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REPUBLIC OF GUINEA

UNITED NATIONS DEVELOPMENT PROGRAMME PROJECT DOCUMENT

Project title: Strengthening Climate Information and Early Warning Systems for Climate Resilient Development and Adaptation to Climate Change in Guinea

Country: Guinea	Implementing Partner: National	Management Arrangements:	
	Directorate of Meteorology – Ministry of Transportation	National Implementation Modality (NIM)	

UNDAF/Country Programme Outcome:

- <u>Outcome 2</u>: By 2022, national institutions, civil society and the private sector have implemented policies that improve food and nutrition security, sustainable environmental management and the resilience of the populations to climate change and disaster risk;
 - Output 2.2: The tools for planning and for sustainably managing the environment and natural resources, disasters and the living environment are revised/developed and used to take into account the aspects of climate change.

UNDP STRATEGIC PLAN:

- <u>Outcome 3</u>: Strengthen resilience to shocks and crises
 - <u>Output 3.3.1.</u>: Evidence-based assessment and planning tools and mechanisms applied to enable implementation of gender-sensitive and risk-informed prevention and preparedness to limit the impact of natural hazards and pandemics and promote peaceful, just and inclusive societies

CPD Output:

 <u>Output 2.5</u>: The most vulnerable groups have increased capacities of climate change resilience and adaptation

UNDP Social and Environmental Screening Category: Low	UNDP Gender Marker: 2
Atlas Project ID/Award ID number: 00094688	Atlas Output ID/Project ID number: 00098781
UNDP-GEF PIMS ID number: 5552	GEF ID number: 8023
Planned start date: July 2019	Planned end date: July 2023
LPAC date: 28 March 2019	

Brief project description: Guinea is one of Africa's richest countries when it comes to natural resource endowment. Beyond having great biodiversity, its soil is fertile and hosts a multitude of minerals. Most of the watercourses in west Africa originate from Guinea and the country has a hydroelectric potential of 6.11 GW with a probable production of 19,300 GWH. The Guinean subsoil

conceals significant deposits of bauxite of 25 billion tons, accounting for the 2/3 of world reserves approximately, gold of 1000 tons, diamond of 30 million carats, iron ore, uranium and other minerals. The eastern and southern parts of Guinea are covered with a primary forest of 100,000 square kilometers. In addition, there is also a secondary forest of an area of 40,000 square kilometers. Despite this natural wealth, Guinea remains one of the poorest countries in the world and this is related to several factors among which the poor management of the effects of climate variability that have been recorded for several decades. These observed climate variabilities include a decline in rainfall, recurring droughts since the 1970s, and frequent and early floods (NAPA, July 2007). The observed impacts of these climate disturbances are the drying up of many rivers and soils, the reduction of vegetation cover, the decline in agricultural, pastoral and fishing production, and the recrudescence of waterborne diseases, all exacerbated by unsustainable production systems, the national development strategies are struggling to achieve the expected results while the country is still recovering from the devastating effects of the 2015 Ebola virus disease.

Despite the many efforts undertaken in managing climate change risks into the most vulnerable and vital socio-economic sectors (agriculture, livestock, water, coastal and forestry areas), the country continues to face precarious living conditions in rural areas that rely on a primary sector that is still mainly dependent on rain. This sector is severely affected by the obstacles of low production and crop losses due to weak forecasting, preparedness, response, and adaptation capacities (NAPA, July 2007). The aim of the Project: Strengthening Climate Information and Early Warning Systems for Climate Resilient Development and Adaptation to Climate Change in Guinea is to facilitate the mainstreaming of climate change adaptation into the medium and long-term planning and budgeting of priority climate-sensitive sectors in the most vulnerable areas.

To this end, Guinea is considering setting up a reliable integrated information system (including a climate and socio-economic data bank) 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 subsequently be integrated into sectoral and local planning and budgeting. The mechanism for the monitoring and evaluation of the implemented adaptation processes and practices will allow to capitalize on the most appropriate techniques and technologies based on a risk analysis. Overall, by helping to remove the obstacles through a reliable system of climate and socio-economic information and the strengthening of capacities of the actors, the Project will provide the current activities, more efficient forecasting, anticipation, preparedness, response and adaptation for inclusive and sustainable development.

en maorrana a	N Dr LDCF or SCCF or other vertical fund	USD 5,000,000
UNDP TRAC reso	ources	USD 350,000
(1) Total Budget administered by UNDP		USD 5,350,000
PARALLEL CO-FI	NANCING (all other co-financing that is	s not cash co-financing administered by UNDP)
Ministry of Agric	culture	USD 30,000,000
Ministry of Trans Meteorology	sport - National Directorate of	USD 1,503,000
National Directo	orate of Hydrology	USD 384,300
Agronomic Rese	earch Centers	USD 240,000
SOGUIPAH		USD 120,000
Institut de Rech	erche pour le Développement	USD 450,000
(2) Total co-fina	ancing	USD 32,697,300
(3) Grand-Total	Project Financing (1)+(2)	USD 38,047,300
SIGNATURES		
Agreed by Government	Signature:	09,07, 2019 Date/Month/Year:
Agreed by Implementing Partner	Title: Minister of Transportation	0 2 JUL 2019
	Name: Mr. Eloi KOUADIO IV Title: Resident Representative a.i.	Date/Month/Year:
Agreed by UNDP	L Walians	Unies 00 0 2 .07. 2019

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LIST OF ACRONYMS AND ABBREVIATIONS

AbE/HG	Adaptation basée sur l'Ecosystème en Haute Guinée (Ecosystem-based Adaptation into Upper Guinea)
AFD	French Development Agency
AWP	Annual Work Programme
CNGCUE	Centre National de Gestion des Catastrophes et Urgences Environnementales (National Centre for the Management of Disasters and Environmental Emergencies)
DNH	National Directorate of Hydraulics
DNM	Direction Nationale de la Météorologie (National Directorate of Meteorology)
EU	European Union
EWS	Early Warning System
GEF	Global Environment Facility
GIS	Geographic Information System
LDC	Least developed country
LDCF	Least Developed Countries Fund
MASPFE	Ministry of Social Affairs and the Advancement of Women and Children
MATD	Ministry of Territory Administration and Decentralization
MEEF	Ministry of the Environment, Waters and Forests
MEH	Ministry of Health
MPCI	Ministry of Planning and International Cooperation
MT	Ministry of Transport
NDC	Nationally determined contribution
NGO	Non-government organization
NAPA	National Adaptation Plan of Action
LDC	Local Development Plan
PNDES	Plan National de Développement Economique et Social (National Social and Economic Development National Plan)
PNIA	Programme National d'Investissement Agricole (National Agricultural Investment Plan)
PPG	Project Preparation Grant
PRSP	Poverty Reduction Strategy Paper
RC	Rural commune
SC	Steering Committee
STC	Scientific and Technical Committee
ToC	Theory of change
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Programme.

I. DEVELOPMENT CHALLENGE

i. Overall context and importance

1. Guinea is a coastal country in West Africa. Its geographic coordinates lie between 7°05' and 12°51' latitude North and 7°30' and 15°10' longitude West. To the east, it borders with Côte d'Ivoire and Mali, to the south, Liberia and Sierra Leone, to the west, the Atlantic Ocean and Guinea Bissau, and to the north, Senegal and Mali. It covers an area of 245,857 km².

2. This particular geographical position places Guinea at the crossroads of major West African climate groups including the Guinean coastal climate, the Sudanese climate, and the wet tropical climate at the edge of the equatorial climate. This climatic diversity determines four bioclimatic zones according to the topography, soils, hydrology and plant cover (Figure 1), with a north-south and east-west double gradient of rainfall (Figure 2). According to the national priorities confirmed during the Project Preparation Grant (PPG) consultations with institutional actors, communities and civil society, the project will build the resilience of the five vital sectors that have been recognized as the most vulnerable and those in need of highest priority – crop and livestock farming, water, coastal and forestry areas (NAPA, July 2007) – in the sites most exposed to climate risks in each of the four bioclimatic zones of Guinea.



Figure 1: Map of risks in the 4 bioclimatic zones of Guinea

3. Observed climate risks and their effects: For several successive decades, Guinea has recorded a considerable decline in rainfall over the entire national territory. The analysis of the rainfall data observed from 1960 to 2004 and as reflected in the NAPA shows (Figure 2) an almost constant decline in precipitation throughout the country and an increase in average temperature.



Figure 2: Map of average annual rainfall (1961-2004)

This decline in rainfall is notably accompanied by a general rise in temperatures, recurring droughts since the 1970s, a decline in the frequency and intra-annual distribution of rainfall, and early and frequent floods (Kankan – 2001, Boké – 2003, Gaoual – 2005, etc.), changes in the spatial distribution of rainfall and sea-level rise. These various climate disturbances are the cause of several events, notably the rapid depletion of rivers, drying up of soil, the destruction of plant cover, the decline in agricultural production, intensification of livestock transhumance, migration of herders and the resurgence of waterborne diseases, particularly in the northern part of the country (NAPA, July 2007). Moreover, Guinea ranks fifth in the world in terms of the number of storm days per year, with an average of 128 days (DNM, August 2017). According to the report of Guinea's *Centre National de Gestion des Catastrophes et Urgences Environnementales* (CNGCUE, National Center for Disaster Management and Environmental Emergencies), between 2001 and 2008, floods affected 120,000 people, of whom 200 were injured, 15 went missing and 20 died; and between 2009 and 2011, 59,921 people were affected, of whom 6,703 were displaced, and 4,781 homes and 4,426.05 ha of crops were destroyed. The July 2017 flood alone in N'Zérékoré affected 2,000 people, i.e. 261 households, and damaged 188 buildings (CNGCUE, August 2017).

4. According to NAPA findings, the floods have also caused the destruction of the riparian socioeconomic infrastructures, losses in human lives, goods, and animal and plant species, the proliferation of water-borne diseases, the destruction of crops of the lowlands and plains, inaccessibility of production areas while the dense forest are drying out and receding by 17 per cent every 15 years, or 9,120 ha /year. The expected flood level in the Koba Plains (5.50 m) will result in 80 per cent flooding of the structures and the lowlands along the coastline and a salt wedge intrusion into lands with severe impacts on rice cultivation.

5. The effects of these climate changes have negative consequences for many rural development sectors still largely dominated by rainfed activities (NDC, September 2015). Crop farming, fishing, livestock farming, mining and forest industries remain the main sources of income for over 80 per cent of the population (NAPA, 2007). The primary sector, one of Guinea's main drivers of growth, remains both exposed and sensitive to climate change, and has little adaption capacity.

As a result of the climatic hazards that could possibly be part of the causes of the decline of 6. the agricultural sector, this important pillar of Guinea's development has steadily declined in relative value in the national GDP. It decreased from more than 90 per cent before independence to 62 per cent in 1971, to 46 per cent in 1988, to less than 20 per cent in 2000¹ and to only 14.2 per cent in 2010 (APIP, 2011).² According to the same source, its share in exports fell from over 90 per cent in 1958 to 7 per cent today. Rice production is the main food crop, with 67 per cent of the area planted in the country, meeting 65 per cent of the country's cereal needs, employing 37 per cent of the active population and engaging 80 per cent of farmers and [contributing] 23 per cent of primary sector GDP and 6 per cent of national GDP (APIP, 2011). In Guinea, over 80 per cent of the population live and work in rural areas. Their livelihoods are increasingly degrading. The effects of climate risks also concern degradation and the disappearance of the plant cover of the watersheds, the destruction of springs and gallery forests, the silting up of beds and plains, the disappearance of animal and plant species, and the reduction in soil fertility (NAPA, 2007). These NAPA findings on the consequent impact of climate change are exacerbated by unsustainable production systems. Hence, all socioeconomic groups that depend on ecosystems and their resources for meeting their livelihood needs are vulnerable. This situation leads to the dysfunction of traditional modes of land use and farming systems (NAPA, 2007). With the current obsolete climate system, scarcely equipped with the appropriate data collection tools for the production of early warnings, the most unexpected early floods will be the cause of the destruction of the riparian socio-economic infrastructures, loss of human lives,

¹ <u>http://afriquepluriel.ruwenzori.net/agriculture-a.htm</u>

² <u>www.apip.gov.gn/?q=content/agriculture</u> (in French)

property and animal and plant species, the proliferation of waterborne diseases, and the destruction of crops of lowlands and plains. These floods will also lead to the inaccessibility production areas (NAPA, 2007).

7. The degradation of the productive capacities of the production systems and ecosystems leads to prevailing poverty in the rural areas. Overall, the analysis of the 2017 Country Programme Document (CPD) shows that 55 per cent of the population live below the poverty line and that there are large disparities between the urban (35 per cent) and rural (65 per cent) population. Nearly a quarter of households do not have access to improved sanitation facilities, 74 per cent of whom do not have electricity (97 per cent in rural areas versus 26 per cent in urban centres). In addition, in 2015, unemployment in the urban areas doubled, from 8 per cent in 2012 to 16 per cent in 2015. Guinea's Human Development Index was 0.414 in 2016, ranking it 183 out of 188 countries (UNDP, 2017). At the community level, the poverty of the population is often aggravated by natural disasters, 75 per cent of which are hydro-meteorological, such as heavy rain showers, severe storms, tornados and drought (NAPA, 2007).

8. **The causes of vulnerability**: The inability to cope with the adverse effects of climate risks continues to be the cause of the communities' vulnerability. This prevents them from being able to organize themselves and plan appropriate and effective responses in a timely manner, mainly because of the lack of reliable real-time warnings. In addition, the results of applied research, with little focus on the resilience of actions of the primary sector, which is a rainfed sector, remain weak due to the lack of specific guidance of the network. Overall, the causes of vulnerability stem from the current context, the obsolescent hydro-meteorological network with inadequate technologies and a lack of proven staff expertise in forecasting, simulation and impact modelling to provide, based on reliable early warning climate data, information and products needed for resilience and adaptation. This vulnerability is exacerbated by the poor practices of unsustainable production systems, due to the lack of alternative priority adaptation options based on the best technologies, which are not capitalized on or disseminated among communities.

9. **Projected climate risks with the expected outcomes:** In the projected climate situation, temperatures, as indicated by NAPA, will vary as follows:

- In Middle and Upper Guinea (northwestern and northeastern parts of the country), warming will be in the range of 0.3°C to 2.2°C (sensitivity of 1.5°C); 0.4°C to 3.3°C (sensitivity of 2.5°C) and 0.5°C to 4.8°C (sensitivity of 4.5°C);

- In Lower Guinea and in Forested Guinea (southwestern and southeastern parts of the country), warming will vary on average from 0.2°C to 1.8°C (sensitivity of 1.5°C) and from 0.3°C to 2.7°C (sensitivity of 2.5°C) and 0.4°C to 3.9°C (sensitivity of 4.5°C). In view of the obsolescence of the meteorological network, these data could be quite imprecise. They do, however, reflect projections (IPCC, 2014) on climate warnings in Africa during the 21st century, surpassing the average of global temperature increases. According to these projections, the increase in average temperature will reach 4°C throughout the African continent.

10. The rise in temperature will be accompanied by changes in the distribution and volume of rainfall over the area. These changes could reach up to 36.4 per cent of the current normal temperature starting in 2050 and 40.4 per cent in 2100 (NAPA, 2007). A Sahelian-type of arid climate shift is expected in the 21st century, in the Gulf of Guinea areas further south.³ This drastic decline in precipitation will have significant impacts on water resources (surface and groundwater) and the main

³ Bamba, Mouhamadou Sylla, Nellie Elguindi, Filippo Giorgi, and Dominik Wisser.2015. *Projected robust shift of climate zones over West Africa in response to anthropogenic climate change for the late 21st century*, see: https://springeropen.altmetric.com/details/4584174

priority socio-economic sectors recognized as the most vulnerable and of greatest priority in the country, which are already severely affected by the effects of current risks.

11. Being an intensive water use industry, the mining sector, one of the main pillars of the economy, is also affected by the reduction of Guinea's water resources. Due to the expansion of mining operations in areas of high water stress, particularly strong in Middle and Upper Guinea, which are home to the largest reserves of aluminum and constitute the poorest areas of the country (NAPA, 2017), mining companies should be investing in water management infrastructure to access the quantities of water needed for their operations.⁴ This situation will result in competition for access to water with the communities living in these regions, thus threatening their living conditions, and could lead to potential conflicts. In addition to impacts on the primary sector, the change in the frequency and intensity of storms could also have an effect on mining operations, for example, on certain physical structures used in the mining process, such as dams, sedimentation control and erosion that prevent the discharge of the mine from spilling into watercourses.

12. This challenge must necessarily be tackled by the effective removal of the remaining obstacles through reliable early warning information and climate products for effective mainstreaming of adaptation into inclusive development policies and plans and strengthening of the resilience of communities so that the country can continue on its course towards sustainable development.

ii. The long-term solution to adaptation and the obstacles to overcome

13. The long-term solution for Guinea is as follows: the priority climate information products and services adapted to the needs of end-user (producers) are developed, accessible and used for developing early warnings and decision-making at the individual and community levels, as well as for developing in-country robust weather and climate observation capability, including now-casting and forecasting infrastructure which can be rapidly deployed, is relatively easy to maintain, and simple to use. Such a weather and climate monitoring system can provide Guinea with the capacity necessary to develop: (i) an early warning system for severe weather; (ii) real-time weather and hydrological monitoring; (iii) weather forecasting capabilities (Numerical Weather Prediction); (iv) agrometeorological information and services (including integrated crop and pest management); (v) applications related to building and management of infrastructure; (vi) tailored products for the mining planning and management; (ix) coastal zone and land management; and (x) planning and policy making processes.

14. However, there are significant policy, institutional, individual, financial, technological and informational barriers that prevent the desired situation from emerging. These barriers that were identified with all key stakeholders during the participatory planning meeting of the project held in Conakry on July 12, 2017 include:

- inadequate coverage of the country by the current network of hydrometeorological stations;
- the inappropriate location of stations and poor calibration of collection tools;
- the lack of equipment to analyze data and transform them into climate products and services;
- insufficient capacity to collect hydrometeorological information and to develop climate products and services;
- weak coordination of early warning systems and of climate information dissemination;
- low awareness of the needs of end users;
- low end-user capacities to assimilate and use climate products and services;
- low awareness of decision-makers of the importance of climate information for development;
- lack of financial autonomy and of medium and long-term financial viability of the National Hydro-meteorological Departments and the EWS;

- lack of strategic planning in the hydro-meteorological sector;
- weak development and coordination of the policy, institutional and regulatory framework of the hydro-meteorological services.

15. The project will have to remove these barriers as indicated in the theory of change (ToC) (Figure 3 below).

iii. Consistency of the challenge with national and global priorities

16. Guinea is committed to a new direction of strategic emergence based on sustainable development through the new project for society embodied in Vision Guinée 2040.

17.In 2016, Guinea adopted the second five-year National Economic and Social Development Plan (PNDES) 2016-2020, considered by the Government as the operational planning document of Vision Guinée 2040. By providing end users with priority climate products and services, and by building their capacity in using these climate services, the project will contribute to the resilience of the primary sector, thus contributing de facto to the achievement of Outputs 3.1.1, 3.1.2 and 3.1.3 of Pillar 2 of the PNDES.

18. In line with the guidelines of the United Nations Framework Convention on Climate Change (UNFCCC), Guinea developed its NAPA in July 2007, following a consultation process carried out between 2005 and 2006 to support short-term priority actions. Out of the ten priority options identified in Guinea's NAPA, the current project alone, which is funded by the Least Development Countries Fund (LDCF), accounts for a total of nine priority options while extending their implementation to the medium and long term. These are priority actions that promote: (i) agroforestry; (ii) the recognition of the value of positive endogenous knowledge and practices; (iii) appropriate adaptation technologies; (iv) bushfire management and protection; (v) the protection and restoration of fragile ecosystems; (vi) information, education and communication; (vii) the development and integrated management of small waterworks; (viii) the protection of spawning grounds; and (ix) the hydro-agricultural development of the plains and lowlands.

19. The project with a Gender Marker 2 will contribute in particular to the achievement of the specific objectives of this gender policy to: (i) ensure the qualitative transformation of Guinean society by removing socio-cultural, economic, legal and policy obstacles to a harmonious, equitable and sustainable development; (ii) ensure that the capacities of communities and development actors are strengthened in matters of gender with a view to reducing inequalities; (iii) promote the removal of gender-related obstacles in policies, programmes and budgetary procedures in order to achieve the Sustainable Development Goals (SDGs).

Overall, by contributing to all ongoing initiatives at the strategic and policy level, the project is in line with the national priorities as defined in the planning instruments in place at the national level (Vision Guinée 2040, PNDES 2016-2020, nationally determined contribution (NDC), NAPA and the EWS roadmap).

iv. Consistency with the Sustainable Development Goals

20. The current trend of the adverse effects of climate change-related risks will lead to a status quo scenario in Guinea, particularly through increased precarious living conditions in the rural areas that are already critical due to high vulnerability. These effects are likely to undermine the achievement of the SDGs in Guinea, one of the poorest and most vulnerable countries due to its increased vulnerability to the frequency and the intensification of climate risks and the current weak resilience of its institutions and communities.

21. To this end, by providing early warning climate information and products in order to effectively guide and mainstream priority adaptation options in producers' behavior and in the development policies and plans at the national, regional and local levels, the project will support the achievement of several SDGs in Guinea, including SDG 7 (Gender equality). In particular, 51 per cent of the beneficiaries of the climate information and products will be targeted in order to strengthen the resilience of women who are very active in the primary sector. In addition, adaptation will be promoted towards the inclusive creation of jobs, wealth and women's empowerment in a sectoral value chain, specifically, the agricultural, pastoral and fisheries value chains, which are conducive to inclusive growth. The project will also contribute to the achievement of SDG 12 (Sustainable consumption and production), SDG 13 (Climate action), SDG 15 (Life on earth), particularly through the resilience of ecosystems and the maintenance of the productive capacities of ecosystem services, a vital support for the productivity of production systems. This contribution focuses more specifically on the following Vision Guinée 2040 and PNDES 2016-2020 objectives, whose achievement is supported by CPD 2018-2022, notably through priority action 2: (i) By 2022, the national institutions, civil society and the private sector will have implemented policies to improve food security, sustainable environmental management and the populations' resilience to climate change. In addition, the management of climate disaster-related risks will promote the achievement of SDG12 (Sustainable consumption and production), SDG 13 (Climate action) and SDG15 (Life on land).

22. Since UNDP actions through the new cycle of cooperation with the Government of Guinea under the CPD (2018-2022) had to be in line with those of the EWS project, they concern the reduction of vulnerability, the strengthening of resilience, and the promotion of inclusive adaptation. Pilot actions will be based on inclusive access to renewable energy in rural areas and on building on the productive capacities of land through agricultural, pastoral and fisheries production systems and through water and natural resources management. In addition to focusing on developing ecovillages, they will focus on improving the productivity of the production systems and ecosystem services, specifically in the Middle and Upper Guinea sites. As a result, the project will be able to contribute to strengthening of actions of the CPD and thus of the United Nations Development Assistance Framework (UNDAF) in achieving the national priorities included in the PNDES.

II. STRATEGY

23. The project will contribute towards the reduction of vulnerability, strengthening of resilience and the promotion of adaptation to the effects of risks and climate disasters that includes communities and institutions in the most vulnerable sectors in rural development. To this end, the project aim is to "strengthen the capacities of climate monitoring and early warning and information systems to respond to climate shocks and plan climate change adaptation into Guinea".

24. To reach this objective, the strategic approach of the ToC (Figure 3), which was chosen for this long-term solution, will focus on two inter-dependent components related to addressing the primary causes of the challenge of mainstreaming adaptation into the policies, plans and budgets at the national, regional and local levels (Figure 3). The priority intervention sectors covered by the project are those identified in Guinea's nationally determined contribution (NDC) (crop and livestock farming, water, coastal and forest areas).

