions set out in the ToR have been met. If there is an ongoing discussion between the commissioning unit and the RU team concerning the quality and completeness of the final deliverables, the regional M&E advisor and the vertical fund management must be consulted. If necessary, the commissioning unit's senior management, the procurement services unit and the legal support office will also be informed so that a decision can be made as to whether or not to withhold payment of any amounts that may be due to the evaluator(s), suspend or terminate the contract and/or remove the contractor concerned from all relevant lists. For further details, see UNDP's Individual Contract Policy:

https://popp.undp.org/_layouts/15/WopiFrame.aspx?sourcedoc=/UNDP_POPP_DOCUMENT_LIBRARY/Public/PSU_Individual%20Contract_Individual%20Contract%20Policy.docx&action=default

¹³ Evaluators must be recruited in accordance with the guidelines for the recruitment of consultants in the POPP <u>https://popp.undp.org/SitePages/POPPRoot.aspx</u>

 $[\]frac{https://intranet.undp.org/unit/bom/pso/Support%20documents\%20on\%20IC\%20Guidelines/Template\%20for\%20Confirmation\%20of\%20Financial%20Proposal.docx}{} \label{eq:constraint}$

¹⁵ procurement-notices.undp.org.doc (live.com)

| Annex 2: Assessment | mission | itinerary |
|---------------------|---------|-----------|
|---------------------|---------|-----------|

| N° | Dates/Locations | Comments |
|----|-------------------------------|--------------------|
| | Friday March 30 | |
| | Arrival in Conakry | |
| | | |
| | Saturday, April 1 | |
| | On-site travel | |
| 1 | Site 1 | Producers, town |
| 2 | Site 2 | halls, prefectures |
| 3 | Site 3 | and projects |
| | | |
| | Sunday, April 2 nd | |
| 4 | Site 4 | Producers, town |
| 5 | Site 5 | halls, prefectures |
| 6 | Site 6 | and projects |
| | | |
| | Monday 3rd | |
| 7 | Site 7 | Producers, town |
| 8 | Site 8 | halls, prefectures |
| | | and projects |
| 9 | Back to Conakry | |
| | | |

Annex 3: List of persons/institutions interviewed

| | Tuesday 4 th | | | |
|----|--|--|--|--|
| 1 | UNDP: Programme Manager | | | |
| 2 | UNDP: Monitoring & Evaluation - Finance | | | |
| 3 | PMU: Coordinator | | | |
| 4 | PMU: Monitoring & Evaluation - thematic experts | | | |
| | | | | |
| | Wenesday 5th | | | |
| 6 | Direction Nationale de la Météorologie | | | |
| 7 | Direction Nationale de l'Hydraulique | | | |
| 8 | Service National de Gestion des Catastrophes et des Urgences | | | |
| | Environnementales (National Service for Disaster and | | | |
| | Environmental Emergency Management) | | | |
| | | | | |
| | Thursday 6th | | | |
| 9 | Direction Nationale de l'Hydrologie | | | |
| | | | | |
| 10 | Direction Nationale de l'Environnement | | | |
| | | | | |
| 11 | Ministry of Decentralization and Territorial Administration | | | |
| | (MDAT) | | | |
| | | | | |
| | Friday 7 ^m | | | |
| 12 | ReNaSCEDD (National Civil Society Network for the | | | |
| | Environment and Sustainable Development) | | | |
| 13 | PREM (Partenariat Recherche, Environnement et Media). | | | |