25. In this strategy, the preferred solution is: "Priority climate products and services for Guinea adapted to the needs of end users (men and women) or producers are developed, accessible and used for the development of early warnings and individual and community decision-making and development planning". In particular, it aims to address the issue of the impacts of climate change and climate-related disasters on Guinea's communities and development. For better effectiveness, this preferred solution focuses on prioritizing the eradication of the root causes of the problem by removing the still-persisting obstacles faced by the communities to adapt to long-term policies and development plans. By removing these obstacles, the project will help reduce the vulnerability of beneficiary communities to the adverse effects of climate change and all climate risks and disasters in Guinea. To this end, the priority actions to be implemented in order to effectively achieve the outputs required for expected Outcome 1 of Component 1 concern the equipping of the climate and environmental network with the

necessary hardware and software for establishing a database coupled with a Geographic Information System (GIS) for the creation of a national data bank (Outputs 1.1, 1.2, 1.3, 1.4, 1.5 and 1.6). This climate data center, under the coordination of *Direction Nationale de la Météorologie* (DNM, National Directorate of Meteorology) will enable the timely provision of data in real time for the generation of climate and environmental information and products. MEEF's CNGCUE will use these products to guide and direct, following an inclusive gender equity approach, the priority adaptation options in community development actions based on a modelling of the impacts resulting from the analysis of vulnerability and stakeholder needs. This will be conducted within the framework of effective outreach and massive dissemination of early warning climate and environmental products with priority adaptation options. To this end, the project targets 9,600,000 individuals, (51 per cent women), of whom 200,000 will be direct beneficiaries (Outputs 2.1, 2.2, 2.3, 2.4 and 2.5). These preliminary outputs are necessary to achieve the expected Outcome 2 of component 2.

26. For a country with a very high vulnerability to climate disasters such as Guinea, it is crucial that the coordination of the management of these climate change-related risks be strengthened. To this end, in addition to focusing on climate disasters, the Project financed by the LDCF fund will put greater focus on: (i) ensuring that climate risk management and climate change adaptation support each other with reciprocal benefits; (ii) assessing how disaster risk, including non-climate-related risks, could affect vulnerability to climate change and mainstream the appropriate responses to adaptation strategies at the national, regional and local levels; and (iii) ensuring as far as possible that the current disaster management strategies and investments will not increase vulnerability nor undermine the effectiveness of future adaptation activities. In addition, the preferred solution would be to strengthen community capacities to manage climate change and natural disasters related to climate risks. These capacities would thus be able to strengthen the capacities (through intensive training activities) of the local authorities and national, regional and local decision-makers, involving newly elected mayors and the actors involved in climate change adaptation activities, and in the management of climate crises and disasters. This solution would not only lead to community ownership of such interventions, but would also lead to their long-term sustainability in the long term.

27. The current capacities in the baseline situation to manage the effects of long-term climate risk are very weak at the National Directorate of Meteorology (DNM), the *Direction Nationale de l'Hydraulique* (DNH, National Directorate of Hydraulics) and the CNGCUE. Accordingly, the Project with LDCF funds will contribute to strengthen the capacities of these institutions and those of communities to adapt to climate risk and disasters, and to reduce their vulnerability to their adverse effects. Indeed, the project will deal with the obstacles to implementing global adaptation solutions at the local level rather than be limited to simple sectoral climate change adaptation approaches.

28. Systemic institutional and individual capacities in climate risk and disaster management will be strengthened through capacity building of the meteorological network and development structures in policy, institutional and regulatory review frameworks. This would facilitate planning and management of climate change effects of climate risks in the long term. To this end, the project will facilitate the integration of information and climate products in planning. For example, climate information will be integrated into vulnerability maps with risk maps to inform and guide land use and land management as well as development actions based on risks and their expected effects. Access, provision and use of this climate information will be promoted by strengthening technical and operational capacities including expertise and equipment for long-term monitoring of the most important climate-related risks and disasters that integrate data analysis. The data generated, collected and centralized in the data bank will be used to facilitate: (i) climate modelling and seasonal forecasts by the Guinea Meteorological Services; and (ii) the real-time dissemination and distribution of early warnings of storms, floods, rockfalls, landslides, heavy swells, droughts, extreme temperatures, earthquakes, rising waters, coastal erosion and encroachment of the sea on coastal lands. The climate information and products generated and centralized in a database under the coordination of the National Centre

for Risk and Disaster Management (CNGCUE) of the Ministry of Environment, Water and Forests in association with the *Comité Permanent Inter Agences* (CoPIA, Permanent Inter-Agency Committee) of the Humanitarian Agencies as part of the United Nations system Contingency Plan in Guinea will also increase the country's capacities to adapt to the adverse effects of climate risks to inform and guide development planning in the medium and long term.

29. Overall, the details of the project's intervention strategy for each of the two components are presented below. They constitute a powerful leverage for implementing the necessary changes in addressing the challenge of adaptation, with different benefits:

30. Benefits at the national level

• The setting up of an integrated information system (Outputs 1.1, 1.2, 1.3) including a climate and satellite data bank (Outputs 1.4, 1.5), the strengthening of the capacities of the network agents (Output 1.6) in the operation and maintenance of the mechanism, and the vulnerability assessments will provide adaptation options based on medium- and long-term climate trends (Outputs 2.1, 2.2). They will also ensure the coordination of interventions in the early warning system in managing climate risk (Output 2.4) and the mainstreaming of adaptation into planning processes based on vulnerability assessment and effective impact modelling (Outputs 2.3, 2.4, 2.5). The provision and sustainable use of reliable climate forecasting, warning and projection products (Outputs 2.2, 2.3 and 2.6) are essential at the national level to inform, guide and direct the planning process in the country with a wide outreach, inclusive dissemination and effective use of climate information and products (Output 2.6).

• By strengthening the planning mechanism at the national level, the project will allow Guinea to be more effective and efficient in allocating the available resources for the adaptation while avoiding duplication by encouraging synergies and complementarities.

• These products will be used by the ministerial departments of the most vulnerable sectors through the various capacity-building modules to facilitate the updating and mainstreaming of adaptation into crop and livestock farming, fisheries and forestry, infrastructure and local policies integrating coastal erosion management. This will also contribute to facilitating the mainstreaming of cross-cutting issues into sectoral public policies as outlined in the priority objectives of PNDES 2016-2020.

These important products will also contribute to the adaptation process in Guinea through the provision of priority adaptation actions to be included in the formulation of development policies and plans.

31. Benefits at the local level

• The project will provide the opportunity to promote better adaptation options based on mediumand long-term climate trends for the most vulnerable sectors and locations (Outputs 2.3, 2.4, 2.5) in the implementation of the Local Development Plans (LDPs). This will lead to an inclusive creation of green jobs, as well as an improvement in the living conditions of vulnerable groups and their involvement in the economic and social development process.

• The project will also be a tool for social cohesion at the local community level through awarenessraising, training and information on adaptation (Output 2.6), and will reduce the many conflicts, particularly between crop and livestock farmers, through the adoption of best techniques and technologies for adaptation.

• Research and development in the selection of early and short-cycle crop species will stimulate adaptation and local development by promoting cereals and sectors conducive to inclusive growth in the value chain.

• The project will benefit 9,600,000 beneficiaries, representing 80 per cent of the Guinean population, of whom 51 per cent will be women, who are currently affected by the effects of climate change in the agriculture, fishing, livestock farming, mining and forest industry sectors. Indeed, the project aims to

provide messages of lightning alerts, floods, drought, strong winds and coastal erosion to this population. Access to reliable climate and socio-economic information and products, thereby strengthening their resilience while promoting their adaption capacity. The project will also benefit over 120 political decision-makers from the five different development sectors mentioned above among the most vulnerable in each of Guinea's four natural regions as well as those of the planning and finance sector. It will also benefit local members of parliament and elected officials. The beneficiaries will also be capable of understanding the risks of climate change and to identify priority adaptation options to be mainstreamed into policies and plans that also integrate LDPs.

32. Benefits of gender mainstreaming

• The analysis of the basic situation of the staff of the meteorological network (Annex M) underlines the weak involvement of women in the climate mechanism. There are 49 women out of the total staff of 300 workers in the hydrometeorological network, or 16.33 per cent. The presence of women is the weakest in the hydrological network where there are only 10 women out of a total of 115 people, i.e. 8.70 per cent. However, there are 8 women out of the total of 20 hydrology engineers among project design managers, or 40 per cent. In the meteorological sector, there are 39 women out of a total of 185 staff, or 21 per cent, whereas there are only 17 women out of a total of 105 engineers or design managers, or 16.19 per cent. There are no women in the strategic forecasting and modelling positions throughout the hydrometeorological system. The highest percentage of women is found in secretarial positions, at 100 per cent, followed by 25.33 per cent in the observer positions in the meteorological network where there are 19 women out of a staff of 75.

• As indicated in the data in Annex M, the engineers, who are supposed to be specialists in programming, forecasting and modelling, are assigned to these positions without having the necessary training. Indeed, the team of the current hydro-meteorological network needs training and coaching for specialized professional capacity building. This training should be extended to CNGCUE and research centres.

• The participatory and inclusive process through this project will involve women in the implementation of all of the expected outcomes from the project. Accordingly, women's jobs will effectively be promoted by building their capacities in the set-up of the climate and socio-economic data bank (Outputs 1.6, 2.2, 2.4 and 2.6).

• The development and implementation of training modules on mainstreaming adaptation into sectors that are vulnerable to the adverse effects of climate change (Output 2. 3) will benefit women working in the institutions in the departments responsible for crop farming, livestock farming, fisheries, forestry, water resources and coastal areas. Accordingly, concerns about gender-related issues will be addressed in the climate products to be generated, particularly in the expression of adaptation needs in the production systems and value chains of the growth sectors where women predominate.

• The involvement of women in the institutional agreements on project implementation will also allow to guide project outputs towards gender mainstreaming, despite persistent prejudices.

• To strengthen the project's capacity to better mainstream gender throughout the implementation, monitoring and evaluation of the project at the national, regional and local levels, a specialized gender expert will be hired to review the overall situation of gender equity and at all levels towards an effective change with respect to the baseline situation. Accordingly, gender-specific training will be included in Outputs 1.6 and 2.3.

33. Benefits to ongoing initiatives in the country

• In its innovative approach of removing obstacles to adaptation, the project will be able to add value to each of the ongoing activities. Due to the removal of persistent obstacles in the baseline situation, the project will create an environment conducive to greater efficiency and effectiveness of the ongoing

activities. The status of ongoing activities that will benefit from LDCF intervention is shown in Section V on Results and Partnerships.

• In addition, through the identification of the best adaptation options on the basis of medium and long-term climate trends, and through effectively coordinating EWS interventions with the aim of sustainability (Outputs 2.4 and 2.5) and also by mainstreaming priority adaptation actions into the adaptation process (Output 2.3), the project will contribute to ongoing interventions that are more efficient and effective. As a result, any investment in the project will be able to generate benefits for all the baseline activities, which indeed strengthens the efficiency of the project.

34. Contributions toward achieving the LDCF strategic outcomes

• In terms of global environmental impacts and benefits, the contribution of the project's impacts to the achievement of LDC's strategic outcomes is highlighted, as shown in Table 1.

<u>Table 1</u>: Alignment of the outcomes of the Guinea EWS Project with the LDCF strategic outcomes

LDCF expected outcomes	Project expected outcomes
Outcome 2.2: Improved scientific and	Outcome 1: The capacities of the
technical knowledge for identifying the	hydrometeorological network are
priorities in the implementation of adaptation	strengthened in monitoring and adaptation to
strategies and measures	climate change effects by integrating extreme
	weather conditions
Outcome 3.2: The policies, plans and	Outcome 2: An efficient and effective use of
associated processes are developed and	hydrometeorological information in the
strengthened to identify the priorities to be	production of early warnings and the
integrated into the adaptation strategies and	channeling/mainstreaming of climate change
measures.	into long-term development plans.

Project objecti∨e	Strengthening the capacities of climate monitoring and the early warning and information systems to respond to climate shocks and to plan climate change adaptation in Guinea				
Intermedia results	te Increased national capacities to collect hydrometeological information, monitoring hydro-climate risks and model the impacts to inform and guide the EWS and integrating adaptation in development policies and plans.	needs of the warnings on the extreme weather phenomena are are accessible and dissiminated in time, relevant climate updated, information is integrated into individual, community and national decision-making and in the development			
Project Outcomes	The capacities of the national hydrometeorological departments are strengthened in monitoring extreme weather phenomena and climate change	The climate products and services are accessible and use efficiently and effectively for the production of warnings for producers and in the drafting of medium- and long-term climate-resilient development plans			
Outputs to address the obstacles	 1.1: 64 hydrological stations with telemetry, processing and archiving of data rehabilitated/installed and operational 1.2: 37 automatic weather stations, 1 upper air station with archiving and data processing facility and 24 lightening detection systems rehabilitated / installed 1.3: A training program is developed and delivered to 36 Class II hydrological and 70 Class II meteorological technicians (30% female for both) for the efficient operating and maintenance of the hydrometeorology equipment. 1.4: A training program to run hydrological models and produce CIPS is delivered to 35 Class I meteorologist and 10 class I hydrologist Engineers (20% female for both) 1.5: A centralized national hydroclimatic data and hazard information and knowledge 	 2.1. Risks profiles and maps for floods, landslides, thunderstorms, stormy winds, and droughts, for malaria and meningitis (length of transmission period and geographic range), risk zoning based on haz ard and risk maps for all ecological regions of the Guinea, the key river basins, agrometeorological bulletins, rainy season outlooks are developed. 2.2. Hazards risks and CIPS are integrated in the multi-years investments plans of the agricultural, water, environment and health sectors, the national land use plan, the national disaster risks management strategy and the Local development plans of 26 municipalities. 2.3. A multi-hazards EWS (IMHEWS) covering all Guinea is developed and operational. 2.4. A sustainable financing mechanism for the MHEWS and the centralized national hydroclimatic data and hazard information and knowledge system is developed. 			
	sharing system set up	3. Low awareness of decision-makers of the importance of			
Key causes and barriers	stations does not cover the country adequately 2. Poor station locations and calibration of collection tools 5. Low coordination of earl dissemination of climate in 6. Low awareness of the ne	ollect hydrometeorological o dimate products and services, y warning systems and formation			
		d to the needs of male and female end users and producers are developed, ng at the individual, and community level and for development planning			

Problem: Climate change and climate-related disasters impact the communities and the development of Guinea

Figure 3: Theory of Change of the Guinea EWS project

III. RESULTS AND PARTNERSHIPS

i.Expected results

Project objective, outcomes, outputs and activities

The goal of the project is to "strengthen the capacities of climate monitoring and early warning and information systems to respond to climate shocks and plan climate change adaptation in Guinea". To achieve this goal, at the end of project implementation, the project must achieve the following outcome: "The capacities of the national hydrometeorological departments for monitoring extreme weather events and climate change are strengthened" (Outcome 1). To meet the conditions for achieving this project goal, it will be necessary to ensure that: "the climate products and services are accessible and used efficiently and effectively to produce warnings for the producers, and medium and long-term climate-resilient developing plans are drafted" (Outcome 2).

35. The mainstreaming of adaptation into policies, plans and budgets at the national, regional and local levels associated with regular monitoring and evaluation, and periodic updating will strengthen the resilience of the development and the adaptation of production systems, ecosystems and communities to the adverse effects of climate change.

36. Effectively addressing the obstacles (see Figure 3 on the Project's ToC) that today prevent the ongoing activities of the baseline situation from achieving the SDGs will focus on building the capacity of the production mechanism for producing reliable climate information and products, as well as building capacities of relevant institutions in mainstreaming adaptation processes in policies, plans and budgets at the national and local levels.

37. At present, 14 projects supported by the GEF and Guinea's partners, including UNDP, have contributed to strengthening the hydrometeorological system in Guinea. GEF- and UNDP-funded projects include: (i) Projet de Renforcement de la Résilience et Adaptation aux Impacts Négatifs du Changement Climatique dans les Zones Côtières Vulnérables de la Guinée ((RAZC, Increasing Resilience and Adaptation to Adverse Impacts of Climate Change in Guinea's Vulnerable Coastal Areas); (ii) The Projet de renforcement de la gestion décentralisée de l'environnement pour répondre à l'objectif des Conventions de Rio (Strengthening Decentralized Management of the Environment to Meet Rio Convention Objectives); (iii) The Biogas Project; (iv) the project Renforcement de la Résilience des Moyens d'Existence des Communautés Agricoles des préfectures de Gaoual. Koundara et Mali face au changement climatique (REMECC-GKM, Strengthening Resilience of Farming Communities' Livelihoods against Climate Change in the Guinean Prefectures of Gaoual, Koundara and Mali); and (v) Adaptation basée sur les Ecosystèmes en ciblant les communautés vulnérables de la Région de la Haute Guinée (AbE/HG, Ecosystem-Based Adaptation Targeting Vulnerable Communities of the Upper Guinea Region). Overall, these projects have specifically made it possible to refurbish and equip ten automatic weather stations that will feed into the EWS mechanism. They also supported the updating and mainstreaming of climate change into 22 LDPs.

38. However, this LDCF project will build on the achievements of the GEF projects and will also strengthen the meteorological network at the national level. It will also create network of all stations with a centralized database that will be set up. This database coupled with GIS will be a national data bank for the authorized and harmonized provision of reliable climate information required for creating early warning climate products for severe weather events and for modelling impacts in the aim of providing priority options for inclusive adaptation with an effective gender equity in the building of resilience.

39.In addition to these GEF initiatives, as well as ongoing actions at the DNM and DNH, the project will build a robust partnership strategy for effective synergies with three other projects including: (i) *Programme National d'Appui aux Acteurs des Filières Agricoles en Basse Guinée et Faranah* (PNAAFA-BGF, National Programme to Support Agricultural Value Chain Actors in Lower Guinea and Faranah expansion) and (ii) *Projet Système d'Activités Rizicoles en Territoire de Mangrove* (SARITEM, Support Project for Rice Production Systems in Mangrove Territories) financed by the French Development Agency (AFD) and *Programme d'Appui aux Communautés Villageoises-3ème Phase* (PACV3, Third Village Community Support Project). The first two projects were initiated to serve as tools for implementing agricultural policy through the *Programme National d'Investissement Agricole* (National Agricultural Investment Plan) to contribute to Guinea's food self-sufficiency and the third is an initiative to strengthen capacities in local development planning. To this end, these initiatives have to strengthen the production and productivity of rice and the commercial sector of horticultural value chains for improved food security.

40. With the effects of climate risks in mangrove rice production in Lower Guinea and the intensification of the adverse effects of climate change in Upper Guinea (Faranah), should these important projects not mainstream priority adaptation options, they will risk failing to achieve the expected outcomes despite their significant budgets amounting respectively to US\$ 40.1 million and EUR18 million, by results below expectations. Overall, the current capacities of the DNM's human resources and equipment are insufficient to provide these two important projects on agricultural policy with the appropriate services of climate information that are needed to prevent and manage, in the medium and long term, the disastrous impacts of severe climate risks for the development of rice cultivation and horticultural industries. Accordingly, this LDCF-funded Project, whose activities aim to respond to these risks, will maximize the chances of success of the Agricultural Policy as one of the highest priorities of the authorities in this vital and vulnerable sector – i.e. agriculture – representing one Vision Guinea 2040's drivers of growth.

41. How these initiatives in the implementation of agricultural policy are coordinated with those of the DNM and the EWS project for effective complementarities and synergies are described in detail in section (ii) on *partnership* and in Table 7 on *parallel co-financing*, under section XI on *financial planning and management*. Table 7 illustrates the co-financing amounts negotiated during the PPG phase with statements of intent for co-financing projects, which will be confirmed by letters signed at the time of the Project Document (PRODOC) submission.

42. With the removal of all remaining obstacles, an environment conducive to resilience and adaptation will finally be created with the EWS project, through the two components of the alternative option of the UNDP-GEF initiative, thus illustrating its innovative and efficient nature.

43. As part of the project's chosen strategy, the goal of project as set in the Theory of Change (Figure 3) will only be met with the achievement of the two expected outcomes, outputs and activities, as follows.

COMPONENT 1: Technology transfer for monitoring the climate and environmental infrastructure.

OUTCOME 1: The capacities of the national hydrometeorological departments in monitoring extreme weather phenomena and climate change are strengthened.

The overall cost of financing Outcome 1 is US\$ 24,613,093, to be distributed as follows:

Outcome 1 cofinancing:	US\$ 20,650,000
LDCF funding for Outcome 1:	US\$ 3,963,093

Without LDCF intervention (baseline situation)

44. **Without the intervention of LDCF resources**, the causes of weak mainstreaming of adaptation into development processes will not be addressed. The situation of ongoing efforts leaving significant obstacles in place (see section *Threats, roots of causes, and obstacles to adaptation*) demonstrates that removal of these obstacles is necessary.

45. Due to Guinea's current obsolete and under-equipped meteorological network, reliable climate and socio-economic data will always be still lacking. Consequently, this situation will never change due to the lack of a mechanism for reliable early warning and projection of impacts, as well as a lack of alternative priority options in a context of climate aridification and increased vulnerability. Ultimately, with the lack of a mechanism for climate simulations and for climate change impact assessment, priority adaptation actions will always be excluded from the development agenda. During the PPG phase, the project capitalized on the lessons learned of the ongoing activities and relied on their achievements in order to propose the implementation of activities needed to the required changes in creating an enabling environment for mainstreaming adaptation.

46. **The baseline situation of the meteorological network**. In addition to the nine meteorological stations being renovated and provided with additional equipment through ongoing GEF projects, the meteorological device has an upper air probe and 12 lightning detection stations. As regards hydrology, the baseline situation includes seven hydrological stations out of the required 22; 20 automatic hydrological stations to be equipped with additional equipment out of the required 62; no staff gauges out of the required 252; and only 170 gauge plates out of the required 600.

47. To date, the baseline situation has, as an alternative option to radar, 12 lightning detection stations, which are not yet fully functional. The LDCF funds will be used to renovate the 12 existing stations and to set up 12 new stations for a total of 24 lightning detection stations to cover the areas with no climate station.

48. **With regard to the hydrological network**, the baseline situation indicates that there is a need for 15 hydrological stations. With regard to automatic hydrological stations, in order to obtain reliable data, there is an additional need for 42 stations. These additional needs include a total of 252 supports for staff gauges, 380 gauge plates, 8 computers, 2 servers and GIS software for the database.

With the LDCF intervention (alternative adaptation option)

49. Under Component 1 of the project on "Technology transfer for monitoring climate and environmental infrastructure", the first desired outcome is "Capacity of the hydrometeorological network is strengthened in the monitoring and adaptation the effects of climate change incorporating extreme weather conditions". With this component, the Government of Guinea will be able to use the LDCF resources to procure, install and/or rehabilitate the critical additional infrastructures required to build and/or strengthen the climate observation network. For any acquisition of equipment, an evaluation of the existing equipment will be carried out, with mention of the manufacturing firm, if the equipment continues to be functional, or if the *Service Météorologique et Hydrologique National* (SMHN, National Meteorological and Hydrometeorological System) is interested in continuing with certain individual models.

50. Based on a strong baseline of the above-mentioned projects and the equipment that these ongoing projects have put in place, the LDCF resources will be able to scale up the project at the national level and install appropriate infrastructure, improve access to climate information for an efficient and reliable EWS. In this particular context of climate change and variability, access and understanding of agro-meteorological information is a prerequisite for the efficient production, management and decision-making regarding agro-sylvo-pastoral activities. This equipment will serve as accessories to the EUMETSAT satellite receiver, the PUMA/MESA station, and the monitoring system of climate parameters of Conakry Airport, which was installed through the baseline projects mentioned above. It aims to support the DNM in supplying populations, including farmers and decision-makers, with

reliable, quality climate information and services in order to anticipate the effects of climate change and take appropriate action to cope with these climate risks.

51. For each of the six outputs needed to achieve Outcome 1, the key planned activities are as follows:

Output 1.1 64 hydrological stations with telemetry, processing and archiving of data rehabilitated/installed and operational.

107. In this Output 1.1, LDCF resources will be used for the acquisition, installation and / or rehabilitation of hydrological monitoring stations with telemetry, processing and archiving of data and appropriate services, thus providing the National Direction of Hydrology (DNH) with the possibilities to monitor the water levels of lakes and watercourses. DNH will also be able to timely detect flood risks, issue warnings for transport/waterworks managers such as downstream dams as well as warnings to the exposed communities. All of the stations will be equipped with the appropriate means to relay data to central servers and to regional and global climate centres through, for example, GPRS or satellite telemetry.

108. The key activities for the outputs 1.1 are the following

- Activity 1.1.1: Acquire and install 64 automatic hydrological stations, 252 gauges supports, 380 gauge plates, 8 computers, 2 servers and GIS software for the data bank.
- Activity 1.1.2: Acquire topography equipment and a Zodiac boat with an outboard engine for the network monitoring.
- Activity 1.1.3: calibrate the stations (after two-three weeks from installation) and to measure the river water level and the transmission of data to the central server via GPRS or satellites.

Output 1.2. 37 automatic weather stations, 1 upper air station and 24 lightening detection sensors with archiving and data processing facility rehabilitated/ installed

109. In this output, the LDCF funds will be used to expand the meteorological network for weather forecasting and monitoring violent weather phenomena, such as cloud-to-ground lightning strikes, heavy rain, high winds, hail and tornadoes, and the provision of reliable early warning climate information and products with options for adapting to the adverse effects of climate risks.

- 110. The key activities for the output 1.2 are the following
 - Activity 1.2.1. Upgrade 9 meteorological stations, install them with their respective accessories, 1 upper air station, 6 automatic synoptic stations, 2 synoptic aerodrome stations, 12 automatic weather stations, 5 automatic agrometeorological stations and 3 automatic maritime stations with a telemetry service, archiving, analysis and meteorological data processing services along with the necessary computers equipment and software.
 - Activity 1.2.2: rehabilitate the radiosonde station (upper air) of Conakry airport for meteorological upper air data collection used for forecasting.
 - Activity 1.2.3: Upgrade 12 lightning sensors from the testing phase and acquire 12 new sensors for full coverage of Guinea
 - Activity 1.2.4. Digitize written meteorological data stored at the DNM to create series that span longer durations to detect climate change trends
 - Activity 1.2.5. Consult local representatives on the site before installing the meteorological equipment in order to ensure that it is installed in the useful and secured locations and build security fences around the meteorological stations.

Output 1.3: A training program for the efficient operating and maintaining of the hydrometeorology equipment is developed and delivered to 36 Class II hydrological and 70 Class II meteorological technicians (30% female for both) of DNM and DNH.

111. In this output, LDCF funds will be used to develop the technical capacities of the meteorological and hydrological technician of the National Directorate of the Meteorology (DNM) and the National Directorate of Hydrology (DNH) in charge of the weather observations and hydrology measurements, for the use, maintenance and servicing of the hydrometeorology network strengthened with LDCF funds in outputs 1.1 and 1.2. Because of a low number of Class II technical staff at the DNM and DNH, the capacity building program will not be able to realize the 50% female beneficiaries. However, the trainings will give priority to the women Class II technical staff interested by the training and the introduction to the required technical information. The capacity building program will give preference to South-South cooperation, where relevant.

- 112. The specific activities needed to achieve this output are:
 - Activity 1.3.1: update the capacity gap assessment of the DNM and DNH Class II staff and develop a capacity building program for these staff for the use and maintenance of operational equipment that has been acquired in this project as well as old equipment that is still operational
 - Activity 1.3.2. Deliver the capacity building program for the DNM and DNH Class II staff
 - Activity 1.3.3. In coordination with the outputs 2.1 and 2.5, develop for the 2 institutions a strategy for the regular update and strengthening the capacity of the DNM and DNH staff.

Output 1.4: A training program to run hydrological models and produce CIPS (including EW information) is delivered to 35 Class I meteorologist engineers and 10 class I hydrologist engineers (20% female for both) of the DNM, DNH

113. The LDCF funds will be used in this output to strengthen the capacities of the meteorological network staff to generate, the climate information (services and products) needed guide the adaptation to climate change. Specifically, the project will support the building of capacity of the DNM and DNH meteorology and hydrology engineers specialized in weather and hydrology analysis, forecasting, climate monitoring and prediction, agriculture meteorology, environmental meteorology, to use appropriate climate models, and weather and hydrology data collected by the strengthened hydro-climatological network, to produce climate information products and services (CIPS). These CIPS are necessary to improve management of climate risks such as flood, droughts, landslide, rainfall disturbances and will be also relevant for mainstreaming climate risks in the policy documents and multiyear investment plans of the agriculture, health, and local development plans. Because a low number of Class I engineers at the DNM and DNH, the capacity building program will not be able to realize the 50% female beneficiaries. However, the trainings will give priority to the women Class I Engineers interested by the training and presenting the required technical background. The capacity building program will give preference to South-South cooperation where relevant.

114. The activities needed to achieve this output include:

- Activity 1.4.1. Update the capacity need assessment and develop a training package for the DNM and DNH Class I engineers
- Activity 1.4.2: deliver the training package for the DNH Class I engineers in the production of improved forecast for water users and mining companies, agricultural projects, national and regional authorities responsible for hydrological resources management to enable and improve water management and to mitigate losses due to floods.

- Activity 1.4.3. deliver the training package for the DNM Class I engineers in the production of improved meteorological forecasts to be used daily towards resilience to climate change and to be mainstreamed in the development plans.
- Activity 1.4.4. Ensure the strengthening of capacities of the partners' staff in the daily use of early warning and climate information

Output 1.5: A centralized national climate data and hazard information center and knowledge management system is set up.

115. LDCF funds will be used in this output to set up a centralized climate data and hazard information center. This will consist of the development of national e-Library, databases, information systems and knowledge portal (web knowledge portal to increase awareness, provide interactive hazard maps, with integration with social media and possible mobile app to increase community engagement and allow two-way flow of information). The weather, hydrology and extreme event monitoring and forecasting data collected from the upgraded hydrometeorology network and the lightening detection sensors, the climate hazard and risk assessment produced by the hydrometeorological engineers, coupled with satellite data/images and the CIPS and EW information that will be developed under the output 2.2 will be centered at the national climate data and hazard information center. The national climate data and hazard information center will be managed by the DNM. To enable access and sharing of this information, a "Last-Mile" early warning and CIPS dissemination and communication system will be developed as an integral part of the multi climate hazards EWS (MHEWS) that will be produced under the output 1.5 and provide the information access and sharing platform for geospatial information on hazards.

116. This output aims in particular to set up a working station for the hydrometeorology staff and a digital data sharing system in order to widen the scope of EWS application to include regional and global centres.

- 117. The activities in this output include:
 - Activity 1.5.1. Acquire a specific server with the appropriate software and tools for the reception, integration, analysis, processing and archiving of hydrometeorological and environmental data.

This activity will include the setting up of the necessary equipment for: (i) the creation of a single national climate and environmental data bank to facilitate the coordination of EWS; (ii) under the supervision of the DNM, the introduction of an administrative act on the creation, organization and operating of the EWS project data bank to formalize the centralization and the official distribution of the data in order to remove the spreading of non-official data sources; (iii) the signing of memorandums of understanding between the managers of the various existing databases at the DNM, the DNH and the CNGCUE; (iv) a consultative study led by an international consultant and with the support of two national consultants for coupling the database with a GIS to yield graphic and cartographic climate products. This will create the data bank with easy-to-understand products in order to facilitate the achievement of the Output 2.6 targets on for the outreach and dissemination of climate information and products.

• Activity 1.5.2. Ensure that the various hydrometeorological and environmental databases are interconnected for climate information sharing.

The actions needed to implement this activity include a consultative mission under the leadership of an international consultant with the support of two national consultants (Activity 1.4.1) for testing the mechanism through climate and environmental data

coupling operations for forecasting, simulations and modelling of climate risk impacts. This aims to provide early warnings to various users with alternative priority adaptation options.

COMPONENT 2: integrating climate information, early warning and climate adaptation products into development plans.

OUTCOME 2: Climate products and services are accessible and used efficiently and effectively for the production of warnings for producers and in the drafting of medium- and long-term climate resilience development plans.

Climate products and services are accessible and used efficiently and effectively for early warning products for the producers, and medium- and long-term climate-resilient developing plans are drafted.

The overall funding required to achieve the Outcome 2 of the project amounts to US\$ 11,448,707 and is broken down as follows:

<u>Co-financing for Outcome 2:</u> US\$ 10,647,330

Grant required from LDCF for Outcome 2: US\$ 801,377

Without the LDCF intervention (baseline situation)

52. Currently, the baseline of the PPG project indicates that adaptation is not sufficiently mainstreamed in the development agenda in Guinea, particularly in vital and priority sectors that are among the most vulnerable to climate change risk (crop and livestock farming, water resources, forestry and coastal areas). Such is the case with the new five-year National Economic and Social Development Plan (PNDES) for the 2016-2020 period, which constitutes one of the first steps for the implementation of Vision Guinée 2040. This is also the case with the PNIA, the Energy Sector Policy Letter, the Poverty Reduction Strategy Paper (PRSP) and the LDPs.

53. Communication on climate challenges remains generally weak, and climate information is not disseminated and remains confined to experts. Without intervention, the weak capacity of the institutions to manage the adverse effects of climate change will increase further, and the local knowledge developed by the communities in the face of the aridification of the environment will not be capitalized to serve as crisis exit strategies. Consequently, alternative options for adaptation and preparedness for response to various climate shocks will not be promoted. This situation will therefore result in a lack of alternative options in the technical management of the response to climate shocks and in weak institutional capacities in the climate outlook in order to guide the mainstreaming of adaptation into the strategies and processes for economic and social development planning.

54. The operational tools for monitoring and evaluating climate and socio-economic impacts, which has recently been set up within the AbE project, only target Upper Guinea. They will not be sufficiently operationalized, and the development process will strongly lack mainstreaming of adaptation in the planning process at the national and regional levels and in the sectoral development policies.

55. The extension of PNAAFA-LGF (2014-2019) aims to improving and integrating access to meteorological information and support for improving food security for the rural populations in the administrative regions of Boké, Kindia and Faranah. Accordingly, for the project, a memorandum of understanding on cooperation was signed with the DNM.

56. The Kakossa Rural Development Project (PDR-K) aims to improve Guinea's security situation by rehabilitating 2,400 ha of upland rice crops in Kakossa and supporting the development of rice production in 384 ha of land. The Lower Guinea Rice Cultivation Project (Riz-BG) aims to: (i) develop 2,500 ha of rice crops in Lower Guinea; (ii) support the water resources management for rice production; and (iii) fund research activities (soil fertility management and socio-economic monitoring).

57. The success of these two projects will also depend on access to appropriate climate information on managing the effects of climate risks for agricultural development. In general, the *Programme National d'Investissement Agricol* (PNIA, National Agricultural Investment Programme) should be one of the key strategies for institutionalizing and systematizing the decision-making processes. It should also identify the investments required for managing climate risks for agricultural development initiatives, including PNAAFA-LGF and PDR-K, which, however, do not yet incorporate the provisions for climate information and the management of the effects of these risks.

58. This is also the case of the PNDES, which does not include the necessary provisions for mainstreaming climate change into the national development processes. In addition, the Government of Guinea has developed a new Policy Letter on Energy Sector Development. This Letter aims to improve the country's capacity to produce electricity to the level needed to satisfy the country's desired growth and economic development by exploiting its great hydroelectric power potential. In spite of the concrete investments underway in this important and vital field for the development of the country, and in reference to the fundamental importance to maintain water flow for the sustainability of activities, this programme does not benefit from a hydrometeorological information system for managing the most severe effects of climate risks in order to sustain the acquired achievements. One of the key success factors of this energy development strategy will be to access reliable climate information and products in order to address the impacts of climate risks on the investment policy for managing hydroelectric potential.

59. Overall, it should be noted that far from being just another project, the alternative option of the EWS Project funded by effectively removing the obstacles to reliable climate information capable of generating effective early warning products with alternative adaptation options will be able to add value to each of the activities underway. It will therefore create an environment conducive to the successful economic and social development activities towards an inclusive and sustainable growth through the strengthening of resilience and the extensive promotion of adaptation actions.

With the LDCF intervention (adaptation alternative [option])

60. With this second component of the project, LDCF funds will be used to develop the capacity of the hydro-meteorological network to produce and use climate information and services for men and women, meeting the needs of end users. This component will also build capacities to mainstream climate products and services into development planning processes for female and male staff involved in planning and in the most vulnerable sectors. A financial sustainability strategy for the EWS and for the production and dissemination of climate information is subsequently developed for the effective financial sustainability of the system. In addition, there will be a strategy to encouraging effective access and use of early warning climate information and products for various users, both women and men.

61. Through this second component of the project, LDCF funds will be used to support the Government of Guinea in mainstreaming climate change in ongoing sectoral development at the national, regional and local levels. To this end, Guinea has opted to update existing plans and policies by mainstream adaptation strategies and options instead of formulating new policies and plans.

62. Overall, Component 2, based on the achievements of Component 1, will support the review process of the PNDES, Sectoral Policies and LDPs for a mainstreaming of adaptation towards making an effective contribution to achieving the targets of Vision Guinée 2040. Indeed, it has been determined that, due to recurring climate risks and their adverse effects on the efforts made to date, for any development planning to be effective today, it must above all integrate climate risks.

63.By focusing on the second category of obstacles to adaptation (Figure 3), component 2 of the project will produce the optimal conditions for the effective and judicious use of climate products that emerge from Component 1. In order to effectively achieve Outcome 2, "The climate products and services are accessible and used efficiently and effectively for the production of warnings for producers

and in the drafting of medium- and long-term climate resilience development plans", which is the aim of Component 2, it will be necessary to achieve the following expected outputs of this component.

Output 2.1: Risks profiles and maps for floods, landslides, thunderstorms, bushfires, stormy winds, and droughts, malaria and meningitis (length of transmission period and geographic range), risk zoning based on hazard and risk maps for all ecological regions of the Guinea, the key river basins, agrometeorological bulletins, rainy season outlooks are developed

118. Consultations held during the project preparation phase allowed to identify these priority climate information products and services for the key sectors. In this output, the LDCF funds will be used to carry out an analysis on the expression of needs of various users in terms of climate information and products towards greater effectiveness in risk detection and management.

119. The activities under this output include:

- Activity 2.1.1 Develop hazard, risk and vulnerability maps for all hazards and all major river basins in Guinea.
- Activity 2.1.2. Introduce modelling and mapping technology and methodologies in line with international directives and following international best practice.
- Activity 2.1.3. Develop and deliver training package in hazard and risk modelling.
- Activity 2.2.4 Use the hazard maps to develop and implement spatial zoning policies.

Output 2.2: Hazards risks and CIPS are integrated in the multi-year investments plans of the agricultural, water, environment and health sectors, the national land use plan, the national disaster risks management strategy and the Local development plans of 26 municipalities

120. The resources from this output aims at supporting the integration of the key risks and adaptation responses in the investments plans of the key economic sectors of Guinea, the land use planning, and the local development plans of 26 municipalities of the regions of Conakry, Boke, Faranah, Kankan, Kindia, Labe, Mamou, N'zerekore.

121. The key activities for the achievement of the output are the following:

- Activity 2.2.1: Training on the integration of key risks in the investment plans of the agricultural, water, environment, health sectors, the land use planning and disaster risks management is delivered to 150 staff of these sectors of 150 staffs of these sectors.
- Activity 2.2.2: run a participative process for the integrations of the risks and adaptation measures in the investment plans, land use plans and disaster risks management strategies

Output 2.3: A multi hazards EWS (MHEWS) covering all Guinea is developed and operational

122. This output will be based on the achievements of the (Monitoring for Environment and Security in Africa) MESA Programme recently launched by SERVIR⁴ at the national and regional levels according to each site throughout Guinea where satellite reception equipment was installed. The potential uses of satellite data and images for planning and management purposes in the context of food security and water resources management will be specifically established, on the basis and needs of users in the short-term management of the climate disasters and medium- and long-term planning. If on-line data are not available on time to support the necessary decision-making, then satellite image reception equipment will be purchased with LDCF funds.

⁴ www.servir.net/africa/index.php?option=com_frontpage&Itemid=1

- 123. The activities under this output include:
 - Activity 2.3.1. Development of a fully integrated multi-hazard forecasting system to be implemented within the CNGCUE (National center for the management of the environmental disasters and emergencies) to cover the whole territory of Guinea.
 - Activity 2.3.2. Develop early warning messages for droughts, landslides, flash floods, bushfires, thunderstorms and stormy wind
 - Activity 2.3.3. Design and implementation of the National MHEWS Protocol' "Last-Mile" warning dissemination and communication system
 - Activity 2.3.4. Set an inter-institutional and multi-disciplinary committee to promote coordination
 of the different EWS in Guinea, foster consultations among all the sectors and actors interested
 by the management of climate change and disasters to agree on the role of each institutional
 actor in the deploying of the MHEWS and the access to the climate information in the national
 climate data center
 - Activity 2.3.5: Set an inter-institutional and multi-disciplinary committee to promote coordination
 of the different EWS in Guinea, foster consultations among all the sectors and actors interested
 by the management of climate change and disasters to agree on the role of each institutional
 actor in the deploying of the MHEWS and the access to the climate information in the national
 climate data center
 - Activity 2.3.6: set up the required institutional, policy and regulatory framework defining the role of each of these institutions in the running of the MHEWS and clarifying the mandate of the coordinating institution, define the protocol for the EWS and warning message dissemination
 - Activity 2.3.7. Raising awareness and training of the institutional actors and communities' members to fulfill their role and responsibility in the running of the MHEWS: risk zoning, EW message dissemination, responses to climate disasters, etc....
 - Activity 2.3.8. Nation-wide risk zoning policy based on risk and hazard maps (produced under output 2.2) will be operationalized through relevant national regulations and guidance documents. Clear communication lines between different agencies will be established, any duplication and inefficiencies will be eliminated. Standard Operational Procedures, Communication Protocols and Codes of Conduct will be developed for each of the agencies responsible for the various elements of the MHEWS and response. Roles of regional and local authorities will be clarified and detailed.

Output 2.4: A financial sustainability strategy for the EWS and the centralized national hydroclimatic data and hazard information and knowledge system is developed

124. To ensure that financial and economic resources are available after the end of the project, this output will assess the financial sustainability of the provision of early warning and climate information by analyzing current funding and budget allocation mechanisms for the hydrometeorological sector, identify the costs and develop financial planning for the maintenance and upgrade of the network and identify potential domestic and international sources of finances including from the private sector. Furthermore, the project will support advocacy and raising awareness towards the decision makers of the key sectors including the authorities in charge of the national and sectoral budget planning processes. These raising awareness will use cost-benefit analysis to convince on the economic relevance of investing in climate and early warning information and examples of positive socio-economic impacts of CI-EWS investments from neighboring countries. In addition, the project will support the identification and partnering with potential contributors from the private sectors specifically the mining and agroindustry companies in Guinea and international private climate information production companies. Specifically, the project will provide the following safeguards to financial sustainability:

- Activity 2.4.1: develop a long term and budgeted operation and maintenance plan
- Activity 2.4.2: Review budgetary requirements for long-term maintenance of optimized hydrometric network and development of a financing model to be put forward to government for the long-term maintenance of networks (using cost-benefit modelling to support the financing model)
- Activity 2.4.3: Strengthening cross-agency cooperation in all CRM and DRR areas including DRR financing and improve the donor coordination in the area of DRR
- Activity 2.4.4: In coordination with the project M&E, carry out cost-benefits analysis of the project investments to convince on the socio-economic relevance of the investments and use this information to advocacy for more contribution from the government budget in terms of staffing, capacity building, O&M costs
- Activity 2.4.5 facilitate public -private partnership consultations to foster the participation of the private sector in the financing of the climate and early warning information system
- Activity 2.4.6. Strengthen the government capacity to mobilize resources from other sources

64. NGOs, CSOs and indigenous people will be involved in the implementation of the Outputs 2.1, 2.2 and 2.3 of the project Document to carry out raising awareness and certain training activities for the communities. The following NGOs/CSOs have been identified during the project implementation as potential partners in this project : Guinée Ecologie, Carbone Guinée, PRONG (Plateforme de Plaidoyer, Recherche et de Renforcement des Capacités des ONGs), ReNaSCEDD (Réseau National de la Société Civile pour l'Environnement et le Développement Durable), PREM (Partenariat Recherche, Environnement et Media).

65. All the outputs expected from the Components 1 and 2 of the project described above will be based on the robust baseline of important initiatives under way, both those of the Government and technical and financial partners in the field of adaptation and the promotion of sustainable development. To this end, obstacles will be removed so as to create a favorable environment for improving the ways to achieve and strengthen resilience and the inclusive promotion of adaptation.

ii. Partnerships

66. To enhance its effectiveness and efficiency, the Guinea EWS project will build on ongoing experiences to strengthen achievements and make additional contributions to adaptation efforts. To this end, the project will forge partnerships and synergies with ongoing initiatives, presented below:

Donor and donation	Name of project and implementation period	Intervention priority and focus areas	Fields of collaboration
IFAD and OFID (OPEC Fund for International Development) US \$ 40.1 million	Programme National d'Appui aux Acteurs des Filières Agricoles en Basse Guinée et Faranah (PNAAFA- BGF, National Programme to Support Agricultural Value Chain Actors in Lower Guinea and Faranah Expansion) 2014- 2019	Guinea (Labé, Mali, Tougué, Lélouma, Koubia, Gaoual, Koundara, Mamou, Pita and Dalaba Prefectures), in Upper Guinea (Kankan, Kerouane, Mandiana, Siguiri, Faranah, Dabola, Dinguiraye and Kouroussa prefectures) and in Forested Guinea and Lower Guinea. It aims to improve the food security of rural populations in the Boké, Kindia and Faranah administrative regions. To effectively achieve this goal, this initiative aims to strengthen the rice production and productivity and the commercial horticultural value chains for an improvement of food security. To this end, PNAAFA-BGF will establish framework agreements with public services including the National Directorate of Meteorology (DNM), DNA, DNH and the Environment at the national, regional and prefectural levels to improve access to appropriate climate information and products	The EWS project will capitalize on the adaptation practices, techniques and technologies developed by this project, in particular, the provision of better technology packages for the improvement of food security for Outputs 2.2 and 2.4, and also for the improvement of the mainstreaming of adaptation into development actions (Output 2.4). This will also include the improvement of early warning climate information and products (Outputs 1.1 to 1.6) and the mainstreaming of adaptation into agricultural sector planning (Output 2.3) through the outreach and extensive dissemination of climate products will strengthen the sustainability of the results of the Emergency Agricultural Production Support Project (Output 2.6)
AFD and World Bank US \$ 33 million	communes of Guinea Ministry of Territorial	Under the supervision of the Ministry of Territorial Administration and Decentralization, PACV3 operates in the 304 rural communes (RCs) of Guinea. It comprises 3 components: (i) the Local Investment Fund, which will be the mechanism used to transfer funds to the RCs in order to finance the public socio-economic infrastructure identified through a participatory process of strategic planning. This first component aims to ensure that RCs receive and manage funds transparently for building and maintaining a technically sound infrastructure. This would therefore enable the local authorities to tackle development issues by acquiring experience in planning, budgeting and financial managing as well as in development activities using participatory methods; (ii) capacity building for decentralized rural development., which should enable the RCs to prepare and implement their development and investment plans in an inclusive manner, with appropriate support from the decentralized staff. This component supports an ambitious capacity-building	The EWS project will capitalize on the achievements of Component A of PACV3 dealing with, respectively, capacity-building of the local authorities in planning, budgeting and financial management in participatory development activities. Component B of the PACV3 Programme will also benefit the EWS project through decentralized development focused on LDP management for a total of 304 RCs. The outputs of the two components of the EWS project include outputs on early warning climate information and products for an inclusive strengthening of community development resilience and the mainstreaming of climate risks into long-term policies, plans and the budgeting. This will support the updating of the 304 LDPs of the RCs targeted by the PACV3

Table 2: Potential of synergies with projects underway in Guinea

Name of project Donor and and donation implementation period		Intervention priority and focus areas	Fields of collaboration	
		includes support for the coordination of the national programme and monitoring and evaluation of the programme.	the targets of this important programme.	
AFD EUR 18 million	SARITEM (Système d'Activités Rizicoles en Territoire de Mangrove (SARITEM, Support Project for Rice Production Systems in Mangrove Areas) 2018-2022	Under the supervision of the Ministry of Agriculture, SARITEM operates in the coastal mangrove areas of Boké, Boffa, Forécariah and Dubreka. SARITEM aims specifically to contribute, using a value chain and territorial approach to "improve food security and incomes in the sustainable activities in the rice production system of mangrove areas while preserving the surrounding ecosystem".	The EWS project will build on the technical achievements and adaptation technologies developed by this project, in particular, the provision of improved technology packages for mangrove rice production in order to improve food security and the conservation of this vital and fragile ecosystem, i.e. the mangrove area, in the regulation of floods and tides on project intervention sites through Outputs 2.2 to 2.6. In addition, the project will benefit from improvement of early warning climate information and products (Outputs 1.1 to 1.6), that include early warnings of heavy swells and floods, and the monitoring of sea-level rise comprising aspects of salt water intrusion. Also, adaptation will be mainstreamed in agricultural sector planning (Output 2.5) through outreach and extensive dissemination of climate products. This will likely strengthen the sustainability of the results of the Emergency Agriculture Support Project.	
Japan 15 million US\$		Under the supervision of the Ministry of Agriculture, the WAAPP Project is being implemented all across Guinea Nationwide. The objective of WAAPP is to generate and accelerate the dissemination and adoption of improved technologies in the priority areas of agricultural products in participating countries, which are aligned with the priorities of agricultural products in the (sub) region, such as indicated in the ECOWAP (while contributing to increase the productivity of rice in the countries of the Mano River Union)	(i) strengthening regional cooperation in the generation of improved technologies; (ii) extension of training and dissemination programs focusing on priority regional and national products; and (iii) the development of collaborative mechanisms and synergies with programs and projects focused on targeted sectors	

iii.Risks and Assumptions

67.As per standard UNDP requirements, the Technical Project Coordinator will monitor risks quarterly and report on their status to the UNDP Country Office. The UNDP Country Office will record progress in the UNDP ATLAS risk log. Management responses to critical risks will also be reported to the GEF

in the annual PIR. Overall, the first six risks below were already recorded in the Project Identification Form (PIF) and remain valid during the PPG phase. In addition, the PPG identified three additional risks.