Annex 4: List of documents reviewed

- 1. Annex 1, Social and Environmental Screening Template PIF stage
- 2. Annex D, GEF Tracking Tools
- 3. Annex G, Gender Analysis and Action Plan
- 4. Fiduxis, audit report, December 2020
- 5. Fiduxis, audit report, December 2021
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| Annex 5: | Matrix | of ev | aluation | questions |
|----------|--------|-------|----------|-----------|
|----------|--------|-------|----------|-----------|

| Evaluation criteria questions | Indicators | Sources | Methodology | | | |
|---|---|--|---|--|--|--|
| 1. project relevance: how does the project relate to the main objectives of the GEF focal area and to local, regional and national climate change and development priorities? Extent to | | | | | | |
| which project objectives and activities match the needs of the target group and national priorities and policies. | | | | | | |
| Match between project objectives and needs of | Degree to which the project meets the needs of the | - Various Reports | Methods/techniques | | | |
| beneficiaries (institutions and | people/institutions in the | - Actors : | - individual interviews | | | |
| structures supported) | intervention areas | Sponsor's team (UNDP) | - Group interview | | | |
| | | Management staff: UGP project team, | - Information triangulation | | | |
| | | Direct individual/collective beneficiaries | - Analysis of documents | | | |
| | | - Other implementing partners : | related to the mid-term | | | |
| | | Regional Directorates/Decentralized Departments | Teview. | | | |
| | | Similar projects/programs in the same project areas | | | | |
| Consistency between the project | Level of coherence between the | - Various Reports | Methods/techniques | | | |
| and national/local policies to | project and the NAP and national | - Actors : | - Individual interviews | | | |
| combat climate change | programmes to combat the effects of climate change in Senegal | Sponsor's team (UNDP) | - Group interview | | | |
| | | Management staff: UGP project team, | - Information | | | |
| | | Direct individual/collective beneficiaries | triangulation | | | |
| | | - Other implementing partners : | to the mid-term review. | | | |
| | | Regional Directorates/Decentralized Departments | | | | |
| | | Similar projects/programs in the same project areas | | | | |
| To what extent are the project | Population needs versus program | - Various Reports | Methods/techniques | | | |
| objectives still valid? | objectives | - Actors : | - Individual interviews | | | |
| | Stakeholder opinions (see stakeholder opinions) | Sponsor's team (UNDP) | - Group interview | | | |
| | | Management staff: UGP project team, | - Information | | | |
| | | Direct individual/collective beneficiaries | triangulation | | | |
| | | - Other implementing partners : | Analysis of documents related to the mid-term review. | | | |
| | | Regional Directorates/Decentralized Departments Similar projects/programs in the same project areas | | | | |

| Evaluation criteria questions | Indicators | Sources | Methodology |
|--|---|---|--|
| Compliance of project activities and outputs with the overall purpose and objectives of the project | of activity completion | Various Reports Various Reports Actors : Sponsor's team (UNDP) Management staff: UGP project team, Direct individual/collective beneficiaries Other implementing partners : | Methods/techniques - Individual interviews - Group interview - Information triangulation Analysis of documents related to the mid-term review. |
| | | • Regional Directorates/Decentralized Departments Similar projects/programs in the same project areas | |
| | of results achieved | idem | idem |
| | Qualitative analysis of % of results | idem | idem |
| Match between project activities | Matching the program with the national guidelines of the NAP and the Emerging Senegal Plan | Various Reports Actors : Sponsor's team (UNDP) Management staff: UGP project team, Direct individual/collective beneficiaries Other implementing partners : Regional Directorates/Decentralized Departments Regional Directorates/Decentralized Departments Similar projects/programs in the same project areas | Methods/techniques - Individual interviews - Group interview - Information triangulation Analysis of documents related to the mid-term review. Ditto |
| and products and desired impact and effects | Intervention logic Analysis of results and effects/impacts produced (comparison between effects produced and expected effects/impacts) | laem | Ditto |