68. Table 5 shows the details of the nine main risks that the project is likely to face as well as their mitigation measures:

Description	Туре	Impact &	Mitigation measures	Owner
		Probability		Currer
The required expertise and data are not available	Administrative /Technical	Probability: 2 Impact: 4	The issue of the lack of available qualified human resources will be resolved through support of the UNDP/CIRDA during the upscaling of the hydro- meteorological network and the recruitment an international consultant who will work closely with the project team, including the counterparts of the hydrometeorological network and the national consultants, with the specific aim of strengthening national capacities. To this end, the project has planned on building the capacities of the hydrological network through Output 1.6 with activities 1.6.1 and 1.6.2. These training activities will be strengthened by those of Output 2.3 (Activities 2.3.1 and 2.3.2). The hiring of international consultants who have been trained in staff activities will accelerate the ownerships of the system 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 institutions will be encouraged to recruit, strengthen and train staff for five years in the station. The combination of the effects of these actions will reduce and eliminate this risk.	MT/UNDP
Weak IT communication infrastructures and expertise of the local mobile telecommunications network	Technique Technical	Probability: 2 Impact: 3	The use of the mobile telecommunications network will be a priority for the observation network because this infrastructure will provide, in time, the strongest communication means and security set-up of the IT equipment. The integrated Cloud services will also be used as an alternative option to minimize this risk locally in the computer rooms. The hiring of international consultants with staff training activities requirement will accelerate the ownership of the mechanisms by national staff (Outputs 1.1 and 1.2) to mitigate or eliminate this risk.	MT/UNDP
Weak institutional support and policy engagement	Policy	Probability: 2 Impact: 3	The proposed project is strongly supported by the Government of Guinea, stakeholders and development partners. The project, together with UNDP, will therefore consider this opportunity to request substantial support from the Government to build strong partnerships with other development partners. Direct links with the ongoing baseline activities through the Government for securing the necessary co-financing as well as local ownership will	MT/UNDP

Table 3: Risk situation and the options for mitigating risks

Description	Туре	Impact & Probability	Mitigation measures	Owner
		- TO SUBILITY	minimize this risk. This ownership will be attained as soon as possible in the other different ministerial departments that will be involved in the provision of data and information and eliminate this risk.	
Fragmented progress of the work with a weak integration and a refusal of the departments to share data and information	Policy	Probability: 2 Impact: 3	This risk is very common in projects like this one. With the guarantee that capacity building concerns 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 the capacity building of 200 decision-makers across all ministerial departments of the most vulnerable sectors in addition to those of the financial, planning and budget departments, as well as targeting locally elected officials and members of parliament. The creation of an official database with the support of the highest authorities by an administrative act on the creation, organization and operations of the data bank (Output 2.4) will be conducive to forging synergies in the collection and updating of data, which will reduce or even eliminate this risk.	MT/UNDP
Lack of cooperation of the main actors in the successful implementation of the project	Administrative	Probability: 2 Impact: 4	Participatory and inclusive project implementation with a monitoring of UNDP procedures will be effective measures to mitigate this risk. Given that the implementation of the project activities has been expressed by the concerned actors as urgent, the risk of non-cooperation will be mitigated, reduced or even eliminated. The capacity-building outputs (Outputs 1.6 and 2.3) in synergy with the awareness, information and communication activities of the adaptation at the national and sub-regional levels (Output 2.6) of the project will reduce or even eliminate this risk.	MT
The occurrence of climate shock during the formulation and implementation of the project	Environmental	Probability: 2 Impact: 3	There may be delays in meeting deadlines because some actors could be mobilized in these emergencies. It is not very likely, however, that this situation could change the direction of the project or cause it to be stopped. However, should this occur, the capacity- building activities (Outputs 1.6 and 2.3) will provide the upmost visibility to the actors concerned on the importance of managing adaptation for a rapid recovery in the event of a disaster. This will encourage diligence in the pursuit of project activities.	MT/UNDP
Weak will to adjust the governance frameworks (e.g. policies, plans, strategies and programmes, etc.)	Policy	Probability: 2 Impact: 4	Raise awareness and involve 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. This aims to strengthen political will to inform the systematically review policies, plans and budgets to effectively integrate the priority adaptation actions. This would eliminate this risk while considering that since this project is a national initiative with a large ownership of all the stakeholders who are very eager to see a very rapid launching this important project for reducing vulnerability and strengthening of resilience	MT/UNDP

Description	Туре	Impact & Probability	Mitigation measures	Owner
			and adaptation as through the capacity of forecasting, anticipating, responding and adapting to the effects of climate risks.	
The staff trained will not remain in the DNM and DNH enough to support the project activities and the sustainability of the project achievement	Strategic	Probability: 2 Impact: 4	The project will include conditions for the staff to be eligible for the training to commit to stay in the DNM and DNH for at least ten years	
Lack of sustainability of the investments in hydrometeorological observation	Financial/Oper ational	Probability: 3 Impact: 4	The long-term maintenance of investments in hydro- meteorological observations is ensured by the Government of Guinea under the DNM and the DNH who have a dedicated staff with a budget allocation for maintenance and operations of monitoring and early warning systems. The financial sustainability of the institutions will be assessed to accommodate the management needs of additional stations during the preparatory phase. The project plans on developing a fee for service model to cover recurrent costs. This activity will be paid by the budget of institutes that request climate products. Given the importance of this risk, a specific output is reserved for the effective management and elimination of this risk (Output 2.5) through activities 2.5.1 to 2.5.3.	MT

Risk Assessment Guiding Matrix

Rating the probability of a risk

Score	Rating
5	Expected
4	High likely
3	Moderately likely
2	Not likely
1	Slight

Rating the impact of a risk

Score	Rating
5	Critical
4	High
3	Medium
2	Low
1	Negligible

Significance of a risk



69. As per standard UNDP requirements, the Project Manager will monitor risks quarterly and report on the status of risks to the UNDP Country Office. The UNDP Country Office will record progress in the UNDP ATLAS risk log. Risks will be reported as critical when the impact and probability are high (i.e. when impact is rated as 5, or 4 and probability is rated at 3 or higher). Management responses to critical risks will also be reported to the GEF in the annual PIR.

iv.Stakeholder engagement plan

70. The various key stakeholders in the project formulation and implementation process are presented below according to their roles and contributions:

Stakeholders	Relevant function and role in the project
1. Ministry of Transport	The project will be implemented by the Ministry of Transport (MT) through the <i>Direction Nationale de la Météorologie</i> (DNM, National Directorate of Meteorology). This ministerial department ensures the technical supervision of the project and thus serves as the governmental agency for cooperation. It chairs the Steering Committee, which is the body for the strategic orientation and steering of project activities. It supervises the Scientific and Technical Committee (STC) for technical decisions based on scientific and technical aspects.
	It is responsible for and contributes to all the outputs of the two project components. Its roles are essential, especially for the entire production of information and products. This project supervision department is responsible for technical, administrative and financial management, particularly as regards monitoring and evaluation of project interventions, the achievement of project results and outcomes, and the efficient use of resources provided to the project by UNDP, through quarterly advances of funds, as part of the implementation of the annual work plans (AWPs).
2. inistry of Energy and Hydraulics (MEH)	This ministerial department oversees the <i>Direction Nationale de l'Hydraulique</i> (DNH, National Directorate of Hydraulics) and is therefore one of the fundamental pillars of the EWS project. It is member of the steering committee of the project. All of the hydrological activities of the project needed to achieve the expected outputs of the two project components are produced under the supervision of the DNH.
3. Ministry of the Environment, Water and Forests (MEEF)	The Ministry of Environment, Water and Forests (MEEF) oversees the implementation of the environmental policy integrating fisheries. It is responsible for sustainable development, which is a multi-sectoral and integrated aspect across all development sectors, including the departments responsible for agriculture, livestock farming, hydrology, hydraulics, forestry and mining. It thus serves as an interface with all parties concerned with regard to sustainable development standards. Through its divisions, including its decentralized local technical departments, it is responsible for matters concerning evaluating environmental impacts by integrating the economic and social aspects in line with the provisions of the environment code. It supervises the <i>Centre National de Gestion des Catastrophes et Urgences Environnementales</i> (CNGCUE, National Centre for Managing Environmental Disasters and Emergencies), an institution whose missions and support will focus in particular on: the effective monitoring of extreme weather events (Activities 1.3.1 and 1.3.2) of Output 1.3; the creation and

Table 4. Stakeholder matrix

Stakeholders	Relevant function and role in the project
	management of a reliable climate data bank (Activities 1.4.1 to 1.4.3); climate forecasts and warnings (Activities 2.1.1 to 2.1.4); and coordination of risk and disaster management actions of Output 2.4. Accordingly, this Centre will be responsible for managing the data bank and EWS products with the cooperation of the DNH and the DNM. It will also be responsible for aspects of national and sub-regional dissemination of products with EWSs for preventing climate-related transboundary conflicts (Output 2.6) through the CNGCUE.
4. Ministry of Economy and Finance (MEF)	This project will follow the National Execution Procedure (NEX), with UNDP serving as the executing agency for GEF funds. UNDP and GEF funds will be managed according to UNDP procedures and the advance of fund -using the Funding Authorization and Certificate of Expenditure (FACE) of the project. Funds from both the GEF and the Ministry of Finance (cash co-financing) will be deposited in a bank account opened for this purpose.
5. Ministry of Planning and International Cooperation (MPIC)	This ministerial department is in charge of the development planning of the country. The revision of PNDES 2016-2020 will provide the opportunity for an effective mainstreaming of adaptation into development planning at the national, regional and local levels. In addition, it will also provide the opportunity for this planning at the various levels to include a plan for priority adaptation actions. The climate and socio-economic products will serve as a guide for directing the processes according to the forecasts of risks and vulnerabilities while providing solutions for the best adaptation options based on the results of projections and analyses. This will also provide the opportunity to demonstrate that for any development planning action to be effective and efficient, it must now include climate adaptation planning.
	This ministerial department is at the core of all project outputs, integrating action planning that includes gender equity and inclusive resilience building. It will focus in particular on Outputs 2.2 (capacity building in mainstreaming adaptation into ongoing processes) and 2.3 (mainstreaming adaptation into national, regional and local plans). This department is a member of the Steering Committee (SC) and the Scientific and Technical Committee (STC) of the Project.
6. Ministry of Agriculture (MA)	This Ministerial Department is engaged in private sector activities that are among the most vulnerable to the adverse effects of climate change. The outputs of all of the project components consist in inputs into the planning of this important department for the economic and social development of the country.
	It will contribute to the project through activities for updating the PNIA, the Poverty Reduction Strategy Paper (PRSP), the Local Development Plans (LDPs) and the agricultural policy towards an effective streamlining of adaptation. Accordingly, it will focus on all of the project outputs of Component 2. It is a member of the Steering Committee (SC) and the Scientific and Technical Committee (STC).
7. Ministry of Livestock Farming (ME)	After agriculture, this is one of the most vulnerable sectors to the negative effects of climate change. Just like the Ministry of Agriculture, the Ministry

Stakeholders	Relevant function and role in the project
	will focus on all 6 outputs of component 2. It is a member of the project's Steering Committee (SC) and Scientific and Technical Committee (STC).
8. Ministry of Decentralization	This Ministry department is responsible for the local authorities, including all the decentralized bodies throughout the country. It is responsible for managing the LDPs. Its role in the EWS project is essential for mainstreaming climate risks and adaptation strategies into policies, plans and budgets (Output 2.3) and for disseminating and using climate adaptation information and products at the national and subregional levels (Output 2.6). It is a member of the Steering Committee (SC) of the project.
9. National Directorate of Meteorology (DNM)	This Directorate is one of the main pillars in the implementation of the EWS project. It is responsible for producing meteorological information and products needed by the EWS. Accordingly, it is responsible for all activities in Output 1.2 and contributes to Outputs 1.3 to 1.6. It plays an important role in the outputs of Component 2. It contributes to feeding the data bank (Outputs 1.4 and 2.4) and to the outreach and extensive dissemination of early warning and climate information and products for their effective use by stakeholders concerned at the 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 Scientific and Technical Committee (STC) of the Project.
10. National Directorate of Hydraulics (DNH)	This Directorate is at the core of the production of early warning hydrological information and products (Activities 1.1.1 to 1.1.3). It carries out effective monitoring of extreme hydrological events, particularly by monitoring water levels, and also provides flood alerts. It contributes to the data bank (Outputs 1.4 and 2.4) and to the outreach and extensive dissemination of climate information and products for their effective use by stakeholders (Activities 2.6.1 and 2.6.2). Under the supervision of the Ministry of Transport, It is member of the Project's Scientific and Technical Committee (CST).
11. Directorate of Water and Forests	This Directorate is under the direct technical supervision of the Ministry of the Environment water and forest. Its mission is to coordinate actions in the fight against climate change across all development sectors. It ensures the technical supervision of projects on the theme of the fight against climate change. Its role will be fundamental in the project.
	It will guide all the actions related to the other directorates responsible for the budget and national planning, and the sectoral directorates. As part of the EWS project, this Directorate will contribute to mainstreaming adaptation into the sectoral plans of the Environment. Specifically, the Directorate will contribute to achieving all the outputs needed to provide climate information, including: the climate and socio-economic data bank (Output 1.4); information on food security (Output 1.5); the mainstreaming of adaptation into sectors vulnerable to climate change through Output 2.5; and outreach and dissemination of climate information and products for their inclusive use (Output 2.6).
12. Deconcentrat ed Departments of the Territorial Administration	These departments support the administrative regions and the entire deconcentration mechanism through the <i>Départements</i> ' prefectures and sub-prefectures. Through this mechanism, national directives and policies are transmitted, implemented and managed; laws/regulations are

Stakeholders	Relevant function and role in the project
	implemented and security is maintained; public expenditures are allocated; and all regional and prefectural boards of directors and their agents are led, coordinated and supervised. In addition, opinions are given on the transfer, promotion and support of public servants; and decentralization and community groups, cooperatives, NGOs are supported in the management of their projects and plans; and socio-economic and cultural development are promoted in the regions, prefectures and sub-prefectures. Under the supervision of the governors responsible for development planning at the regional level, these bodies representing the State at the regional, departmental and sub-prefectural levels will play a central role in updating the plans of the region, the <i>départments</i> and sub-prefectures with priority action plans. Their contribution to the project will focus in particular on: capacity building (Output 2.3); guiding the planning within the updating of LDPs for an effective mainstreaming of priority adaptation actions (Output 2.3); disseminating climate information and products (Output 2.6).
13. The NGOs and civil	The NGO's and the civil society's role is to serve as the interface between the ministerial actors and the communities.
society	In this context, they will play a key role in training programmes and mainstreaming of climate risks and adaptation strategies in policies and planning processes (Outputs 2.3) and on inclusive outreach and massive dissemination of climate information and products (Output 2.6). They will also be represented in the project steering committees.
	The key NGOs/CSOs that have been identified as potential partners in this project are: Guinée Ecologie, Carbone Guinée, PRONG (Plateforme de Plaidoyer, Recherche et de Renforcement des Capacités des ONGs), ReNaSCEDD (Réseau National de la Société Civile pour l'Environnement et le Développement Durable), PREM (Partenariat Recherche, Environnement et Media).
14. Focal points of Environmental conventions	Focal points for United Nations Framework Convention on Climate Change (UNFCCC), the <i>Lutte contre la Désertification</i> (LCD, Fight against Desertification), the Convention on Biological Diversity (CBD) and the Ramsar Convention will play an active role in networking and information sharing for the project and will be invited to participate at the steering committee of the project
15. Grassroots community organizations and farming associations	These organizations will be among the main beneficiaries of the project activities and will participate in the design, implementation and monitoring of project activities for all components. They will participate in the project's performance evaluations, and in identifying the corrective measures to be taken as the EWS project is implemented in Guinea.

v. Gender equality and empowering women

71. As part of the development process in Guinea, the EWS project will include gender issues to ensure the equitable participation of women and men in decision-making and in the implementation of adaptation activities. It is also important to ensure that these activities do not exacerbate gender
inequalities. The mainstreaming of gender aspects in the Guinea EWS process will lead to more resilient communities and thus to successful adaptation.

72. The mainstreaming of gender considerations in the process of the EWS project could involve several activities, which include, in particular:

- Ensure the participation of the most vulnerable groups, including women, in the EWS project processes. This includes the integration of women's perspectives and reliance on unique knowledge on adaptation and management of local strategies in the formulation of the EWS project.
- Adjust and implement EWS project activities based on a clear understanding of the gender dynamics and potential disproportionate impacts of climate change on women.
- Assess the available information particularly, on vulnerable groups including women, and focus on these groups in future studies.
- Exploit the potential of women as agents of change within their communities and invest in this potential as an integral part of the EWS project process in Guinea.
- Carry out outreach activities to ensure that different stakeholders understand how adaptation to climate change can impact gender.
- Monitor and report on the mainstreaming of gender considerations in EWS project processes.
- Include gender considerations in the assessment of adaptation activities and make improvements where needed.
- Strengthen women's capacities by involving them in the generation of climate and socio-economic information and in particular in vulnerability assessment and vulnerability mapping to reflect their specific areas of interest.
- Strengthen the role of women in mainstreaming adaptation processes in policies, plans and budgets at the national, regional and local levels, and in sectoral decision-making in the most vulnerable sectors and sites in Guinea.
- Focus efforts and resources on gender, particularly on the awareness, training, information and communications programme on adaptation for inclusive and equitable use of priority adaptation options.
- Emphasize the participation of women in the Steering Committee (SC), the Scientific and Technical Committee (STC) and in the project management system by assigning them an important role in institutional organization.
- Share project lessons learned on prevention, simulation and risk management at the national, regional, local and international levels.

73.Overall, for each of the component of the project, the plan for mainstreaming and integrating gender equity through the various outputs of the Guinea EWS project is illustrated in Table 2.

Outcomes/Outputs	Responsible body	Gender mainstreaming activities in the project
Outcome 1: The capacities of for monitoring extreme weath		o-meteorological services are strengthened ad climate change
Output 1.1 : The hydrological network is strengthened for the hydrological monitoring and the data collection needed to provide reliable hydrological information	MEH/MEEF /MASPFE	Promote the involvement of women in the climate and socio-economic observation stations throughout the hydrological network.
Output 1.2: The meteorological network is strengthened for climate monitoring and the provision of reliable early warning climate information and products with options for adapting to the adverse effects of climate risks	MT/MEEF/MAS PFE	Promote the involvement of women in the climate and socio-economic observation stations throughout the meteorological network.
Output 1.3: The mechanisms for monitoring violent weather phenomena are strengthened through the lightning sensors to be used as alternative to weather radar	MT/MEEF/MAS PFE	In order to take into consideration gender equity, encourage women's involvement in the inclusive monitoring of extreme weather events and their impacts on the most vulnerable sectors and areas with options for adaptation and their participation in indicating their needs for climate products.
Output 1.4 : A national climate data bank is set up and functional	MT/MEEF/MAS PFE	Take into consideration the gender approach in staff recruitment and training on the coordination and management of the national data bank.
Output 1.5: The satellite data/images are coupled with the data of the meteorological network to provide the climate information and products needed for simulation	MT/MEH/MEE F/MASPFE	Involve women in the meteorological network in strategic simulation and modelling job positions; these are positions in which they are currently absent in the baseline situation.
Output 1.6: The capacities of female and male staff of the DNM, DNH and DNA are strengthened for using and maintaining equipment	MEH/MT/MA/ME EF /MASPFE	Promote the involvement of women in the capacity building of staff in the use and maintenance of equipment.

Outcomes/Outputs	Responsible body	Gender mainstreaming activities in the project						
Outcome 2: The climate products and services are accessible and used efficiently and effectively for the production of warnings for producers and in drafting medium- and long-term climate resilient development plans								
Output 2.1: The capacities of men and women are strengthened for developing and using climate products and services	MPCI/MT/MEH/ MEEF /MASPFE/NGOs /CSOs	Promote the participation of women in the provision and use of daily, weekly and seasonal early warnings on climate events in the specific short-, medium- and long-term adaptation actions.						
Output 2.2: Climate products and services are developed that meet the needs of end- users (men and women)	MT/MEH/MEEF/ MASPFE /MATD/NGOs/C SOs	Integrate women-dominated priority adaptation activities in climate products that will direct and guide the mainstreaming of adaptation into current sectoral plans and policies.						
		Ensure that at least 51% of the beneficiaries of climate and socio-economic products are women.						
Output 2.3: The capacities to mainstream climate products and services in the development planning are created for female and male staff involved in the planning and in the most vulnerable sectors	MEH/MT/MEEF/ MASPFE /MEF/NGOs/CS Os	Promote women's access to climate information to better guide mainstreaming of priority gender actions into the adaptation and the development policies and plans.						
Output 2.4: The institutional capacities are strengthened for coordinating the early warning systems and sharing climate information and products	MT/MEH/MA/ MEEF/MASPFE	Promote the presence and training of women in the EWS coordination and management mechanism.						
Output 2.5: A strategy is developed on the financial sustainability of EWS and the production and dissemination of climate information	MEP/MT/MEH/M A/MEEF	Strengthen the role of women in the mechanisms and strategies for the sustainability of financing the meteorological network.						
Output 2.6: Access and use of information and early warning climate products for various users are encouraged among women and men	MPCI/MT/MEH/ MEEF /MASPFE	Encourage the active role of women in the drafting, implementation, monitoring and evaluation of the environmental awareness, training, information and communications programme, and in allowing them to benefit from specific climate products in order to anticipate, prepare and respond to the adverse effects of climate change.						

Outcomes/Outputs		Responsible body	Gender mainstreaming activities in the project
Adaptive Management	Project	MT/MEH/MEEF/ MASPFE/MATD	Involve women in the project coordination and management mechanism by assigning them roles in the Steering Committee (SC) and Scientific and Technical Committee (STC) of the project.

vi. South-South and Triangular Cooperation

74. Guinea's EWS Project will be a powerful lever for transboundary cooperation for adaptation with neighbouring countries with which Guinea shares the same climate and socio-economic challenges, in particular, Senegal, Mali, Sierra Leone and Guinea Bissau. The lessons drawn from these missions at the strategic, programmatic and operational levels will be shared with these countries to identify potential areas of collaboration.

75. The project will encourage exchange visits and sharing of capacity-building experiences with institutions and communities integrating the gender approach in the member countries of the EWS Regional Programme.

76. These South-South cooperation activities are planned under Activity 1.4.3 of Output 1.4 with regard to the archiving and sharing of information and experiences with these countries.

vii. Sustainability and Scaling-up

77. In terms of sustainability, Guinea will use LDCF funds to develop and test tools for integrating adaptation into the most vulnerable development sectors and priority sites in each of the four different bioclimatic zones. The tools and technologies can be used to integrate adaptation into sectors and regions not targeted by this project. The capacity-building activities planned in the project will well consolidate the ownership and institutionalization of the tools for the long-term viability and sustainability of this project as well as of other adaptation projects being implemented and those that will be implemented in the country in the future.

78. Scaling up at the policy level will be facilitated by mainstreaming climate change concerns into the policy agenda in Guinea by encouraging government commitment. Concurrently, participatory approaches and other collaborative approaches to adaptation planning will enable multiple stakeholders to share knowledge, develop awareness, and improve learning, as well as replication for upscaling. The strengthening expertise among Ministry and decentralized staff on climate vulnerability and the identification of the most appropriate priority adaptation options will facilitate the upscaling and dissemination of the tools for integrating adaptation into development strategies and techniques.

79. In terms of innovation, activities planned with the support of LDCF funds will be an added value to NAPA 2007 by addressing medium- and long-term adaptation needs as an integral part of the development planning. The EWS project will also provide a framework for policy dialogue including and integrating several sectors and programmatic approaches. The Guinea EWS approach will make a difference in key sectors affected by climate change and provide planners, policy decision-makers, budget holders, and members of parliament with tools and expertise to ensure that climate change is well assimilated into the policies and budgets of the country. This will ensure that the Government of Guinea is well-positioned and well-prepared to tackle the adverse effects of the climate – not only for today, but also for the future.

80. This is an innovative approach, therefore, for optimizing resources, building capacities, sharing knowledge and forging partnerships with the various organizations already on site, building on the

current work and successes. Finally, innovative and strong partnerships that were established during the PPG will be pursued and forged because the planning process includes not only government agencies and ministries, but also PPPs with the mining sectors and with the communities, the local municipalities, the NGOs and other relevant stakeholders.

In general, on the basis of the objectives and expected outcome indicators, the mid-term and end-ofproject targets are shown in the table in section VII below on the project results framework.

IV. PROJECT MANAGEMENT

i.Cost efficiency and effectiveness

81. Guinea's 2007 NAPA ranked development actions according to their potential for positive effects on economic development, social capital and environmental management.

82. This Guinea EWS project, funded by the LDCF, is aligned with the priorities of the NAPA in order to implement the necessary actions that have already been identified as cost-effective. Indeed, in the PPG phase, the following cost-effect measures were identified for the project:

- strengthen the capacity of the institutions and of the CNGCUE to respond to climate disasters;
- provide the necessary equipment and training to better respond to climate disasters;
- support climate change-resilient development planning in targeted local communities.

These measures have been identified as tangible and cost-effective because they prioritize the needs of local communities in the project design, optimize the spending of project funds to meet these needs and ensure that the project is well understood by the beneficiaries to promote the project's success and the efficient use of funds.

83. With the identification and classification of the best adaptation options, the project will provide all of the baseline activities with the strategies to mitigate the adverse effects of climate change, which are generally exacerbated by the poor adaptation accompanied by unsustainable development actions that put pressure on production systems and ecosystems, and the adverse effects of climate risks.

84. The project has voluntarily opted to update existing policies and plans to minimize the cost of developing new ones. By choosing this option, the project will build on existing budgets to mainstream priority adaptation actions.

85. Finally, the project selected the option of adapting and anticipating these climate risks. This will enable Guinea, through this alternative GEF option, to empower its response to climate change and avoid having to recur to external aid during disasters, particularly by integrating adaptation into the policy and planning processes, including budgets.

86.By focusing on easy-to-use and maintain techniques and technologies that the meteorological network team is generally accustomed to, the project will be able to enhance sustainability while reducing recurring repair and maintenance costs and external dependence. This reduced dependence is also reinforced by the training of the staff of the meteorological and hydrological network.

87.By considering the removal of obstacles and the setting up of an environment conducive to the implementation of other projects in the baseline situation, several indirect targets will be achieved through these projects. It should be noted that the project will disseminate its best practices at the national, sub-region, transboundary and the international levels.

88. The status of the project performance indicators for each of the outputs is presented with the baseline situation in section VII on the project results framework.

ii.Project management:

89. The project will be implemented over a period of four years (48 months). The project will be implemented following UNDP's national implementation modality (NIM), according to the Standard Basic Assistance Agreement between UNDP and the Government of Guinea, and the Country Programme.

90. The Implementing Partner for this project is the Ministry of Transports (MT). The Implementing Partner will take the responsibility for the oversight of the project, and is the main (but not only) beneficiary for Components Two where the Project Databank Management will be operated by the National Centre for Disasters and Environmental Risks (CNGCUE) - *Centre National de Gestion des*

Catastrophes et Urgences Environnementales under the supervision of the Ministry of Environment, Water and Forests. The Implementing Partner will also appoint a National Project Director. This will be a high-ranking official person responsible to ensure cooperation, collaboration and efficient implementation of the project. The Implementing Partner will assign a National Project Coordinator (NPC) to the Project Management Unit (PMU, see below).

91. The day-to-day implementation of the project will be supported by a Project Coordinator and an Administrative and Financial Management who will be in charge of the project operations and procurement. The selection of the Project Coordinator and the Administrative and Financial Management will be done based on a competitive selection process as per UNDP POPP.

92. The awarding of the contracts will be based on a Quality-Based Fixed Budget Selection (QB-FBS). This means that the budget will be disclosed at the time of the Call for Proposal, and the bidders will submit proposals based on that fixed budget.

93. Steps to conduct the capacity assessment and the risk assessment will remain significantly the same although at this stage it will be conducted from the TOR perspective. The Project Coordinator and Administrative and Financial Assistant selection process will follow immediately the PRODOC signature. Under the oversight of the Project Board, the Project Coordinator, the Project Administrative and Financial Management will be responsible and accountable for managing the implementation of all components and outputs of this project, including the monitoring and evaluation of project interventions, achieving project outcomes, and for the effective use of UNDP resources (see draft TORs for the Terms of Reference for Project Board, Project Manager and other positions as appropriate Responsible in Annex E).

iii. Agreement on intellectual property rights and use of logo on the project's deliverables and disclosure of information

94.To accord proper acknowledgement to the GEF for providing grant funding, the GEF logo will appear together with the UNDP logo on all promotional materials, other written materials like publications developed by the project, and project hardware. Any citation on publications regarding projects funded by the GEF will also accord proper acknowledgement to the GEF. Information will be disclosed in accordance with relevant policies notably the UNDP Disclosure Policy and the GEF policy on public involvement.

95. If other agencies and project partners have provided support through co-financing, their policies and branding requirements should be similarly applied.

96.Given the nature of this project and its focus on knowledge products, UNDP-GEF and UNEP will discuss and collaborate on brand issues related to these products and reach agreement before launching them

iv. Social and environmental safeguards

97. During the project preparation phase, stakeholder engagement and participation have been key elements for the successful work undertaken under the PPG activities in Guinea. The project design makes the assumption that the consultations during project preparation strengthen the transparency and legitimacy of the proposed project activities, notwithstanding that during project implementation, activities can and should be adapted to ensure that the human rights of stakeholders are preserved and/or reinforced. Besides, the project specifically promotes in Guinea, the development of strong and adequate institutional and technical capacities of stakeholders to reduce vulnerability and promote adaptation, through involvement of all concerned actors. Beyond the long-term planning and implementation of the project, the relevant legal instruments related to the project implementation will consist of arrangements that will be concluded between the government (represented by the MT), on the one hand, and the various stakeholders on the other hand such as – mainly Ministry of Environment, Ministry of Finance, Ministry of Planning, Ministry of Agriculture, Ministry of Livestock, Ministry of Land Use Management Plans, the Ministry in charge of Gender, various national and international NGOs, Decentralized Institutions etc. One of the purposes of the

stakeholder's engagement is to restore the confidence and cooperation between the local populations on one hand and the national and decentralizes institutions, by offering them the capacity to take charge of a solidarity-based and inclusive sustainable adaptation. The strategy is aimed at reducing vulnerability and building capacities for inclusive sustainable adaptation through climatic and socioeconomic data bank establishment and integration of adaptation onto current sectorial policies, planning and budgeting processes for inclusive sustainable green growth.

98. The objective of the project is to strengthen the climate monitoring capabilities, early warning systems and information for responding to climate shocks and planning adaptation to climate change in Guinea. This project will include two outcomes: (i) Enhanced capacity of national hydrometeorological (NHMS) and environmental institutions to monitor extreme weather and climate change; and (ii) . Efficient and effective use of hydro-meteorological and environmental information for making early warnings and mainstreaming CC in the long-term development plans.

99. The project's monitoring activities include indicators for monitoring the environmental and social benefits.

100. A Social and Environmental Impacts Assessment will be undertaken prior to the site identification and the installation of the AWS to ensure that the sites selections and the installation of the AWS and AHS take in account and prevent the risks for Biodiversity Conservation and Sustainable Resources Management. This is one of the provisions of the Environmental and Social Impact Assessment law in Guinea.

101. Concerning Indigenous peoples: The Guinea EWS project will result in socioeconomic benefits which will contribute to the improvement of indigenous people livelihoods and rights access to climatic and socioeconomic information and EWS to ease adaptation, and thus strengthening social and economic sustainability of indigenous communities. The Guinean Constitution guarantees the protection of indigenous peoples' rights. Through their empowerment and accountability in the inclusive adaptation, in accordance with their vision and needs, the project promotes alternative options for creating environmentally friendly jobs and sustainable sources of income for local communities. The project will pursue implementation of a human rights-based approach by ensuring full participation of local and indigenous communities in the project activities, especially under Components 2 on building concerned actors capacities. Furthermore, the project will prepare an Indigenous People Plan (IPP) during the first year of implementation (before the relevant activities start); and apply Free, Prior and Informed Consent (FPIC) Processes during the project implementation. The definitive selection of the sites that will host the AWS and AHS will ensure to avoid the lands and territories claimed by indigenous people, unless they give their free prior consent for the installation of the stations.

102. **Concerning local communities:** The Guinea EWS Project's theory of change concept will enable the local authorities to exercise their prerogatives in the administration and management of local development. On the managerial level, capacity-building efforts will be devoted through the project for promoting inclusive rural sustainable adaptation, together with an effective mastery of the values chair; including conservation sector jobs that promote sustainable development of local communities. The project Component 2 will benefit young people, women, indigenous peoples, and vulnerable groups via establishment Climate Change EWS. The project by addressing adaptation measure at the policy, budgeting and planning levels, will provide an enabling environment for positive effects on local communities and will ensure that human rights approaches are embedded in the project adaptation initiatives. In terms of participation, the project will enable regular meetings and consultations all concerned actors ensure human rights approach implementation. Additional consultations will be held during the project inception phase with the communities of the identified sites to confirm the outcomes of the consultations held during the project preparation. A project-level grievance redress mechanism will be established in the first year.

A **Grievance Redress Mechanism** will be established to monitor effect of the project on local communities and respond quickly to their concerns about the project implementation. This mechanism will be based on experiences from past and current on-going projects implementation. Decentralized institutions along with international institutions will participate in the project Steering Community and will have power to influence adaptive management of the project activities and ensure necessary balance of project profits among all concerned actors. Besides, the M&E framework of the project is fully participatory and allows all concerned stakeholders to share freely their opinion on the project, its results, and social impacts.

103. Annex F provides a more detailed analysis on the risks linked to social and environmental safeguards.

	V.	PROJECT RESULTS FRAMEWORK
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This project will contribute to the following Sustainable Development Goal (s):

SDG 5: Achieve gender equality and empower all women and girls

SGD 13: Take urgent action to combat climate change and its impacts

This project will contribute to the following country outcome included in the UNDAF/Country Programme Document: UNDAF OUTCOME 2:

By 2022, national institutions, civil society and the private sector are implementing policies that improve food and nutrition security, sustainable management of the environment and the resilience of the populations to climate change and disaster risk; Output 2.2: The tools for planning and for the sustainable management of the environment and natural resources, and of disasters and the living environment are revised/developed and used to take into consideration the aspects of climate change.

This project will be linked to the following output of the UNDP Strategic Plan: UNDP Strategic Plan 2018-2021 Output 3.3.1. National capacities and evidence-based assessment and planning tools enable gender-sensitive and risk-based development investments, including for crisis response and exit from crisis

Applicable Output Indicators from the UNDP Strategic Plan Integrated Results and Resources Framework:

Indicator: Output indicator:

Number of countries with operational end-to-end multi-sectoral early warning systems (EWS) to limit the gender-differentiated impact of:

a) Natural hazards

d) Other risk factors

Project objective Outcomes	/ Objective and Outcome Indicators	Baseline⁵	Mid-term Target	End of Project Target	Source of verification	Assumptions ⁶
Component 1: Technology transfer for monitoring the climate and environmental infrastructure						

⁵ Baseline, mid-term and end of project levels must be expressed in the same neutral unit of analysis as the corresponding indicator.

⁶ Risks must be outlined in the Feasibility section of this project document.

Project objective/ Outcomes	Objective and Outcome Indicators	Baseline⁵	Mid-term Target	End of Project Target	Source of verification	Assumptions ⁶
Project Objective: Project Objective: Strengthen climate monitoring and early warning capacities to respond to climate shocks and	Indicator 1 : Number of municipalities that have integrated resilience and adaptation practices into their Local Development Plan	74	84 (soit 10 nouveaux)	100 26 new from the baseline situation	 Annual reports of the Ministry in charge of Decentralization Annual reports of the Ministry in charge of Planning Annual reports of the Ministry in charge of the Environment Project annual reports 	Relevant adaptations options for the LDP are available and Local authorities are aware of the benefits of integrating adaptation options in the LDPs
mainstream adaptation into development planning processes in Guinea	Indicator 2: Number of direct beneficiaries using the climate information and products and services Y1: Number of direct beneficiaries	Y1:0 Y2: 0	Y1: 100,000 Y2: 51,000 (51%)	Y1: 200,000 Y2: 102,000 (51%)	Project Annual monitoring reports and DNH/DNM reports	Beneficiaries of climate products are convinced of the usefulness of the CIPS for their resilience
Outcome 1: The capacities of the national hydrometeorolgical departments are strengthened in monitoring extreme	Y2: % women Indicator 3: Number of hydrometeorological stations that regularly provide reliable climate information and products				DNH/DNM reports Direct observations	The after-sales services of the modules necessary for the proper functioning of the synoptic stations are guaranteed, and

Project objective/ Outcomes	Objective and Outcome Indicators	Baseline⁵	Mid-term Target	End of Project Target	Source of verification	Assumptions ⁶
weather phenomena and climate change	b: Automatic hydrological stations b1: automatic hydrological stations	b1: 20 b2: 7	b1: 22 b2: 12	b1: 42 b2: 22		immediately available and the guarantee of
	b2: hydrological stations	c1: 9	c1: 8	c1: 12		
	c: Meteorological stations c1: Automatic	c2: 0	c2 : 5	c2 : 8		
	meteorological (weather) stations	c3: 12	c3: 8	c3: 12		
	c2: Number of automatic synoptic stations	c4: 0	c4: 3	c4: 5		
	c3: Number of lightning		c5: 2	c5: 3		
	detection stations	c5: 0	c6: 1	c6: 1		
	c4: Number of	c6: 0				
	automatic agrometeorological stations					
	c5: Number of automatic maritime meteorological stations					

Project objective/ Outcomes	Objective and Outcome Indicators	Baseline⁵	Mid-term Target	End of Project Target	Source of verification	Assumptions ⁶
	c6: Number of operational upper air stations					
	Indicator 4: The capacities of the DNM and DNH managers and technicians are strengthened to ensure the operation and maintenance of the stations, the processing, analysis and dissemination equipment of the climate information products and services				DNH and DNM reports/Direct observations	There is enough staff at the DNM and DNH eligible to the training programs and the staff trained will remain in the DNM and DNH enough to support the project activities and the sustainability of the project achievement
	(CIPS). The capacities will be measured using a capacity index that will be assessed at project start, mid-term and end of project					
	d1: Number of	d1: 251	d1: 285	d1: 485		
	management staff trained d2: % women	d2: 19.5%	d2: 51%	d2: 51%		

Project objective/ Outcomes	Objective and Outcome Indicators	Baseline⁵	Mid-term Target	End of Project Target	Source of verification	Assumptions ⁶
Component 2: Main	streaming of early warning c	limate infor	mation and pro	oducts and o	f adaptation into de	evelopment plans
Outcome 2: The climate products and services are accessible and used efficiently and effectively for the	Indicator 5: Number of climate information products and services (CIPS) produced and accessible to end-users e1 : Number of weather and hydrological forecasts per day e2: Specific CIPS on demand per month	e1: 0 e2; 0	e1 : 2 e2 : 5	e1: 6 e2 : 10	Reports of the Ministry of Transport (DNM); Ministry of Energy and Hydrolics, (DNH)	The beneficiaries find the CIPS useful in their operations and priorities actions of adaptation with an effective strengthening of inclusive resilience
production of warnings for producers and in the drafting of medium- and long- term development plans that integrate climate resilient	Indicator 6: Number of decision-makers trained for an efficient use of CIPS in the public and private sectors f1: Number of decision- makers trained f2: % women	f1: 0 f2: 0	f1: 100 f2: 51%	f1: 200 f2: 51%	Reports of the Ministry of Transport (DNM); Ministry of Energy and Hydrolics, (DNH)	The beneficiaries find the training sessions useful in the integration of priorities actions of adaptation into the policy plans, with an effective strengthening of inclusive resilience

Project objective/ Outcomes	Objective and Outcome Indicators	Baseline⁵	Mid-term Target	End of Project Target	Source of verification	Assumptions ⁶
	Indicator 7:					
	Number of updated plans and development policies that incorporate relevant CIPS	g1: 0	g1: 1	g1: 1		
	g1: PNIA regularly updated by effectively integrating priority adaptation options		g2: 1	g2: 1	Reports by the Ministry of Agriculture	The Oscillation
	g2: Energy Sector Policy Letter regularly updated by effectively integrating priority adaptation options	g2: 0			Reports by the Ministry of Energy	The Government is willing to adopt the development plans and policies that incorporate the relevant CIPS
	g3: Number of Mining Plans/Codes updated to integrate priority adaptation actions	g3: 0	g3: 1	g3: 1	Reports by the Ministry of Mining/MEEF	
	g4: Number of updated Mining Plans/Codes to integrate priority adaptation actions	g4: 0	g4: 1	g4: 1		

VI. MONITORING AND EVALUATION PLAN

138. The project results as outlined in the project results framework will be monitored annually and evaluated periodically during project implementation to ensure the project effectively achieves these results.

139. Project-level monitoring and evaluation will be undertaken in compliance with UNDP requirements as outlined in the <u>UNDP POPP and</u> UNDP Evaluation Policy. While these UNDP requirements are not outlined in this project document, the UNDP Country Office will work with the relevant project stakeholders to ensure UNDP M&E requirements are met in a timely fashion and to high quality standards. Additional mandatory GEF-specific M&E requirements (as outlined below) will be undertaken in accordance with the GEF M&E policy and other relevant GEF policies.

140. In addition to these mandatory UNDP and GEF M&E requirements, other M&E activities deemed necessary to support project-level adaptive management will be agreed during the Project Inception Workshop and will be detailed in the Inception Report. This will include the exact role of project target groups and other stakeholders in project M&E activities including the GEF Operational Focal Point and national/regional institutes assigned to undertake project monitoring. The GEF Operational Focal Point will strive to ensure consistency in the approach taken to the GEF-specific M&E requirements (notably the GEF Tracking Tools) across all GEF-financed projects in the country. This could be achieved for example by using one national institute to complete the GEF Tracking Tools for all GEF-financed projects in the country, including projects supported by other GEF agencies.

M&E Oversight and monitoring responsibilities:

141. The Project Manager is responsible for day-to-day project management and regular monitoring of project results and risks, including social and environmental risks. The Project Manager will ensure that all project staff maintain a high level of transparency, responsibility and accountability in M&E and reporting of project results. The Project Manager will inform the Project Board, the UNDP Country Office and the UNDP-GEF RTA of any delays or difficulties as they arise during implementation so that appropriate support and corrective measures can be adopted.

142. The Project Manager will develop annual work plans based on the multi-year work plan included in Annex A, including annual output targets to support the efficient implementation of the project. The Project Manager will ensure that the standard UNDP and GEF M&E requirements are fulfilled to the highest quality. This includes, but is not limited to, ensuring the results framework indicators are monitored annually in time for evidence-based reporting in the GEF PIR, and that the monitoring of risks and the various plans/strategies developed to support project implementation (e.g. gender strategy, KM strategy, etc.) occur on a regular basis.

104. Project Board: The Project Board will take corrective action as needed to ensure the project achieves the desired results. The Project Board will hold project reviews to assess the performance of the project and appraise the Annual Work Plan for the following year. In the project's final year, the Project Board will hold an end-of-project review to capture lessons learned and discuss opportunities for scaling up and to highlight project results and lessons learned with relevant audiences. This final review meeting will also discuss the findings outlined in the project terminal evaluation report and the management response.

105. Project implementing partner: The implementing partner is responsible for providing any and all required information and data necessary for timely, comprehensive and evidence-based project reporting, including results and financial data, as necessary and appropriate. The implementing partner will strive to ensure that project-level M&E is undertaken by the national institutes, and is aligned with the national systems so that the data used and generated by the project supports the national systems.

145. UNDP Country Office: The UNDP Country Office will support the Project Manager as needed, including through annual supervision missions. The annual supervision missions will take place according to the schedule outlined in the annual work plan. The supervision mission reports will be distributed to the project team and to the Project Committee within on the month following the completion of the mission. The UNDP Country Office will initiate and organize key GEF M&E activities including the annual GEF PIR, the independent mid-term review and the independent terminal evaluation. The UNDP Country Office will also ensure that the standard UNDP and GEF M&E requirements are fulfilled to the highest quality.

146. The UNDP Country Office is responsible for complying with all UNDP project-level M&E requirements as outlined in the UNDP POPP. This includes ensuring the UNDP Quality Assurance Assessment during implementation is undertaken annually; that annual targets at the output level are developed, and monitored and reported using UNDP corporate systems; the regular updating of the ATLAS risk log; and, the updating of the UNDP gender marker on an annual basis based on gender mainstreaming progress reported in the GEF PIR and the UNDP ROAR. Any quality concerns flagged during these M&E activities (e.g. annual GEF PIR quality assessment ratings) must be addressed by the UNDP Country Office and the Project Manager.

147. The UNDP Country Office will retain all M&E records for this project for up to seven years after project financial closure in order to support ex-post evaluations undertaken by the UNDP Independent Evaluation Office (IEO) and/or the GEF Independent Evaluation Office (IEO).

148. UNDP-GEF Unit: Additional M&E and implementation quality assurance and troubleshooting support will be provided by the UNDP-GEF Regional Technical Advisor and the UNDP-GEF Directorate as needed.

149. Audit: The project will be audited according to UNDP Financial Regulations and Rules and applicable audit policies on NIM implemented projects.

150. Additional GEF monitoring and reporting requirements: Inception Workshop and Report: A project inception workshop will be held within two months after the project document has been signed by all relevant parties to, among others:

- a) Re-orient project stakeholders to the project strategy and discuss any changes in the overall context that influence project strategy and implementation;
- b) Discuss the roles and responsibilities of the project team, including reporting and communication lines and conflict resolution mechanisms;
- c) Review the results framework and finalize the indicators, means of verification and monitoring plan;
- d) Discuss reporting, monitoring and evaluation roles and responsibilities and finalize the M&E budget; identify national/regional institutes to be involved in project-level M&E; discuss the role of the GEF OFP in M&E;
- e) Update and review responsibilities for monitoring the various project plans and strategies, including the risk log; Environmental and Social Management Plan and other safeguard requirements; the gender strategy; the knowledge management strategy, and other relevant strategies;
- f) Review financial reporting procedures and mandatory requirements, and agree on the arrangements for the annual audit; and
- g) Plan and schedule Project Board meetings and finalize the first year annual work plan.

151. The Project Manager will prepare the inception report no later than one month after the inception workshop. The inception report will be cleared by the UNDP Country Office and the UNDP-GEF Regional Technical Adviser, and will be approved by the Project Board.

152. GEF Project Implementation Report (PIR): The Project Manager, the UNDP Country Office, and the UNDP-GEF Regional Technical Adviser will provide objective input to the annual GEF PIR covering the reporting period July (previous year) to June (current year) for each year of project implementation. The Project Manager will ensure that the indicators included in the project results framework are monitored annually in advance of the PIR submission deadline so that progress can be reported in the PIR. Any environmental and social risks and related management plans will be monitored regularly, and progress will be reported in the PIR.

153. The PIR submitted to the GEF will be shared with the Project Board. The UNDP Country Office will coordinate the input of the GEF Operational Focal Point and other stakeholders to the PIR as appropriate. The quality rating of the previous year's PIR will be used to inform the preparation of the subsequent PIR.

154. Lessons learned and knowledge generation: Results from the project will be disseminated within and beyond the project intervention area through existing information sharing networks and forums. The project will identify and participate, as relevant and appropriate, in scientific, policy-based and/or any other networks, which may be of benefit to the project. The project will identify, analyse and share lessons learned that might be beneficial to the design and implementation of similar projects and disseminate these lessons widely. There will be continuous information exchange between this project and other projects of similar focus in the same country, region and globally.