| Evaluation criteria questions | Indicators | Sources | Methodology | | | |
|---|--|--|--|--|--|--|
| Conditions for success/impediments to projects and programs | Success factors (internal, external) for projects and programs | idem | Ditto | | | |
| | - Factors (internal, external) that have hindered the implementation of projects and programs | idem | Ditto | | | |
| 2 effectiveness: to what extent have the expected results and project objectives been achieved? | | | | | | |
| Degree of achievement of project objectives What were the main factors | Activity implementation situation Degree of achievement of results Degree of target achievement Stakeholder opinion and analysis of | Various Reports Actors : Sponsor's team (UNDP) Management staff: UGP project team, Direct individual/collective beneficiaries Other implementing partners : Regional Directorates/Decentralized Departments Similar projects/programs in the same project areas idem | Methods/techniques - Individual interviews - Group interview - Information triangulation Analysis of documents related to the mid-term review. Ditto | | | |
| determining whether or not you achieved your objectives? | factors influencing (negatively or positively) the achievement of objectives | | | | | |
| Meeting project objectives | Has the implementation of the project achieved or is it moving towards achieving its main objective? | idem | Ditto | | | |
| Beneficiaries reached (in relation to forecasts) | Number of beneficiaries reached (in relation to forecast) | idem | Ditto | | | |
| 3. Efficiency: has the project been implemented efficiently, in accordance with national and international norms and standards? Measurement of the relationship between project outputs and the resources deployed to obtain them | | | | | | |
| Evaluation criteria questions | Indicators | Sources | Methodology |
|--|--|---|--|
| Were the activities cost- effective? | Comparison of budget allocation to personnel with investments (audit findings, findings on implementation of audit recommendations and supervisory visits) Existence of procedure manuals (where necessary) Level of application of procedure manuals. | Various Reports Actors : Sponsor's team (UNDP) Management staff: UGP project team, Direct individual/collective beneficiaries Other implementing partners : Regional Directorates/Decentralized Departments Similar projects/programs in the same project areas | Methods/techniques - Individual interviews - Group interview - Information triangulation Analysis of documents related to the mid-term review. |
| Were targets met on time? | Comparison over time of objectives targeted and those achieved | idem | idem |
| Has the program or project been implemented in the most efficient manner compared to other possible approaches? | Cf. Existence and use of procedure manual and budget allocation rate for implementation. | idem | Ditto |
| 4. Pilot project impact: is there any evidence that the project has contributed to (or enabled) progress towards a reduction in environmental pressures and/or an improvement in ecological status? Positive and/or negative changes induced | | | |
| What happened after the project was implemented? | Are there any effects whose combinations tend towards achieving the predicted impact? | Various Reports Various Reports Actors : Sponsor's team (UNDP) Management staff: UGP project team, Direct individual/collective beneficiaries Other implementing partners : Regional Directorates/Decentralized Departments Similar projects / programs in the same project areas | Methods/techniques Individual interviews Group interview Information triangulation Analysis of documents related to the mid-term review. |

| Evaluation criteria questions | Indicators | Sources | Methodology |
|---|--|--|--|
| What has the project really changed for beneficiaries? | What a change to aim for. What trend of change does the project induce? | | |
| How many people were affected? | Number of people affected and their assessment of the change brought about by the project at their level | al socio-political and/or environmental risks to maintaining the project's result | over the long term? How likely |
| is it that the project's positive resu | Its will endure beyond the end of the | project? | |
| To what extent will the positive results of the pilot project continue after the program has ended (sustainability)? | Project exit strategy? What steps have beneficiaries taken to continue after the project? | idem | Ditto |
| What are the main factors determining the viability or non-viability of the pilot project? | - See underlying elements : | | |
| Corporate sustainability | - Administrative recognition with texts governing the various local structures set up | Various Reports Actors : Sponsor's team (UNDP) Management staff: UGP project team, Direct individual/collective beneficiaries Other implementing partners : Regional Directorates/Decentralized Departments Similar projects/programs in the same project areas | Methods/techniques Individual interviews Group interview Information triangulation Analysis of documents related to the mid-term review. |
| | - Organization chart | | |
| | Infrastructure housing and ownership of local structures | | |