155. GEF Focal Area Tracking Tools: The following GEF Tracking Tool(s) will be used to monitor global environmental benefit results:

• GEF Focal Area Tracking Tool(s) – submitted as Annex D to this project document – will be updated by the Project Manager/Team (not the evaluation consultants hired to undertake the MTR or the TE) and shared with the mid-term review consultants and terminal evaluation consultants before the required review/evaluation missions take place. The updated GEF Tracking Tool(s) will be submitted to the GEF along with the completed Mid-term Review report and Terminal Evaluation report.

156. Independent Mid-term Review (MTR): An independent mid-term review process will begin after the second PIR has been submitted to the GEF, and the MTR report will be submitted to the GEF in the same year as the 3rd PIR. The MTR findings and responses outlined in the management response will be incorporated as recommendations for enhanced implementation during the final half of the project's duration. The terms of reference, the review process and the MTR report will follow the standard templates and guidance prepared by the UNDP IEO for GEF-financed projects available on the UNDP Evaluation Resource Center (ERC). As noted in this guidance, the evaluation will be 'independent, impartial and rigorous'. The consultants that will be hired to undertake the assignment will be independent from organizations that were involved in designing, executing or advising on the project to be evaluated. The GEF Operational Focal Point and other stakeholders will be involved and consulted during the terminal evaluation process. Additional quality assurance support is available from the UNDP-GEF Directorate. The final MTR report will be available in English and will be cleared by the UNDP Country Office and the UNDP-GEF Regional Technical Adviser, and approved by the Project Board.

157. Terminal Evaluation (TE): An independent terminal evaluation (TE) will take place upon completion of all major project outputs and activities. The terminal evaluation process will begin three months before operational closure of the project allowing the evaluation mission to proceed while the project team is still in place, yet ensuring the project is close enough to completion for the evaluation team to reach conclusions on key aspects such as project sustainability. The Project Manager will remain on contract until the TE report and management response have been finalized. The terms of reference, the evaluation process and the final TE report will follow the standard templates and

guidance prepared by the UNDP IEO for GEF-financed projects available on the UNDP Evaluation Resource Center. As noted in this guidance, the evaluation will be 'independent, impartial and rigorous'. The consultants that will be hired to undertake the assignment will be independent from organizations that were involved in designing, executing or advising on the project to be evaluated. The GEF Operational Focal Point and other stakeholders will be involved and consulted during the terminal evaluation process. Additional quality assurance support is available from the UNDP-GEF Directorate. The final TE report will be cleared by the UNDP Country Office and the UNDP-GEF Regional Technical Adviser, and will be approved by the Project Board. The TE report will be publically available in English on the UNDP ERC.

158. The UNDP Country Office will include the planned project terminal evaluation in the UNDP Country Office evaluation plan, and will upload the final terminal evaluation report in English and the corresponding management response to the UNDP Evaluation Resource Centre (ERC). Once uploaded to the ERC, the UNDP IEO will undertake a quality assessment and validate the findings and ratings in the TE report, and rate the quality of the TE report. The UNDP IEO assessment report will be sent to the GEF IEO along with the project terminal evaluation report.

159. Final Report: The project's terminal PIR along with the terminal evaluation (TE) report and corresponding management response will serve as the final project report package. The final project report package shall be discussed with the Project Board during an end-of-project review meeting to discuss lesson learned and opportunities for scaling up.

GEF M&E requirements	Primary responsibility	Indicative costs to be charged to the Project Budget ⁷ (US\$)		Time frame
		GEF grant	Co- financing	
Inception Workshop	UNDP Country Office	US\$11,000		Within two months of project document signature
Inception Report	Project Manager	None	None	Within two weeks of inception workshop
Standard UNDP monitoring and reporting requirements as outlined in the UNDP POPP	UNDP Country Office	None	None	Quarterly, annually
Monitoring of indicators in project results framework	Project Manager	Per year: US\$4,000*4 = US\$16,000		Annually
GEF Project Implementation Report (PIR)	Project Manager and UNDP Country Office and UNDP- GEF team	None	None	Annually

Table 6: Budget of the Monitoring and Evaluation Plan of the Guinea EWS Project

⁷ Excluding project team staff time and UNDP staff time and travel expenses.

NIM Audit as per UNDP audit policies	UNDP Country Office	Per year: US\$3,000 *4= US\$12,000	Annually or other frequency as per UNDP Audit policies
Lessons learned and knowledge generation	Project Manager		Annually
Monitoring of environmental and social risks, and corresponding management plans as relevant	Project Manager UNDP CO	None	Ongoing
Addressing environmental and social grievances	Project Manager UNDP Country Office BPPS as needed	None for time of project manager, and UNDP CO	
Project Board meetings	Project Board UNDP Country Office Project Manager		At minimum annually
Supervision missions	UNDP Country Office	None ⁸	Annually
Oversight missions	UNDP-GEF team	None8	Trouble-shooting as needed
Knowledge management as outlined in Outcome 4	Project Manager	US\$5,000	Ongoing
GEF Secretariat learning missions/site visits	UNDP Country Office and Project Manager and UNDP-GEF team	None	To be determined.
Mid-term GEF Tracking Tool to be updated by (add name of national/regional institute if relevant)	Project Manager	US\$9,000	Before mid-term review mission takes place.
Independent Mid-term Review (MTR) and management response	UNDP Country Office and Project team and UNDP- GEF team	US\$30,000	Between 2 nd and 3 rd PIR.
Terminal GEF Tracking Tool to be updated by (add name of national/regional institute if relevant)	Project Manager	US\$10,000	Before terminal evaluation mission takes place
Independent Terminal Evaluation (TE) included in UNDP evaluation plan, and management response	UNDP Country Office and Project team and UNDP- GEF team	US\$40,000	At least three months before operational closure

⁸ The costs of UNDP Country Office and UNDP-GEF Unit's participation and time are charged to the GEF Agency Fee.

Translation of MTR andUNDP CountryTE reports into EnglishOffice	US\$5,000	
TOTAL indicative COST Excluding project team staff time, and UNDP staff and travel expenses	US\$138,000, i.e. 2.68%	

GOVERNANCE AND MANAGEMENT ARRANGEMENTS

160. <u>Roles and responsibilities of the project's governance mechanism</u>: The project will be implemented over a four-year period (48 months). The project will be implemented following UNDP's national implementation modality, according to the Standard Basic Assistance Agreement between UNDP and the Government of *Guinea*, and the Country Programme.

The implementing partner of this project will be the Ministry of Transport (MT) through the DNM. The responsible partners are:

- Ministry of Environment, Water and Forests/CNGCUE and DNE
- Ministry of Energy and Hydraulics / DNH
- Ministry of Territorial Administration and Decentralization / National Service for Humanitarian Actions (SENAH)
- Ministry of Security and Civil Protection / DNPC
- Ministry of Agriculture / Agronomic Research Institute of Guinea (IRAG)
- Ministry of Social Action for the Promotion of Women and Children/ *Direction Nationale Action Sociale* (DNAS, National Directorate of Social Action)
- Ministry of Health / DNSC
- Ministry of Livestock and Animal Production / DNPA
- Ministry of Posts and Telecommunications and New Information Technologies / ANGIE
- Ministry of Higher Education and Scientific Research / Scientific Research Center, Conakry Rogbané (CERESCOR) and Centre d'Etude de Recherche et de l'Environnement (CERE)
- Ministry of Fisheries/ Centre National des Sciences Halieutiques de Boussoura (CNSHB)
- Ministry of Mines and Geology / CGS
- Ministry of Economy and Finance
- Ministry of Budget
- National Council for Civil Society Organizations
- Mobile telephony operators
- Technical and Financial Partner /UNDP
- Red Cross Society of Guinea.

161. These services will be represented in the project's steering committee and will be responsible for the delivery of specific products. A copy of the proposal of the terms of reference (ToR) of the project indicating the roles of each institution can be found in Annex E.

162. The Project Coordinator will be recruited in accordance with GEF/UNDP procedures for the supervision and coordination of the implementation of project activities. The implementing partner will also be responsible for establishing collaborative agreement with the institutions and organizations that play a major role at the local, regional and international levels in the implementation of the project. He/she will be responsible for monitoring and evaluation, and for all financial and technical reports submitted to UNDP-Guinea

163. The Project Steering Committee (SC) is a body for strategic orientation and supervision of project implementation. It approves, over the life of the project, the Annual Work Programme (AWP) and plays a decisive role in the approval of the project's technical and financial implementation report and in monitoring and evaluation by ensuring the quality of processes and products. It uses assessments as a means of improving performance in project management. The SC was created by Ministerial Decree on the project's technical supervision. It brings together all of the project's strategic partners and is chaired by the Minister of Transport, thus ensuring the project's technical supervision. The technical and financial partners participate as observers with the presence of NGO representation.

The project's organizational structure is as follows:



164. Roles and responsibilities of the project's governance mechanism: The project will be implemented following UNDP's national implementation modality, according to the Standard Basic Assistance Agreement between UNDP and the Government of Guinea, and the Country Programme.

165. The Implementing Partner for this project is the Ministry of Transport. The Implementing Partner is responsible and accountable for managing this project, including the monitoring and evaluation of

project interventions, achieving project outcomes, and for the effective use of UNDP resources. "The Implementing Partner is responsible for:

- Ø Approving and signing the multiyear workplan;
- Ø Approving and signing the combined delivery report at the end of the year; and,
- Ø Signing the financial report or the funding authorization and certificate of expenditures.

166. The Project Board (also called the Project Steering Committee) is responsible for making by consensus, management decisions when guidance is required by the Project Manager, including recommendation for UNDP/Implementing Partner approval of project plans and revisions. In order to ensure UNDP's ultimate accountability, Project Board decisions should be made in accordance with standards that shall ensure management for development results, best value money, fairness, integrity, transparency and effective international competition. In case a consensus cannot be reached within the Board, final decision shall rest with the UNDP Programme Manager. The terms of reference for the Project Board are contained in Annex. Specific responsibilities of the Project Board include:

- Provide overall guidance and direction to the project, ensuring it remains within any specified constraints;
- Address project issues as raised by the project manager;
- Provide guidance on new project risks, and agree on possible countermeasures and management actions to address specific risks;
- Agree on project manager's tolerances as required;
- Review the project progress, and provide direction and recommendations to ensure that the agreed deliverables are produced satisfactorily according to plans;
- Appraise the annual project implementation report, including the quality assessment rating report; make recommendations for the workplan;
- Provide ad hoc direction and advice for exceptional situations when the project manager's tolerances are exceeded; and
- Assess and decide to proceed on project changes through appropriate revisions.
- The composition of the Project Board must include the following roles:
- Executive: The Executive is an individual who represents ownership of the project who will chair the Project Board. This role can be held by a representative from the Government Cooperating Agency or UNDP. The Executive is: Add who will represent the Executive for the project.
- The Executive is ultimately responsible for the project, supported by the Senior Beneficiary and Senior Supplier. The Executive's role is to ensure that the project is focused throughout its life cycle on achieving its objectives and delivering outputs that will contribute to higher-level outcomes. The executive has to ensure that the project gives value for money, ensuring cost-conscious approach to the project, balancing the demands of beneficiary and suppler.
- Specific Responsibilities: (as part of the above responsibilities for the Project Board)
- Ensure that there is a coherent project organisation structure and logical set of plans;
- Set tolerances in the AWP and other plans as required for the Project Manager;
- Monitor and control the progress of the project at a strategic level;

- Ensure that risks are being tracked and mitigated as effectively as possible;
- Brief relevant stakeholders about project progress;
- Organise and chair Project Board meetings.

Senior Supplier: The Senior Supplier is an individual or group representing the interests of the parties concerned which provide funding and/or technical expertise to the project (designing, developing, facilitating, procuring, implementing). The Senior Supplier's primary function within the Board is to provide guidance regarding the technical feasibility of the project. The Senior Supplier role must have the authority to commit or acquire supplier resources required. If necessary, more than one person may be required for this role. Typically, the implementing partner, UNDP and/or donor(s) would be represented under this role. The Senior Supplier is: *Add who will represent the Senior Supplier for the project.*

Specific Responsibilities (as part of the above responsibilities for the Project Board):

- Make sure that progress towards the outputs remains consistent from the supplier perspective;
- Promote and maintain focus on the expected project output(s) from the point of view of supplier management;
- Ensure that the supplier resources required for the project are made available;
- Contribute supplier opinions on Project Board decisions on whether to implement recommendations on proposed changes;
- Arbitrate on, and ensure resolution of, any supplier priority or resource conflicts.

Senior Beneficiary: The Senior Beneficiary is an individual or group of individuals representing the interests of those who will ultimately benefit from the project. The Senior Beneficiary's primary function within the Board is to ensure the realization of project results from the perspective of project beneficiaries. The Senior Beneficiary role is held by a representative of the government or civil society. The Senior Beneficiary is: *Add who will represent the Senior Beneficiary for the project.*

The Senior Beneficiary is responsible for validating the needs and for monitoring that the solution will meet those needs within the constraints of the project. The Senior Beneficiary role monitors progress against targets and quality criteria. This role may require more than one person to cover all the beneficiary interests. For the sake of effectiveness, the role should not be split between too many people.

Specific Responsibilities (as part of the above responsibilities for the Project Board):

- Prioritize and contribute beneficiaries' opinions on Project Board decisions on whether to implement recommendations on proposed changes;
- Specification of the Beneficiary's needs is accurate, complete and unambiguous;
- Implementation of activities at all stages is monitored to ensure that they will meet the beneficiary's needs and are progressing towards that target;
- Impact of potential changes is evaluated from the beneficiary point of view;
- Risks to the beneficiaries are frequently monitored.

The Project Board is comprised of the following individuals:

167. The Project Manager will run the project on a day-to-day basis on behalf of the Implementing Partner within the constraints laid down by the Board. The Project Manager function will end when the final project terminal evaluation report, and other documentation required by the GEF and UNDP, has been completed and submitted to UNDP (including operational closure of the project).

168. The project manager will be supported by the member of the Project Management Unit, composed of an administrative and financial specialist, a secretary, an M&E expert, a communication expert and a meteorological and hydrological expert.

Project Manager: The Project Manager has the authority to run the project on a day-to-day basis on behalf of the Project Board within the constraints laid down by the Board. The Project Manager is responsible for day-to-day management and decision-making for the project. The Project Manager's prime responsibility is to ensure that the project produces the results specified in the project document, to the required standard of quality and within the specified constraints of time and cost.

The Implementing Partner appoints the Project Manager, who should be different from the Implementing Partner's representative in the Project Board.

Specific responsibilities include:

- Provide direction and guidance to project team(s)/ responsible party (ies);
- Liaise with the Project Board to assure the overall direction and integrity of the project;
- Identify and obtain any support and advice required for the management, planning and control of the project;
- Responsible for project administration;
- Plan the activities of the project and monitor progress against the project results framework and the approved annual workplan;
- Mobilize personnel, goods and services, training and micro-capital grants to initiative activities, including drafting terms of reference and work specifications, and overseeing all contractors' work;
- Monitor events as determined in the project monitoring schedule plan/timetable, and update the plan as required;
- Manage requests for the provision of financial resources by UNDP, through advance of funds, direct payments or reimbursement using the fund authorization and certificate of expenditures;
- Monitor financial resources and accounting to ensure the accuracy and reliability of financial reports;
- Be responsible for preparing and submitting financial reports to UNDP on a quarterly basis;
- Manage and monitor the project risks initially identified and submit new risks to the project board for consideration and decision on possible actions if required; update the status of these risks by maintaining the project risks log;
- Capture lessons learned during project implementation;
- Prepare the annual workplan for the following year; and update the Atlas Project Management module if external access is made available.
- Prepare the GEF PIR and submit the final report to the Project Board;
- Based on the GEF PIR and the Project Board review, prepare the AWP for the following year.
- Ensure the mid-term review process is undertaken as per the UNDP guidance, and submit the final MTR report to the Project Board.
- Identify follow-on actions and submit them for consideration to the Project Board;
- Ensure the terminal evaluation process is undertaken as per the UNDP guidance, and submit the final TE report to the Project Board;

169. **Project Assurance**: UNDP provides a three – tier supervision, oversight and quality assurance role – funded by the GEF agency fee – involving UNDP staff in Country Offices and at regional and headquarters levels. Project Assurance must be totally independent of

the Project Management function. The quality assurance role supports the Project Board and Project Management Unit by carrying out objective and independent project oversight and monitoring functions. This role ensures appropriate project management milestones are managed and completed. The Project Board cannot delegate any of its quality assurance responsibilities to the Project Manager. This project oversight and quality assurance role is covered by the GEF Agency.

170. Additional quality assurance will be provided by the UNDP Regional Technical Advisor as needed.

VII. FINANCIAL PLANNING AND MANAGEMENT

171. The total cost of the project is US\$38,047,330. This total cost includes the LDCF grant of US\$5,000,000 and UNDP cash co-financing for an amount of US\$350,000. The total funds administered by UNDP amount to US\$5,350,000 including both GEF and UNDP contributions. The parallel co-financing from the Government of Guinea and other entities is US\$32,697,300. UNDP, as the GEF Implementing Agency, is responsible for the execution of the GEF resources and the cash co-financing transferred to UNDP bank account only.

172. <u>Transfer or disposal of assets:</u> In consultation with the NIM Implementing Partner and other parties of the project, UNDP programme manager (UNDP Resident Representative) is responsible for deciding on the transfer or other disposal of assets. Transfer or disposal of assets is recommended to be reviewed and endorsed by the project board following UNDP rules and regulations. Assets may be transferred to the government for project activities managed by a national institution at any time during the life of a project. In all cases of transfer, a transfer document must be prepared and kept on file'.

173. Parallel co-financing: The actual realization of project co-financing (Table 7) will be monitored during the mid-term review and terminal evaluation process and will be reported to the GEF. The planned parallel co-financing will be used as follows:

Co-financing source	Co- financin g type	Co- financing amount (US\$)	Planned Activities/Outputs
Government of Guinea: through the Ministry of Agriculture (US\$30,000,000); Ministry of Transport (1,503,000); NDH (US\$ 384,300); Agro Research (US\$ 240,000); SOGUIPAH (US \$ 120,000); IRD (450,000)	In-kind	32,697,300	In-kind co-financing by the Government covers the two components of the project by providing logistics, which include infrastructure and equipment of the Directorate of Agriculture and its projects, and the mechanism already set up through the DNM. The Government contribution also includes an in-kind contribution from MEEF for US\$357,000. Overall, this contribution from the Government includes the existing stations of the meteorological network already in place and its equipment (Outputs 1.1, 1.2), the monitoring of extreme weather

Table 7: Parallel co-financing

Co-financing source	Co- financin g type	Co- financing amount (US\$)	Planned Activities/Outputs
			events (Output 1.3), the administration of the database (Output 1.4), the promotion of food security by integrating climate risks into development actions through risk forecasts (Output 1.5) and available staff (Output 1.6). The Government's contribution also covers Component 2 by setting up of institutions and existing staff and their post-project empowerment (Outputs 2.1, 2.2, 2.3, 2.4, 2.5 and 2.6).
UNDP	Cash	350,000	This contribution from the UNDP Guinea Country Office with the TRAC funds will be used in particular for the outputs of Component 2 dealing with capacity building of actors in integrating of climate risks into development actions and integrating the strategic adaptation options in the policies, plans and budget (Output 2.3); and outreach and inclusive dissemination of climate information and products for their extensive use for effective adaptation (Output 2.6). UNDP's contribution will also be used to support Project Management through, <i>inter alia</i> , Guinea EWS project operating and staff costs.
TOTAL		33,047,300	

174. Budget Revision and Tolerance: As per UNDP requirements outlined in the UNDP POPP, the project board will agree on a budget tolerance level for each plan under the overall annual work plan allowing the project manager to expend up to the tolerance level beyond the approved project budget amount for the year without requiring a revision from the Project Board. Should the following deviations occur, the Project Manager and UNDP Country Office will seek the approval of the UNDP-GEF team as these are considered major amendments by the GEF:

- a) Budget re-allocations among components in the project with amounts involving 10% of the total project grant or more;
- b) Introduction of new budget items/or components that exceed 5% of original GEF allocation.

175. Any over expenditure incurred beyond the available GEF grant amount will be absorbed by non-GEF resources (e.g. UNDP TRAC or cash co-financing).

176. Refund to Donor: Should a refund of unspent funds to the GEF be necessary, this will be managed directly by the UNDP-GEF Unit in New York.

177. Project Closure: Project closure will be conducted as per UNDP requirements outlined in the UNDP POPP. On an exceptional basis only, a no-cost extension beyond the initial duration of the project will be sought from in-country UNDP colleagues and then the UNDP-GEF Executive Coordinator.

178. Operational completion: The project will be operationally completed when the last UNDPfinanced inputs have been provided and the related activities have been completed. This includes the final clearance of the Terminal Evaluation Report (that will be available in English) and the corresponding management response, and the end-of-project review Project Board meeting. The Implementing Partner through a Project Board decision will notify the UNDP Country Office when operational closure has been completed. At this time, the relevant parties will have already agreed and confirmed in writing on the arrangements for the disposal of any equipment that is still the property of UNDP.

179. Financial completion: The project will be financially closed when the following conditions have been met:

- a) The project is operationally completed or has been cancelled;
- b) The Implementing Partner has reported all financial transactions to UNDP;
- c) UNDP has closed the accounts for the project;
- d) UNDP and the Implementing Partner have certified a final Combined Delivery Report (which serves as final budget revision).

180. The project will be financially completed within 12 months of operational closure or after the date of cancellation. Between operational and financial closure, the implementing partner will identify and settle all financial obligations and prepare a final expenditure report. The UNDP Country Office will send the final signed closure documents including confirmation of final cumulative expenditure and unspent balance to the UNDP-GEF Unit for confirmation before the project will be financially closed in Atlas by the UNDP Country Office.

181. UNDP Direct Project Services as requested by Government: The UNDP, as GEF Agency for this project, will provide project management cycle services for the project as defined by the GEF Council. In addition, the Government of Senegal may request UNDP direct services for specific projects, according to its policies and convenience. The UNDP and Government of Senegal acknowledge and agree that those services are not mandatory, and will be provided only upon Government request. If requested the services would follow the UNDP policies on the recovery of direct costs. These services (and their costs) are specified in the Letter of Agreement (Annex O). As is determined by the GEF Council requirements, these service costs will be assigned as Project Costs should not be charged as a flat percentage. They should be calculated based on estimated actual or transaction based costs and should be charged to the direct project costs account codes: 64397 – 'Services to projects - CO staff' and 74596 – 'Services to projects - GOE for CO'.

- (a) Identification and/or recruitment of project personnel;
- (b) Provision of Responsible Party Agreements;
- (c) Identification and facilitation of implementation of activities;
- (d) Procurement of goods and services required under the project.