| Evaluation criteria questions | Indicators | Sources | Methodology |
|--|--|--|--|
| Technical Sustainability | Mastery of well-adapted, environmentally-friendly techniques (in the various fields of activity of the Pilote² project) | | |
| Financial Sustainability | Existence of an account in the name of and managed by local structure managers | | |
| | - Account funding sources | | |
| | - Current account level | | |
| Socio-political effect/impact | Increase in the level of local financial resources and income of individual direct or indirect beneficiaries | Various Reports Actors : Sponsor's team (UNDP) Management staff: UGP project team, Direct individual/collective beneficiaries Other implementing partners : Regional Directorates/Decentralized Departments Similar projects/programs in the same project areas | Methods/techniques Individual interviews Group interview Information triangulation Analysis of documents related to the mid-term review. |
| | Institutionalization of women's structures in the process of combating the effects of CC | | |
| Effects/impact on the governance of local structures | Reducing inequality at all levels and bringing about sustainable, innovative social change | | |

| Evaluation criteria questions | Indicators | Sources | Methodology |
|---|--|---------|-------------|
| | Existence of medium- or long- term strategic itineraries for the various local structures: vision; strategies; action plan | | |
| Effect/impact of local structures on their environment | Degree of dependence of local structures on the project | | |

Annex 6: Project theory of change

| Objectifs du projet | Renforcer les capacités de sur répondre aux chocs climat | veillance du climat, les systèmes d'ale iques et planifier l'adaptation au chan | rte précoce et d'information pour gement climatique en Guinée |
|--|---|---|---|
| Résultats i ntermédiaires | Capacités nationales accrues à collecter les informations hydrométéorologiques, à surveiller les risques hydro-climatiques et à modéliser les impacts pour informer et guider les SAP et l'intégration de l'adaptation dans les politiques et les plans de développement | Les produits et services climatiques répondant aux besoins spécifiques des utilisateurs (hommes et femmes) sont produits et régulièrement mis à jour, et les alertes sur les phénomènes extrêmes sont développées à temps | Les SAP sont renforcés et mieux coordonnés, les alertes sur les phénomènes climatiques extrêmes sont accessibles et diffusées à temps, l'information climatique pertinente est intégrée dans les prises de décision individuelles, communautaires et nationales et dans les politiques et plans de développement des secteurs prioritaires |
| Produits du projet | Produit 1 : Les capacités des services hydrométe nationaux à surveiller les phénomènes climatique le changement climatique sont renforcées | éorologique s extrêmes et manière efficiente e producteurs(trices) climat à moyen et l | duits et services climatiques sont accessibles et utilisés de et efficace pour la production d'alertes au profit des et dans l'élaboration de plans de développement résilient au ong-terme |
| Résultats pour, éliminer les barrières | 1.1 : Achat et installation des stations hydro automatiques a 1.2 : Achat et installation des stations météo automatiques 1.3 : Achat et installation d'équipement de surveillance des extrêmes sévères (foudre,) 1.4 : Mise en place d'une banque des données climatiques 1.5 : Achat et installation d'équipement de réception de dor satellitaires 1.6 : Renforcement des capacités du personnel féminin et r DNH, DNAgri, pour l'utilisation et la maintenance des équipement | avec télémétrie 2.1 : Capacités de dé phénomènes 2.2 : des produits et s fonctionnelle 2.3 : capacités à intég inées/images 2.4 : Renforcement te masculin des DNM, 2.5 : Développement 2.5 : Développement 2.6 : Encouragement d'alertes précoces au d'alertes précoces au | velopper et utiliser les produits et services climatiques sont créés chez les s ervices climatiques répondant aux besoins des utilisateurs finaux sont élaborés rer les produits et services climatiques dans les processus de oppement sont créés (chez le personnel féminin et masculin impliqué chnique et matériel et coordination institutionnelle des systèmes écoces et de partage des informations climatiques d'une stratégie de durabilité financière du SAP, de production et de ons climatiques. à L'accès et l'utilisation des informations et des produits climatiques profit des divers usagers chez les 2 sexes. |
| Les causes et barrières clés | Le réseau actuel de stations hydrométéorologiques ne permet pas une couverture adéquate du pays Mauvais emplacement des stations et calibrage des outils de collecte Absence d'équipements d'analyse et de transformation des données en produits et services climatiques | Insuffisance des capacités de collecte des informations hydrométéorologiques et de développement des produits et services climatiqu Faible coordination des systèmes d'alertes préco et de dissémination des informations climatiques Faible connaissance des besoins des utilisateurs finaux Faibles capacités des utilisateurs finaux à assimil utiliser les produits et services climatiques | Faible conscience des décideurs de l'importance de l'information climatique pour le développement Absence d'autonomie financière et de viabilité financière à moyen et long terme des services nationaux d'hydrométéorologie et de SAP Manque de planification stratégique dans le secteur hydrométéorologique Faible développement et coordination du cadre politique, institutionnel et règlementaire des services hydro climatiques |

Solution idéale : Les produits et services climatiques prioritaires pour la Guinée et adaptés aux besoins des utilisateurs finaux (hommes et femmes) ou producteurs /trices sont développés, accessibles et utilisés pour le développement d'alertes précoces et les prises de décision aux niveaux individuel et communautaire et la planification du développement

Problème : le changement climatique et les catastrophes liées au climat impactent les communautés et le développement de la Guinée

Annex 7: Rating scales

| Ratings for results, effectiveness, | Sustainability ratings : | Relevance ratings |
|---|---|---------------------|
| efficiency, monitoring and evaluation and | | |
| surveys | | |
| 6 Highly satisfactory (HS): no gaps | 4 Probable (L): negligible risk to | 2 Relevant (P) |
| 5 Satisfactory (S): minor deficiencies | Sustainability | |
| 4 Moderately satisfactory (MS) | 3 Moderately probable (MP): moderate | 1 Not relevant (PP) |
| 3 Moderately Unsatisfactory (MU): | risk | |
| major shortcomings | 2 Moderately unlikely (MU): significant | |
| 2 Unsatisfactory (U): major problems | risks | Impact ratings : |
| 1 Very unsatisfactory (HU): serious | 1 Unlikely (U): serious risks | 3 Satisfactory (S) |
| problems | | 2 Minime (M) |
| | | 1 Negligible (N) |
| Additional notations where applicable : | | |
| Not applicable (N/A) | | |
| Impossible evaluation (I.E.) | | |

Annex 8: Data collection tools

Interview Guide - Project Coordination Team

| Name of person met: | |
|---------------------------------|---------|
| Position held by person we met: | |
| Phone : | Email : |

1. Can you give us a brief overview of the SAP Guinea Project?

.....

2. In what way are the project's objectives and planned activities consistent with the Guinean government's priorities?

.....

3. How do the project's objectives and planned activities match the needs of meteorological and hydrological structures?

.....

4. How do the project's objectives and planned activities match the needs and expectations of the local beneficiary communities?

.....

5. What are the main difficulties you have encountered in carrying out the project and the solutions you have implemented?

.....

6. Were you able to keep to the initial schedule of activities?

(A) Yes B. No

If not, are there any activities you were unable to carry out and why?

······

If not, were any activities carried out late and why?

.....

Which activities did you enjoy the most?
 Explain......

8. Which activities do you perform or have performed with less satisfaction? Explain.....

9. More generally, are you :

- A. Very satisfied with the results achieved by the project
- B. Moderately satisfied with project results
- C. Not at all satisfied with project results

| If very satisfied, explain |
|---|
| |
| |
| If not at all satisfied |
| |
| 10. Do you think that the SAP project has taken sufficient account of cross-cutting themes, particularly gender, in both its design and implementation?(A) Yes B. No |
| |
| Explain |
| 11. Do the activities you have carried out have an impact on women and the most vulnerable populations? |
| (A) Yes B. No |
| Explain |
| 12. Have the activities you have carried out helped to strengthen the capacities of the beneficiary communities? |
| (A) Yes B. No |
| Explain |
| |

13. Have the activities you have carried out helped to build the capacities of other players (project partners, decentralized government departments, local authorities, etc.)?