VIII. TOTAL BUDGET AND WORK PLAN							
Atlas[1] Proposal or Award ID:	00094688	Atlas Primary Output Project ID:	00098781				
Atlas Proposal or Award Title:	Système Information Climatique						
Atlas Business Unit	GIN10						
Atlas Primary Output Project Title	Système Information Climatique						
UNDP-GEF PIMS No.	5552						
Implementing Partner	Ministry of transportation						

GEF Component - Outcome/At Ias Activity	Responsibl e Party/[1]	Fund ID	Donor Name	Atlas Budget ary Accoun t Code	ATLAS Budget Description	Amount Year 1 (USD)	Amount Year 2 (USD)	Amount Year 3 (USD)	Amount Year 4 (USD)	Total (USD)	Bud get Note :
OUTCOME		62160	GEF/LDCF	71200	International Consultants	63,000	18,000	-	-	81,000	L01
1: The capacities		62160	GEF/LDCF	72100	Contractual services - Companies	415,000	120,000	15,000	15,000	565,000	L02
of the		62160	GEF/LDCF	71300	Local Consultants	22,500	37,500			60,000	L03
national hydro meteorologi		62160	GEF/LDCF	71400	Contractual Services- Individual	114,000	114,000	114,000	114,000	456,000	L04
cal department		62160	GEF/LDCF	71600	Travel	20,000	30,000	20,000	15,000	85,000	L05
s in monitoring	GdG/MT	62160	GEF/LDCF	72200	Equipment and furniture	850,404	1,625,943			2,476,347	L06
extreme		62160	GEF/LDCF	72500	Supplies	10,000	10,000	10,000	10,000	40,000	L07
weather phenomena		62160	GEF/LDCF	75700	Training, Workshops & Conferences	25,000	25,000	25,000	15,000	90,000	L08
and climate change are		62160	GEF/LDCF	72300	Materials & Goods	8,000	15,000	15,000	15,000	53,000	L09
strengthene		62160	GEF/LDCF	73400	Rental & Maint of Other Equip	11,746	15,000	15,000	15,000	56,746	L10
		TOTAL O	GEF/LDCF OL	JTCOME 1		1,539,650	2,010,443	214,000	199,000	3,963,093	

GEF Component 	Responsibl e Party/[1]	Fund ID	Donor Name	Atlas Budget ary Accoun t Code	ATLAS Budget Description	Amount Year 1 (USD)	Amount Year 2 (USD)	Amount Year 3 (USD)	Amount Year 4 (USD)	Total (USD)	Bud get Note :
		04000	UNDP	72200	Equipment and furniture	45,000	31,800			76,800	L11
		TOTAL		OME 1		45,000	31,800	0	0	76,800	
		TOTAL	OUCOME 1			1,584,650	2,042,243	214,000	199,000	4,039,893	
OUTCOME 2: Climate		62160	GEF/LDCF	71200	International Consultants	45,000	83,000		32,000	160,000	L12
products and		62160	GEF/LDCF	71300	Local Consultants	47,500	60,500		10,000	118,000	L13
services are accessible		62160	GEF/LDCF	71600	Travel	11,000	15,000	11,000	15,000	52,000	L14
and used efficiently		62160	GEF/LDCF	72100	Contractual services Companies	55,000	55,000	55,000	55,000	220,000	L15
and effectively		62160	GEF/LDCF	75700	Training, Workshops & Conferences	41,307	37,000		2,000	80,307	L16
for the production		62160	GEF/LDCF	71400	Contractual Services- Individual	22,800	45,600	45,600	45,600	159,600	L17
of warnings	GdG/MT	62160	GEF/LDCF	74500	Miscellaneous	2,470	3,000	3,000	3,000	11,470	L18
for producers		TOTAL	GEF/LDCF OL	JTCOME 2		225,077	299,100	114,600	162,600	801,377	
and in the drafting of		04000	UNDP	75700	Training, Workshops & Conferences		12,000			12,000	L19
medium- and long-		04000	UNDP	72100	Contractual services Companies	10,000	67,600	30,000		107,600	L20
term climate		TOTAL U		OME 2		10,000	79,600	30,000		119,600	
resilience developme nt plans.		TOTAL	OUTCOME 2			235,077	378,700	144,600	162,600	920,977	
Project		62160	GEF/LDCF	73400	Rental & Maint of Other Equip		3,470	3,470	2,466	9,406	L21
Manageme	GdG/MT	62160	GEF/LDCF	74100	Professional Services	3,000	3,000	3,000	3,000	12,000	L22
nt		62160	GEF/LDCF	71400	Contractual Services- Individual	48,000	48,000	48,000	48,000	192,000	L23

GEF Component 	<u>Responsibl</u> <u>e Party/[1]</u>	Fund ID	Donor Name	Atlas Budget ary Accoun t Code	ATLAS Budget Description	Amount Year 1 (USD)	Amount Year 2 (USD)	Amount Year 3 (USD)	Amount Year 4 (USD)	Total (USD)	Bud get Note :
		62160	GEF/LDCF	74596	Direct Project Costs	5,531	5,531	5,531	5,531	22,124	L24
		Sub-tota	I GEF/LDCF			56,531	60,001	60,001	58,997	235,530	
		04000	UNPD	72500	Supplies	11,000	10,000	8,000	7,000	36,000	L25
		04000	UNPD	72300	Materials & Goods	10,000	10,000	8,000	8,000	36,000	L26
		04000	UNPD	71400	Contractual Services- Individual	20,400	20,400	20,400	20,400	81,600	L27
		Sub-tota	I UNDP			41,400	40,400	36,400	35,400	153,600	
		TOTAL F	PROJECT MA	NAGEMEN	IT	97,931	100,401	96,401	94,397	389,130	
		TOTAL GEF/LDCF			1,821,258	2,369,544	388,601	420,597	5,000,000		
TOTAL P	ROJECT	TOTAL U	JNDP			96,400	151,800	66,400	35,400	350,000	
		TOTAL PROJECT				1,917,658	2,521,344	455,001	455,997	5,350,000	

Summary of Funds: 9

	Amount US\$	Amount US\$	Amount US\$	Amount US\$	Total US\$
	Year 1	Year 2	Year 3	Year 4	
GEF	1,821,258	2,369,544	388,601	420,597	5,000,000
UNDP	96,400	151,800	66,400	35,400	350,000
Government	11,859,000	15,200,000	2,582,970	3,055,330	32,697,300
TOTAL	13,776,658	17,721,344	3,037,971	3,511,327	38,047,300

⁹ Summary table should include all financing of all kinds: GEF financing, cofinancing, cash, in-kind, etc...

BUDGET NOTES

Budget Note:	Notes budgétaires
L01	 5 International Consultants (IC) skilled experts in meteorology and hydrology for a total of 135 days @600 US\$/jour : 2 IC to make together, an in-depth diagnose of meteorology and hydrology network existing equipment and to advise on the best and most suitable additional equipment and software including modeling, simulation and GIS along with the required technical specifications to the profit of 26 synoptic meteorology stations and 42 hydrologic stations. 2 IC including one skilled expert on meteorology and one on hydrology for 30 days each@600 US\$/day. Year 1 1 IC to support the development of projection and assessment of climate impacts and to combine satellite imagery with lightning detection stations to serve as a simulation base. 30 days @ 600 US \$/day. Year 1 1 IC for an in-depth evaluation of the existing skills in the current management of the meteorology and hydrology network including the databank for 15 days @ 600 US\$/day. Year 1 1 IC to assist in the consolidation of the database for the development of reliable climate forecasts, to integrate climate monitoring information with that of satellite data into climate and seasonal forecasts, to facilitate access to new climate change projection data (Magicc Scengen vs. 5.2., CMIP, Cordex) and to support the updating of projections and combine satellite imagery with lightning detection stations to serve as a simulation base and create a database to be coupled with a GIS , which would constitute a data bank. 30 days each (60 days in total) @ US\$250 /day. Year 2, @81,000 US\$
L02	For a total amount of 565,000 US\$ *Contribution to CIRDA Regional (UNDP Program for Climate Information and Resilient Development in Africa) Program Operating Cost for technical assistance to SAP Guinea, Coordination facilitation, along with CI-EWS sharing best practices and learnt lessons to the profit of Guinea UNDP-GEF Project, Year 1, 2,3 and 4. @400,000 US\$ -*For an overall amount of 165,000 US\$, this budget line covers the Services for companies, engineering firms or NGOs to be provided for the monitoring of the operation of the climate system with regular training of agents of the climate network in the management of the establishment, operation, maintenance the climate network to ensure the sustainability of the device (Activity 1.4.2 of Output 1.4). @ 65,000 US\$. Year 1, Year 2, Year 3 and Year 4 Coupling data from the 24 lightning detection stations with data from the climate stations and strengthening the actors' GIS capabilities and maintaining and using the database. @165,000 US\$. Year 2
L03	 6 national consultants (NC): 3 NC skilled national experts meteorology, hydrology and impacts assessment to work together with the 2 IC for an in-depth diagnose of meteorology and hydrology network existing equipment and to advise on the best and most suitable additional equipment and software including modeling, simulation and GIS along with the required technical specifications to the profit of 26 synoptic meteorology stations and 42 hydrologic stations for the hydro meteorological network (total of 90 days) @250 US\$/day in Year 1 2 NC to assist in the consolidation of the database for the development of reliable climate forecasts, to integrate climate monitoring information with that of satellite data into climate and seasonal forecasts, to facilitate access to new climate change projection data (Magicc Scengen vs. 5.2., CMIP, Cordex) and to support the updating of projections and combine satellite imagery with lightning detection stations to serve as a simulation base and create a database to be coupled with a GIS , which would constitute a data bank (total of 60 days)) @ 250 US\$/day. Year 2 1 NC for the creation of the hydro meteorological data base for 90 days @ 250 US\$, Year 2. @60,000 US\$
L04	For a total amount of 456,000 US\$, this budget line covers the salary of 5 national experts including 1 in Meteorology, 1 inHydrology, 1 in Monitoring and Evaluation & 1 expert in GIS and databank management and 1 Accounting Manager for Component 1 Management for 4 Years, Year 1, Year 2, Year 3 and Year 4. @ 456,000 US\$

Budget Note:	Notes budgétaires
L05	For a total amount of 85,000US\$ *For a total amount of 20,000 US\$, this budget line covers the IC missions costs to the 4 Project Priority Selected Guinea Bioclimatic Sites for the realization of the necessary activities to Outputs 1.1 et 1.2. Theses missions cost include the drivers DSA along with the MT/Meteorology/Hydrology/MEEF Representatives; Year 1& Year 2.@20,000 US *For the amount of US\$65,000 US\$ over the years Y1, Y2, Y3 and Y4, this budget line covers mission expenses during the training sessions of the meteorological network management staff on the operation and maintenance of the climate mechanism equipment and mission expenses of the members of the Scientific and Technical Committee to ensure a regular monitoring and evaluation of the equipment to be set up. These missions integrate the DSAs of the drivers for the staff mission and for accompanying ministers from the ministries of Meteorology /Hydrology. @ US\$65,000.
L06	For a total amount of 2,476,347 US\$ "For an overall amount of 2,301 347 US\$ in Year 1, Year2 & Year 3, this budget line covers the cost for the acquisition, supply and installation of equipment and additional modules for the hydro-meteorological network including: 9 weather stations @ US\$7,000/station 1 upper air station @ 120,000\$ /station 2 automatic synoptic standard stations with accessories @ 15,000 US\$/station 12 automatic synoptic atome stations with accessories @ 14,000 US\$/station 12 automatic or meteorological stations with accessories @ 14,000 US\$/station 3 automatic agro-meteorological stations with accessories @ 14,000 US\$/station 12 automatic expression with accessories @ 14,000 US\$/station 2 automatic agro-meteorological stations with accessories @ 14,000 US\$/station, 12 lightning detection stations @ US\$0,000/new station 2 servers for the reception centre @ 14,000 US\$/station 2 servers for the reception centre @ 14,000 US\$/station -25 personal computers @ 1,700 US\$/computer for each station 0 Office and IT equipment and rehabilitation of the sites @ US\$ @ 300,000\$ for the environmental services responsible for risk prevention and disaster management -25 complete kits for purchasing regular spare parts for the meteorological network: @ US\$1,300/unit -1 software package for climate modelling and weather forecasts @ US\$24,947/unit -22 hydrological stations @ US\$5,000/
L07	For a total amount of US\$40,000 US\$, this budget line covers the expenses for office equipment and consumables including the purchase of ink cartridges and paper for printing, photocopies and binding training documents needed for the training sessions (Activities 1.6.1, 1.6.2 and 2.2.1) to the management and supervision of the project. Y1, Y2, Y3 & Y4. @40,000 US\$

Budget Note:	Notes budgétaires
L08	For a total amount of US\$90,000, this budget line covers training workshops for the management staff pf the EWS mechanism Y1, Y2, Y3 and Y4, including 2 workshops to validate consultative studies. Y1 & Y2 Total Y1, Y2, Y3 & Y4 @ 90 000 US\$
L09	For a total amount of US\$ 53,000, this budget line covers the purchase of fuel and lubricants needed for the project's field missions. Y1, Y2, Y3 & Y4; @53,000 US\$
L10	For a total amount of 56,746 US\$ for the project four years, this budget line covers the operations and maintenance of the office including payments for water, telephone, electricity and access to the Internet, Y1, Y2, Y3 & Y4. @ 56,746 US\$.
L11	For an amount of US\$ 76,800 this budget line covers the purchase of 18 motorcycles (@US\$2,500 each) and other office supplies to ensure the smooth running of technical field missions of the project. Y1, Y2. @ 76,800 US\$.
L12	For a total amount of 160,000 US\$ *5 international consultants: @ @99,000 US\$ - 2 IC to support the formulation of vulnerability studies along with producing the vulnerability maps from the socioeconomic and climatic information assessment. 30 days @ US\$600 / day. Y1 & Y2; - 1 IC for gender analysis. 15 days @ 600 US\$/day. Y1 - 2 CI responsible for taking into consideration gender in planning activities and developing a database on women's organizations active in the field of climate change. 30 days @ US\$600. Y2. 30 days @ 600 US\$. A2. @99,000 US\$ * For a total amount of US\$ 61,000 : 2 international consultant evaluation project , this budget line covers the monitoring and evaluation of project performance in accordance with the M/E Table in Section IX of Prodoc Y1, Y2, Y3 & Y4.
L13	For a total amount of 118,000 US\$ *12 National Consultant: @ 100,000 US\$ -1 socio-economic modelling specialist to support the provision of reliable climate and socio-economic products including vulnerability maps to integrate into policies and plans. 60 days @ US\$250/day. Y1 & Y2 -4 NCs to conduct vulnerability assessments on the agriculture, fisheries, water resources and livestock, forestry and coastal areas. 40 days each @ US\$250/day. Y1 - 4 NCs to corry out the prioritization activity in each of the 6 priority sectors (agriculture, fisheries, water resources, livestock, forestry and coastal areas) 30 days each @ US\$250/day. Y2 -1 consultant will make a list of the options and prepare the action plan and budget. 30 days @ US\$250. Y2 -2 NC for identifying entry points for integrating climate change adaptation into sectoral and regional plans (including budgets) and providing recommendations. 30 days @ US\$250/day. Y2 * For a total amount of US\$ 18,000 : 2 national consultant evaluation project , this budget line covers the monitoring and evaluation of project performance in accordance with the M/E Table in Section IX of Prodoc Y1, Y2, Y3 & Y4.
L14	For a total amount of 52,000 US\$ *DSA mission expenses of the international and national consultants; the missions of the Scientific and Technical Committee (STC) to support the process of developing climate products and priority adaptation actions to be integrated into the policies and plans. @ US\$24,000. Y1, Y2, Y3 &Y4. @ 24,000 US\$. * For a total amount of US\$ 28,000 : travel international consultant evaluation project and DSA mission expenses project, this budget line covers the monitoring and evaluation of project performance in accordance with the M/E Table in Section IX of Prodoc Y1, Y2, Y3 & Y4.
L15	For a total amount of 220,000 US\$ *Service contract for the training of trainers and training of management staff of the climate and socio-economic network Service contract for the participatory development and implementation of the required training modules for 90 Departmental Management Staff to enable them to understand and promote the integration of adaptation into planning and developing sectoral policies for the ministerial departments of the most vulnerable key sectors Service contract for the prioritization of adaptation options through training in evaluation methodologies and the conduct of multi-criteria studies. Service contract for the organization of 16 workshops (one per region of the priority sites, i.e. 4 in each of the 4 natural regions of Guinea and 1 national) on mainstreaming gender considerations into plans, policies and budgets. Y1, Y2, Y3 & Y4 @ 100,000 US\$. *Provision of services with the national research institutes in the six key sectors under Output for in-depth feasibility studies along with financial sustainability @US\$120,000. Y1, Y2, Y3 & Y4

Budget Note:	Notes budgétaires
Note:	
L16	For a total amount of 80,307 US\$ *8 workshops of 10 days each for training for 120 managers / policymakers to understand the risks of climate change and identify priority adaptation options in policies and plan and the need for financial sustainability of the climate system 1 workshop to provide the main actors involved in the data collection with the skills needed to feed the monitoring and evaluation system. An awareness meeting with members of parliament on the Guinea's EWS process. An awareness workshop for journalists and NGOs on Guinea's EWS and the challenges of integrating adaptation into planning. Workshops to validate the work carried out by national and international consultants on the integration of adaptation into policies and plans, and on the validation of the updating of
	policies and plans integrating adaptation, and a validation workshop on monitoring and evaluation mechanism. Y1 & Y2. @65,307 US\$ *For a total amount of US\$ 15,000 workshops , this budget line covers the monitoring and evaluation of project performance in accordance with the M/E Table in Section IX of
	Prodoc Y1, Y2, Y3 & Y4.
L17	2 National Technical Assistants 1 specialist in participatory approaches and institutional capacity building 3 years (42 months @1,900 US\$/month. Y1, Y2 & Y3 1 communications specialist 3 years (42 months) @1,900 US\$/month Y1, Y2, Y3 & Y4 @ 159,600 US\$
L18	Miscellaneous expenses
L19	With funding from UNDP, this budget line of US\$12,000 covers Y2 funding for 3 training workshops for policy decision-makers and management staff of the most vulnerable structures in the primary sector on the integration of priority adaptation options and on the updating of policies and plans for their integration in the priority adaptation options (Activities 2.3.1 and 2.3.2 Y2 @ US\$ 12,000
L20	For a total amount of 107,600 US\$ *With funding from UNDP, this budget line of US\$ 47,600 covers risk monitoring for Y 1 and Y2 *Contract of services provided by companies, consulting firms or NGOs for the development of the 2 climate change integration guides in sectoral and regional planning, including gender considerations; and training of senior staff in key ministries. Service contract for the development of 8 vulnerability maps including 2 maps (dry season and rainy season) per year. Y1, Y2, Y3 & Y4. @60 000 US\$
L21	For an amount of US\$9,406, this budget line covers, for four years, the operations and maintenance needed for the missions to carry out activities Y1, Y2, Y3 & Y4. @ 31,000 US\$. A1, A2, A3 & A4
L22	For an overall amount of US\$12,000 over 4 years, this budget line covers annual audits of the project
L23	For a total amount of US\$192,000 US\$, this budget line covers the monthly salary of the coordinator @ US\$3,000 US\$ per month, the Administrative and Financial Officer @ US\$1,000 US\$ Y1, Y2, Y3 et Y4 @ 192,000 US\$
L24	For a total amount of 22,124 US\$ @ 5,531 US\$ per year, Direct Project Costs for UNDP CO is estimated to assist GdG/MT with payment processes, manufacturer selection, equipment procurement, preparation and management of contracts, and purchase order assistance. Adjustments will be made each year as appropriate.
L25	For a total amount of US\$36,000, this budget line covers the expenses for office equipment and consumables including the purchase of ink cartridges and paper for printing, photocopies and binding training documents needed for the training sessions (Activities 1.6.1, 1.6.2 and 2.2.1) to the management and supervision of the project. Y1, Y2, Y3 & Y4. Activities 1.6.1; 1.6.2 and 2.2.1) at PMC. @ 36,000 US\$.
L26	Fuel and lubricants for the missions by consultants and the implementation of results 1.1 and 1.2 and 2.4 of the supervision missions of the Steering Committee and the Scientific and Technical Committee of component 2. Exchange visits to neighoring countries and Regional CI-EWS Member Countries @ 36,000 US\$. A1, A2, A3 & A4
L27	With UNDP financing, for a total amount of US\$ 81.600, this budget line covers the monthly salary of 4 drivers @US\$ 425 per month each for Y1,Y2 Y3 and Y4 @US\$ 81,600

IX. LEGAL CONTEXT

181. This project document shall be the instrument referred to as such in Article 1 of the Standard Basic Assistance Agreement between the Government of Guinea and UNDP, signed on February 13, 1975. All references in the SBAA to "Executing Agency" shall be deemed to refer to "Implementing Partner."

182. This project will be implemented by the National Directorate of Meteorology – Ministry of Transportation ("Implementing Partner") in accordance with its financial regulations, rules, practices and procedures only to the extent that they do not contravene the principles of the Financial Regulations and Rules of UNDP. Where the financial governance of an Implementing Partner does not provide the required guidance to ensure best value for money, fairness, integrity, transparency, and effective international competition, the financial governance of UNDP shall apply.

183. Any designations on maps or other references employed in this project document do not imply the expression of any opinion whatsoever on the part of UNDP concerning the legal status of any country, territory, city or area or its authorities, or concerning the delimitation of its frontiers or boundaries.

X. RISK MANAGEMENT

184. Consistent with the Article III of the SBAA *or any Supplemental Provisions to the Project Document]*, the responsibility for the safety and security of the Implementing Partner and its personnel and property, and of UNDP's property in the Implementing Partner's custody, rests with the Implementing Partner. To this end, the Implementing Partner shall:

- a) put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried;
- b) assume all risks and liabilities related to the Implementing Partner's security, and the full implementation of the security plan.

185. UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of the Implementing Partner's obligations under this Project Document.

The Implementing Partner agrees to undertake all reasonable efforts to ensure that no 186. UNDP funds received pursuant to the Project Document are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via http://www.un.org/sc/committees/1267/ag sanctions list.shtml.

187. Social and environmental sustainability will be enhanced through application of the UNDP Social and Environmental Standards (http://www.undp.org/ses) and related Accountability Mechanism (http://www.undp.org/secu-srm).

188. The Implementing Partner shall: (a) conduct project and programme-related activities in a manner consistent with the UNDP Social and Environmental Standards, (b) implement any management or mitigation plan prepared for the project or programme to comply with such standards, and (c) engage in a constructive and timely manner to address any concerns and complaints raised through the Accountability Mechanism. UNDP will seek to ensure that communities and other project stakeholders are informed of and have access to the Accountability Mechanism.
189. All signatories to the Project Document shall cooperate in good faith with any exercise to evaluate any programme or project-related commitments or compliance with the UNDP Social and Environmental Standards. This includes providing access to project sites, relevant personnel, information, and documentation.

190. The Implementing Partner will take appropriate steps to prevent misuse of funds, fraud or corruption, by its officials, consultants, responsible parties, subcontractors and sub-recipients in implementing the project or using UNDP funds. The Implementing Partner will ensure that its financial management, anti-corruption and anti-fraud policies are in place and enforced for all funding received from or through UNDP.

191. The requirements of the following documents, then in force at the time of signature of the Project Document, apply to the Implementing Partner: (a) UNDP Policy on Fraud and other Corrupt Practices and (b) UNDP Office of Audit and Investigations Investigation Guidelines. The Implementing Partner agrees to the requirements of the above documents, which are an integral part of this Project Document and are available online at www.undp.org.

192. In the event that an investigation is required, UNDP has the obligation to conduct investigations relating to any aspect of UNDP projects and programmes. The Implementing Partner shall provide its full cooperation, including making available personnel, relevant documentation, and granting access to the Implementing Partner's (and its consultants', responsible parties', subcontractors' and sub-recipients') premises, for such purposes at reasonable times and on reasonable conditions as may be required for the purpose of an investigation. Should there be a limitation in meeting this obligation, UNDP shall consult with the Implementing Partner to find a solution.

193. The signatories to this Project Document will promptly inform one another in case of any incidence of inappropriate use of funds, or credible allegation of fraud or corruption with due confidentiality.

194. Where the Implementing Partner becomes aware that a UNDP project or activity, in whole or in part, is the focus of investigation for alleged fraud/corruption, the Implementing Partner will inform the UNDP Resident Representative/Head of Office, who will promptly inform UNDP's Office of Audit and Investigations (OAI). The Implementing Partner shall provide regular updates to the head of UNDP in the country and OAI of the status of, and actions relating to, such investigation.

195. UNDP shall be entitled to a refund from the Implementing Partner of any funds provided that have been used inappropriately, including through fraud or corruption, or otherwise paid other than in accordance with the terms and conditions of the Project Document. Such amount may be deducted by UNDP from any payment due to the Implementing Partner under this or any other agreement.

196. Where such funds have not been refunded to UNDP, the Implementing Partner agrees that donors to UNDP (including the Government) whose funding is the source, in whole or in part, of the funds for the activities under this Project Document, may seek recourse to the Implementing Partner for the recovery of any funds determined by UNDP to have been used inappropriately, including through fraud or corruption, or otherwise paid other than in accordance with the terms and conditions of the Project Document.

197. <u>Note</u>: The term "Project Document" as used in this clause shall be deemed to include any relevant subsidiary agreement further to the Project Document, including those with responsible parties, subcontractors and sub-recipients.

198. Each contract issued by the Implementing Partner in connection with this Project Document shall include a provision representing that no fees, gratuities, rebates, gifts, commissions or other payments, other than those shown in the proposal, have been given, received, or promised in connection with the selection process or in contract execution, and that the recipient of funds from the Implementing Partner shall cooperate with any and all investigations and post-payment audits.

199. Should UNDP refer to the relevant national authorities for appropriate legal action any alleged wrongdoing relating to the project, the Government will ensure that the relevant national authorities shall actively investigate the same and take appropriate legal action against all individuals found to have participated in the wrongdoing, recover and return any recovered funds to UNDP.

200. The Implementing Partner shall ensure that all of its obligations set forth under this section entitled "Risk Management" are passed on to each responsible party, subcontractor and sub-recipient and that all the clauses under this section entitled "Risk Management Standard Clauses" are included, *mutatis mutandis*, in all sub-contracts or sub-agreements entered into further to this Project Document.