(A) Yes B. No

| Explain |
|---|
| |
| 14. Do you think the project's results and achievements will last? (A) Yes B. No |
| Explain |
| 15. Do you think that the sustainability of SAP project results was taken into account from the outset?(A) Yes B. No |
| Explain |
| 16. Is there an exit strategy? (A) Yes B. No |
| Explain |
| 17. Were project partners involved in the design and execution of the SAP project? |

(A) Yes B. No

Explain.....

18. Were local authorities involved in the design and implementation of the SAP project?(A) Yes B. No

Explain.....

19. Were local communities involved in the design and implementation of the SAP-Guinea project?

(A) Yes B. No

Explain.....

20. Does the project have an information and communication strategy? Have the various reports been drawn up on time?

(A) Yes B. No

Explain.....

21. Do you know whether your partners have an information and communication strategy? Have the various reports been drawn up on time?

(A) Yes B. No

- 22. Is there a partnership strategy in place at national, regional and local levels? What impact do these partnerships have on the results achieved?
- (A) Yes B. No

Explain.....

23. How do you monitor and evaluate the activities and achievements of the SAP Guinea project?

.....

24. How are SAP project implementation partners chosen?

.....

25. What improvements and adjustments/adaptations do you think need to be made to ensure that the project's offering better meets the needs of local communities, especially women?

.....

26. What proposals and recommendations do you have for future project work?

.....

Thank you for your cooperation

Interview guide - Project implementation partners

| Partner name: |
|--|
| Legal status of partner (NGO, association, CSO): |
| Head office (physical address): |
| Areas of operation: |
| Phone:E-mail |

I-PARTNERSHIP WITH UNDP

- 1. Since when has your institution partnered with the SAP project?.....
- 2. Who made the first move?
- B. My institution
- C. The SAP project
 - 3. What does partnership with the project entail?

Explain.....

4. What results have you achieved through your partnership with the SAP Guinea project?

| •••••• | ••••••••••••••••••••••••••••••••••••• | | ••••••••••••••••••••••••••••••••••• | |
|--------|---------------------------------------|---|-------------------------------------|--|
| | | | | |
| | | • | | |

5. Has the partnership with the project had an impact on your institution's ability to intervene?

(A) Yes B. No

| Explain | | |
|---------|------|-------|
| | | |
| | | ••••• |
| | | ••••• |
| | | |

6. Has the partnership with the project had any impact on the beneficiaries?

(A) Yes B. No

| Explain | | | |
|---------|------------|--------|-------|
| L. | | | |
| | •••••• | •••••• | ••••• |
| | | •••••• | |
| | | | |

7. Do you see any advantages and/or disadvantages in partnering with the project?(A) Yes (B) No

Explain.....

8. Do you think the project partnership should be improved? (A) Yes (B) No

Explain.....

9. Do you think any adaptations/changes are needed in the partnership with the SAP Guinea project?

(A) Yes (B) No

| Explain |
|--|
| |
| |
| 10. More generally, what are your proposals/recommendations regarding the partnership with SAP Guinea? |
| |
| |
| |
| II-PROJECT INTERVENTIONS |
| 11. Do you feel that the project's interventions are in line with the country's priorities in the area of resilience and climate change? |
| (A) Yes B. No |
| Explain ? |
| |
| |
| 12. Do you feel that the project's interventions are in line with the priorities of the target areas? |
| (A) Yes B. No |
| |
| Explain |
| |
| ······ |

13. Are the project's interventions in line with the priority needs and expectations of the beneficiary populations?

(A) Yes B. No

| Explain |
|---|
| |
| 14. Have project interventions had an impact on local communities? |
| (A) Yes B. No |
| Explain |
| |
| 15. Do the project's interventions have an impact on women and the most vulnerable populations? |
| (A) Yes B. No |
| Explain |
| 16. Do you think the SAP project should be improved? |
| (A) Yes (B) No |
| Explain |
| |
| 17. Are adaptations/changes necessary in the SAP project interventions? |
| (A) Yes (B) No |

Explain.....

18. What proposals/recommendations do you have for future project work?

.....

Thank you for your cooperation

Annex 9: Evaluation Report Approval Form

(to be completed by CO and UNDP GEF Technical Adviser based in the region and included in the final document)

| Evaluation Report Reviewed and Cleared by | | |
|---|--------|--|
| UNDP Country Office | | |
| Name: | | |
| Signature: | _Date: | |
| | | |
| UNDP GEF RTA | | |
| Name: | | |
| Signature: | _Date: | |
| | | |
| | | |

Annex 10: Signed UNEG Code of Conduct form

UNEG code of conduct for evaluators

Independence refers to the ability to assess without undue influence or pressure from any party (including the recruiting group), and to ensure that assessors have free access to information about the subject of the assessment. Independence ensures the legitimacy and objective perspective of assessments. An independent evaluation reduces the risk of conflicts of interest that could arise with the scores awarded by those involved in the management of the project being evaluated. Independence is one of the ten general principles of evaluation (along with principles, objectives and targets.

Evaluators/consultants :

- 1. Must present full and fair information in their assessment of strengths and weaknesses so that decisions or actions taken are well-founded.
- 2. Must disclose all assessment findings, together with information on their limitations, and make them available to all those involved in the assessment and legally entitled to receive the results.
- 3. Must protect the anonymity and confidentiality to which those providing information are entitled. Assessors must allow sufficient time, minimize wasted time and respect the right of individuals not to commit themselves. Assessors must respect the right of individuals to provide information in confidence, and ensure that sensitive information cannot be traced back to its source. Assessors are not required to assess individuals, and must maintain a balance between the assessment of management functions and this general principle.
- 4. sometimes uncover evidence of wrongdoing while conducting assessments. Such cases should be reported confidentially to the competent authorities responsible for investigating the matter. They should consult with other competent supervisory bodies when there is any doubt as to whether and how to report matters.
- 5. Must be sensitive to beliefs, habits and customs, and demonstrate integrity and honesty in their dealings with all stakeholders. In accordance with the Universal Declaration of Human Rights, evaluators must be attentive to, and concerned about, issues of discrimination and gender disparity. Evaluators must avoid anything that might offend the dignity or self-respect of the people with whom they come into contact during an evaluation. Recognizing that an evaluation may have a negative impact on the interests of certain stakeholders, evaluators must carry out the evaluation and publicize its purpose and results in a way that absolutely respects the dignity and sense of self-respect of the stakeholders.
- 6. Are accountable for their performance and its outcomes. Evaluators must be able to present the evaluation, its limitations, findings and recommendations clearly, accurately and honestly, either orally or in writing.
- 7. Must adhere to recognized accounting procedures and use valuation resources prudently.
- 8. Must ensure that independence of judgment is maintained and that valuation conclusions and recommendations are presented independently.
- 9. Must confirm that they were not involved in the design and implementation of the project being evaluated, nor in any consultancy activities relating to it, and that they did not carry out the mid-term evaluation of the project.

Evaluation Consultant Agreement Form

Agreement to comply with the United Nations Evaluation Code of Conduct :

Name of appraiser: ______Alexandre Diouf ______

Name of consulting organization (if any) : _____

I confirm that I have received and understood the United Nations Code of Conduct on Evaluation and undertake to abide by it.

| Signed at | Dakar | (Place) on | 23 June 2023 | (Date) |
|-----------|--------|------------|-----------------|---------|
| Signediat | Dantai | | 2 J JOING 2023_ | _(Dutt) |

Signature:

TE Report Clearance Form

| Terminal Evaluation Report for (Strengthening climate information and early warning systems for climate resilient development and adaptation to climate change in Guinea & UNDP PIMS ID 5552) | | | | |
|--|----------------------|--|--|--|
| Reviewed and Cleared By: | | | | |
| Commissioning Unit (M&E Focal Point) | | | | |
| sylvain ki Name: | | | | |
| Signature: | 18-Sep-2023 Date: | | | |
| Regional Technical Advisor (Nature, Climate and Energy) Julien Simery | | | | |
| Name: | | | | |
| Signature: | 19-Sep-2023 Date: | | | |