XI. MANDATORY ANNEXES

- ANNEX A: Guinea EWS Project Multiyear Work Plan
- ANNEX B: Monitoring Plan Guinea EWS Project
- ANNEX C: Evaluation Plan for Guinea EWS Project
- ANNEX D: GEF Tracking Tools at Baseline for Guinea EWS Project
- ANNEX E: Terms of Reference for Project Board, Project Manager and other positions as appropriate
- ANNEX F: UNDP Social and Environmental and Social Screening Template (SESP)
- Annex G: UNDP Project Quality Assurance Report UNDP Project Quality Assurance Report
- Annex H: UNDP Risk Log (to be completed by UNDP Country Office)
- ANNEX I: Results of the Capacity Assessment of the Project Implementing Partner and HACT Micro assessment
- ANNEX J: Signed Co-financing Letters
- ANNEX K: National Focal Point Endorsement Signed Letter
- ANNEX L: Stakeholders consulted during the PPG
- ANNEX M: Staff situation of the hydro-meteorological network.

Annex A: Multi Year Work Plan

EXPECTED	Planned Activities	Respon sible		Yea	ar 1			Yea	ar 2			Yea	ar 3			Yea	ar 4	
OUTPUTS	Fiaimeu Activities	Parties	Q1	Q2	Q3	Q4												
Output 1.0: Establishment of an enabling environment for efficient and	Activity 1.0.0. Recruit the project staff and organize the project launching workshop to strengthen the ownership of the project by the concerned parties and organize the first session of the Steering Committee to approve the first PTA of the project following the ASL	PCU	x															
effective start of the project	Activity 1.0.1. Initiate the first cash advance application based on the first quarter Work Plan, implement the first Project quarter and develop the first quarterly report	PCU	x															
Output 1.1: The hydrological network is strengthened for the hydrological	Activity 1.1.1. Acquire and install with their respective accessories 22 hydrological stations, 42 automatic hydrological stations, in addition to the 20 existing ones, 252 gauges supports, 380 gauge plates, 8 computers, 2 servers and GIS software for the data bank.	PCU	x	x														
monitoring and collection of data needed for the provision of reliable	Activity 1.1.2 Acquire topography equipment and a Zodiac boat with an outboard engine for monitoring the network.	PCU	x	x	x													
hydrological information	Activity 1.1.3. Visit the stations two to three weeks after the equipment was installed in order to calibrate it and to measure the river water level and the transmission of data to the central server via GPRS or satellites.	PCU	x	x	x													
Output 1.2: The meteorological network is strengthened for climate monitoring and the provision of reliable early warning climate information	Activity 1.2.1 : Upgrade 9 meteorological stations, install them with their respective accessories, 1 upper air station, 6 automatic synoptic stations, 2 synoptic aerodrome stations, 12 automatic weather stations, 5 automatic agrometeorological stations and 3 automatic maritime stations 12 new lightning detection stations and 12 additional to be rehabilitated along with the necessary computers equipment and software.	PCU	x	x	x													
and products with options for adapting to the adverse		PCU	x	x	x													

EXPECTED	Planned Activities	Respon sible		Yea	ar 1			Yea	ar 2			Yea	ar 3			Yea	ar 4	
OUTPUTS		Parties	Q1	Q2	Q3	Q4												
effects of climate risks	Activity 1.2.2. Update the radiosonde station (upper air) of Conakry for meteorological upper air data collection used for forecasting.																	
	Activity 1.2.3. Digitize written meteorological data stored at the DNM to create series that span longer durations to detect climate change trends	PCU		х	x	x												
	Activity 1.2.4. Consult local representatives on the site before installing the meteorological equipment in order to ensure that it is installed in the useful and secured locations, and build security fences around the meteorological stations.	PCU		x	x	x	x											
Output 1.3: The means for monitoring violent weather phenomena are	Activity 1.3.1. Upgrade 12 lightning sensors from the testing phase and acquire 12 new sensors for full coverage of Guinea.	PCU		x	x	x												
strengthened through the lightning detection sensors to be used as an alternative to meteorological radar	Activity 1.3.2. Define the ideal positions for the installation and the conditions of use of the monitoring service by lightning sensors.	PCU		x	x	x												
	Activity 1.4.1. Acquire the equipment for reception, integration, analysis and archiving of hydrometeorological and environmental data.	PCU		x	x	x	x	x	x	x	х	x	x	x	x	x	x	x
Output 1.4 : An operational national climate data bank is set up	Activity 1.4.2. Ensure that the various hydrometeorological and environmental databases are interconnected for climate information sharing	PCU		x	x	x	x											
	Activity 1.4.3. Acquire archiving and climate data-sharing equipment at the national, sub-regional and global levels.	PCU																
Output 1.5. : The satellite data/images are coupled with data from	Activity 1.5.1. Set up a meteorological forecast system using satellite data, i.e. those from the country's climate and socio-economic database and digital models of regional and international centers, as well as	PCU		x	х	x	x	x										

EXPECTED	Planned Activities	Respon sible		Yea	ar 1			Yea	ar 2			Yea	ar 3			Yea	ar 4	
OUTPUTS		Parties	Q1	Q2	Q3	Q4												
hydrometeorological network to provide the	meteorological data including forecasts from these centers																	
necessary climate information and products for weather simulation	Activity 1.5.2. Acquire two servers: one main server for the database and the weather forecasting system, and one for the backup of the main server.	PCU		х	x													
	Activity 1.5.3. Produce immediate, daily and up to ten- day meteorological/climate forecasts for the main users in the districts and the main towns throughout the country.	PCU			x	x	x	x	x	x	x	x	x	x	x	x	x	x
	Activity 1.5.4. Develop early warning and consultative modules for adapting to climate change effects in the country	PCU				x	x	x	x	x	x	x	x	x	x	х	х	x
Output 1.6 : The capacities of the female and male staff of the DNM, DNH and the National	Activity 1.6.1. Train DNM and DNH staff in the use and maintenance of operational equipment that has been acquired in this project as well as old equipment that is still operational.	PCU	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Directorate of Agriculture (DNA) are strengthened for using and maintaining equipment	Activity 1.6.2. Train staff from DNM/DNH in techniques of simulation, use of numerical models and the production of improved hydrometeorological forecasts for end users.	PCU	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Output 2.1: Women's and men's capacities are built to develop and use the climate products and services	Activity 2.1.1. Ensure the strengthening of the capacities of DNH staff in the production of improved forecast for water users and mining companies, agricultural projects, national and regional authorities responsible for hydrological resources management to enable and improve water management and to mitigate losses due to floods.	PCU	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	Activity 2.1.2. Ensure the strengthening of DNM staff capacities in the production of improved meteorological forecasts to be used daily towards resilience to climate	PCU			x	x	х	х	х	х	х	х	x	х	x	х	х	x

EXPECTED	Planned Activities	Respon sible		Yea	ar 1			Yea	ar 2			Yea	ar 3			Yea	ar 4	
OUTPUTS		Parties	Q1	Q2	Q3	Q4												
	change and to be mainstreamed in the development plans.																	
	Activity 2.1.3. Ensure the strengthening of capacities of the partners' staff in the daily use of early warning and climate information	PCU			x	x	x	x	x	x	x	x	x	x	x	x	x	x
	Activity 2.1.4 Promote South-South cooperation in long- term development planning for adapting to climate change effects	PCU		x	x	x	x	x	x	x	х	х	х	x	х	x	x	x
	Activity 2.2.1. Hold consultations with the specific users of climate information and the appropriate research institutes to determine their needs with respect to specific climate products.	PCU			x	x	x	x	x	x	x	x	x	x	х	x	x	x
Output 2.2: Climate products and services that meet the needs of end-users (men and women) are developed	Activity 2.2.2. Development of tailor-made products for users and research centers that need specific products for their development or their needs in climate change adaptation.	PCU				x	x	x	x	x	x	x	x	x	х	x	x	x
	Activity 2.2.3. Combine the data of the hydrometeorological stations and satellite in order to provide climate products that forecast climate risks adapted to each region of the national territory.	PCU			x	x												
Output 2.3: Capacities for integrating climate products and services into development planning processes are created for the	Activity 2.3.1. Train the decision-makers, the administration staff and the private sector, and in particular, staff responsible for disaster management, in assimilating and using warnings, short- and long-term meteorological and climate forecasts.	PCU					x	x	x	x	x	x	x	x	x	x	x	x
benefit of female and male staff involved in planning and in the most vulnerable sectors	Activity 2.3.2. Train decision-makers in the planning departments and in the most vulnerable sectors, as well as the locally elected officials in the process of mainstreaming adaptation into policies, plans, budgets and decision-making.	PCU					x	x	x	x	x	x	x	x	x	x	x	x
Output 2.4: The institutional capacities	Activity 2.4.1. Set an Inter-institutional and Multi- Disciplinary Committee to promote Synergy (CIMS) and	PCU				X	Х	Х	Х	X	X	Х	X	X	X	Х	X	x

EXPECTED	Planned Activities	Respon sible		Ye	ar 1			Yea	ar 2			Yea	ar 3			Yea	ar 4	
OUTPUTS	Fidinieu Activities	Parties	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
are strengthened for coordinating early warning systems and	resolve coordination problem, and promote data sharing between the organizations and the related EWS initiatives (DNM/DNH and research centers).																	
sharing climate information and products	Activity 2.4.2 Create an open access EWS portal for data sharing across sectors, specifically by facilitating access to the Internet and mobile services through a public-private partnership (PPP).	PCU				x	x	x	x	x	x	x	x	x	х	x	x	x
Output 2.5 : A	Activity 2.5.1. Advocate for the sustainability of project achievements by maintaining the stability of staff in the institutions concerned	PCU	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
strategy is developed on the financial sustainability of the EWS and on the	Activity 2.5.2 Assess the current and future capacities regarding the financial sustainability of the system for early warning and adaptation to the adverse effects of climate risk	PCU			x	x	x	x	x	x	x	x	x	x	х	x	x	x
production and dissemination of climate information	Activity 2.5.3. Comprehensively assess the needs for climate services and products in the vulnerable public and private sectors and sign public-private partnership agreements with the companies operating in the mining, farming, horticulture, fisheries and pastoral sectors	PCU		x	x	x	x	x	x	x	x	x	x	x	х	x	x	x
Output 2.6 : Access and use of early	2.6.1 Set up a communication mechanism that facilitates better access to meteorological information for communities	PCU		Х	x	x	x	x	x	x	X	x	x	x	x	х	х	x
warning and climate information and products are encouraged for various	2.6.2. Explore and acquire, as appropriate, innovative software and technologies, for example, Google Earth, for the presentation of forecasts and identified risks	PCU	x	x	x	x	x	x	x	x	x	x	x	x	х	x	x	x
users, both men and women	2.6.3 Set up a climate information exchange network with the neighboring countries in order to specifically limit the transboundary risks	PCU	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
PROJECT	Coordinate and manage the project activities	PCU	Х	Х	Х	X	Х	Х	Х	X	Х	Х	X	Х	Х	Х	Х	X
MANAGEMENT	Recruit and commission the project team	PCU	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	X	Х	Х	Х	Х	X

EXPECTED	Planned Activities	Respon sible		Yea	ar 1			Yea	ar 2			Yea	ar 3			Yea	ar 4	
OUTPUTS		Parties	Q1	Q2	Q3	Q4												
	Acquire office supplies	PCU	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
	Acquire the project communication equipment	PCU	Х	Х	X	Х	Х	Х	X	X	Х	Х	Х	Х	Х	Х	Х	X
	Maintain the project equipment	PCU	Х	Х	X	Х	Х	Х	X	X	Х	Х	Х	Х	Х	Х	Х	X
	To acquire the fuel necessary for the missions	PCU	Х	Х	X	Х	Х	Х	X	X	Х	Х	Х	Х	Х	Х	Х	X
	Audit, Monitoring and Evaluation	PCU	Х	Х	X	Х	Х	Х	X	Х	Х	X	Х	Х	Х	Х	X	X

Monitoring II s	ndicator s	Description	Data source / Collection Methods	Frequency	Responsible for data collection	Means of verification	Assumptions and Risks	Budget (US\$)
Project objective : Renforcer les capacités de surveillance du climat, les systèmes d'alerte précoce et d'information pour répondre aux chocs climatiques et planifier l'adaptation au	Indicator 1	Indicator 1 : Number of municipalities that have integrated resilience and adaptation practices into their Local Development Plan	Direct observations and evaluation of 26 new updated Local Development Plans (LDPs) with an effective consideration of priority adaptation options	Annually Reported in the GEF PIR and METT	Project Coordination Unit	 Annual reports of the Ministry in charge of Decentralization Annual reports of the Ministry in charge of Planning Annual reports of the Ministry in charge of the Environment Annual reports of the Ministry in charge of gender Project annual reports 	Relevant adaptations options for the LDP are available and Local authorities are aware of the benefits of integrating adaptation options in the LDPs	1,500

ANNEX B: Budgeted Monitoring Plan Guinea EWS Project

Monitoring	Indicator s	Description	Data source / Collection Methods	Frequency	Responsible for data collection	Means of verification	Assumptions and Risks	Budget (US\$)
changement climatique en Guinée	Indicator 1	Indicator 1: Number of direct beneficiaries using the climate information and products and services	Direct observation and survey of the most vulnerable groups and sectors on their level of use of climate products	Annually Reported in the GEF PIR and METT	Project Coordination Unit	 Annual reports of the DNH DNM Annual Reports Annual reports of the Ministry of Transport Annual reports of the Ministry in charge of Planning Annual reports of the Ministry in charge of the Environment 	Relevant adaptations options for the LDP are available and Local authorities are aware of the benefits of integrating adaptation options in the LDPs	6,000
	Indicator 2	Indicator 2: Number of weather stations that regularly provide reliable climate information and products	Direct observations of the operation of each of the 9 weather stations, 9 automatic synoptic stations, 24	Annually Reported in the GEF PIR and METT	Project Coordination Unit	 DNM Annual Reports Annual reports of the DNH Annual reports of the Ministry in charge of Planning 	The immediate availability and the guarantee of the after-sales service of the modules necessary for the proper functioning	1,500

Monitoring	Indicator s	Description	Data source / Collection Methods	Frequency	Responsible for data collection	Means of verification	Assumptions and Risks	Budget (US\$)
			lightning detection stations, 4 maritime stations, 12 climatological stations, 5 agro- meteorologica I stations, the aerological station and the 62 hydrological stations			Annual reports of the Ministry in charge of the Environment	of the synoptic stations	
Component 1 OUTCOME 1: The capacities of the national hydrometeoro logical departments in monitoring extreme	Indicator 3	Indicator 3: The capacities of the DNM and DNH managers and technicians are strengthened to ensure the operation and maintenance of	The capacities will be measured at project start, mid- term and end of project through Surveys of the DNM and	Annually Reported in the GEF PIR and METT	Project Coordination Unit	 DNM Annual Reports Annual reports of the DNH Annual reports of the Ministry in charge of Planning Annual reports of the Ministry in 	There is enough staff at the DNM and DNH eligible to the training programs and the staff trained will remain in the DNM and DNH enough to support the	2,500

Monitoring	Indicator s	Description	Data source / Collection Methods	Frequency	Responsible for data collection	Means of verification	Assumptions and Risks	Budget (US\$)
weather phenomena and climate change are strengthened		the stations, the processing, analysis and dissemination equipment of the climate information products and services (CIPS).	DNH managers and technical staff using Capacity index scorecard			charge of the Environment	project activities and the sustainability of the project achievement	
Component 2 OUTCOME 2: Climate products and services are accessible and used efficiently and effectively for the production of warnings for producers and in the	Indicator 4	Indicator 4: Number of climate information products and services (CIPS) produced and accessible to end-users	Surveys of the beneficiaries to assess the level and constraints of their access to the CIPS	Annually Reported in the GEF PIR and METT	Project Coordination Unit	 DNM Annual Reports Annual reports of the DNH Annual reports of the Ministry in charge of Planning Annual reports of the Ministry in charge of the Environment Annual reports of the Ministry in 	End-users find useful and relevant the CIPS produced	2,500

Monitoring	Indicator s	Description	Data source / Collection Methods	Frequency	Responsible for data collection	Means of verification	Assumptions and Risks	Budget (US\$)
drafting of medium- and long-term climate resilience development plans.						 charge of Planning Annual reports of the Ministry in charge of the Environment Annual reports of the Ministry in charge of Gender Annual reports of the most vulnerable sectors 		
	Indicator 5	Indicator 5: Number of updated plans and development policies that incorporate relevant CIPS	Analysis of key policies and plans to assess the level of integration of the CIPS in the six sectoral policies of the primary sector	Annually Reported in the GEF PIR and METT	Project Coordination Unit	 Annual reports of the sectoral ministries concerned; Annual reports of the Ministry in charge of Planning Annual reports of the Ministry in 	The Government is willing to adopt the development plans and policies that incorporate the relevant CIPS	2,000

Monitoring	Indicator s	Description	Data source / Collection Methods	Frequency	Responsible for data collection	Means of verification	Assumptions and Risks	Budget (US\$)
						charge of the Environment		
Mid-term GEF Tracking Tool (if FSP project only)	N/A	<u>N/A</u>	Standard GEF Tracking Tool available at www.thegef.o rg Baseline GEF Tracking Tool included in Annex D.	After the transmissio n of the second PIR to the GEF	Project Coordination Unit	 Annual Project Reports; Annual reports of the Ministry in charge of the Annual reports of the Ministry in charge of the Environment 	N/A	9,000
Terminal GEF Tracking Tool	N/A	<u>N/A</u>	Standard GEF Tracking Tool available at www.thegef.o rg Baseline GEF Tracking Tool included in Annex.	After the transmissio n of the last PIR to the GEF	Project Coordination Unit	 Annual Project Reports; Annual reports of the Ministry in charge of the Annual reports of the Ministry in charge of the Environment 	N/A	10,000
Total								35,000

ANNEXE C: Evaluation Plan:

Evaluation Title	Planned start date Month/year	Planned end date Month/year	Included in the Country Office Evaluation Plan	Budget for consultants	Other budget (i.e. travel, site visits etc.)	Budget for translation
Independent Mid- term Review (MTR) and management response	April 2020	June 2020	Independent evaluator	20,000 USD		5,000
Independent Terminal Evaluation (TE) included in UNDP evaluation plan, and management response	February 2022	March 2022	Independent evaluator	40,000 USD		
Total evaluation buc	lget	65,000 USD	1	<u> </u>		

Annex D: GEF Tracking Tool at baseline

Project identification							
Project title:	bject title: Strengthening climate information and early warning systems for climate resilient development and adaptation to climate change in Guinea						
Country(ies):	Guinea GEF project ID: TBD						
GEF Agency(ies):	UND	Agency project ID:	PIMS 5552				
Executing Partner(s):	National Directorate of Meteorology/Ministry of Transports	Council/ CEO Approval date:	TBD				
Project status at submission:		Tool submission date:	TBD				

Project baselines, targets and outcomes								
Indicator	Unit of measurement	Baseline at CEO Endorsement	Actual at mid- term	Actual at completion	Comments (e.g. specify unit of measurement)			
Objective 1: Reduce the vulnerability of people, livelihoods, physical assets and natural systems to the adverse effects of climate change								
	number of people		100,000	200,000				
Indicator 1: Number of direct	% female		51,000 (51%)	102,000 (51%)				
beneficiaries	vulnerability assessment (Yes/No)	No	No	No	(if a vulnerability assessment has been carried out for the targeted population, please describe)			
Outcome 1.1: Vulnerability of physical	assets and natural systems red	uced						
	ha of land	N/A	N/A	N/A				
Indicator 2: Type and extent of	km of coast	N/A	N/A	N/A				
assets strengthened and/or better managed to withstand the effects of climate change	km of roads	N/A	N/A	N/A				
	other	N/A	N/A	N/A	(add rows as needed)			

Project baselines, targets and outc	omes				
Indicator	Unit of measurement	Baseline at CEO Endorsement	Actual at mid- term	Actual at completion	Comments (e.g. specify unit of measurement)
Outcome 1.2: Livelihoods and source	s of income of vulnerable popula	tions diversified and	strengthened	L	
Indicator 3: Population benefiting	number of people				(describe livelihood options, add rows as needed)
from the adoption of diversified, climate-resilient livelihood options	% female				
climate-resilient livelihood options	% of targeted population				
Outcome 1.3: Climate-resilient techno	logies and practices adopted an	d scaled up			
	number of people				(indicate what technology and add rows as needed)
Indicator 4: Extent of adoption of climate-resilient technologies/ practices	% female				
	% of targeted				
	number of ha				
	% of targeted				
Objective 2: Strengthen institutional a	nd technical capacities for effecti	ive climate change a	daptation		
Outcome 2.1: Increased awareness of	f climate change impacts, vulner	ability and adaptation	า		
Indicator 5: Public awareness	Yes/No		Yes	Yes	
activities carried out and population	number of people		100,000	200,000	
reached	% female		51,000 (51%)	102,000 (51%)	
Outcome 2.2: Access to improved clin	nate information and early-warni	ng systems enhance	d at regional, nation	al, sub-national and lo	cal level
	number of relevant				
Indicator 6: Risk and vulnerability	assessments/knowledge				
assessments, and other relevant scientific and technical assessments carried out and updated	products developed (risks profile for drought, flood, landslide, thunderstorm; vector borne diseases)	N/A	N/A	N/A	

Indicator	Unit of measurement	Baseline at CEO Endorsement	Actual at mid- term	Actual at completion	Comments (e.g. specify unit of measurement)
Indicator 7: Number of people/	number of people		100,000	200,000	
geographical area with access to	% female		51%	51%	
improved climate information services	% of targeted area (e.g. % of country's total area)	0			
Indicator 8: Number of people/ geographical area with access to	Number people with access to improved climate-related products and early warning information with % of females	0	100,000	200,000	
improved, climate-related early- warning information	% female		51,000 (51%)	102,000 (51%)	
	% of targeted area (e.g. % of country's total area)	0			
Outcome 2.3: Institutional and technic	al capacities and human skills s	rengthened to identi	fy, prioritize, impleme	ent, monitor and evalu	ate adaptation strategies and measure
Indicator 9: Number of people trained to identify, prioritize, implement, monitor and evaluate adaptation	f1: Number of decision- makers trained f2: % women	0	60	120	
strategies and measures	% female	0	51%	51%	
	number of institutions		12	12	
Indicator 10: Capacities of regional, national and sub-national institutions to identify, prioritize, implement, monitor and evaluate adaptation strategies and measures	score				(if the scoring methodology is different from the recommended [see Sheet 2], please describe)

Indicator	Unit of measurement	Baseline at CEO Endorsement	Actual at mid- term	Actual at completion	Comments (e.g. specify unit of measurement)
Outcome 3.1: Institutional arrangemer established and strengthened	hts to lead, coordinate and suppo	ort the integration of a	l climate change adapta	ation into relevant polici	l ies, plans and associated processes
Indicator 11: Institutional	number of countries		1	1	
arrangements to lead, coordinate and support the integration of climate change adaptation into relevant policies, plans and associated processes	score				(if the scoring methodology is different from the recommended [see Sheet 2], please describe)
Outcome 3.2: Policies, plans and as	ssociated processes develope	d and strengthened	to identify, prioritize	e and integrate adapta	ation strategies and measures
	g1: PNIA regularly updated by effectively integrating priority adaptation options	g1: 0	g1: 1	g1: 1	
	g2: Energy Sector multi-year investment plan integrating priority adaptation options				
Indicator 12: Regional, national and sector-wide policies, plans and processes developed and strengthened to identify, prioritize and integrate adaptation strategies and measures	g3: Number of Mining Plans/Codes updated to integrate priority adaptation actions	g2: 0	g2: 1	g2: 1	
	g4: Health Sector multi-year investment plan integrating priority adaptation options	g3: 0	g3: 1	g3: 1	
	g5: Water sector multiyear investment plan integrating priority adaptation options				
	g6: Municipality Local development plans integrating	g4	g4	g4	

Indicator	Unit of measurement	Baseline at CEO Endorsement	Actual at mid- term	Actual at completion	Comments (e.g. specify unit of measurement)
	climate risks and priority adaptation options				
	score				(if the scoring methodology is different from the recommended [see Sheet 2], please describe)
Indicator 13: Sub-national plans and	N/A	N/A	N/A	N/A	
processes developed and strengthened to identify, prioritize and integrate adaptation strategies and measures	score	N/A	N/A	N/A	(if the scoring methodology is different from the recommended [see Sheet 2], please describe)
Indicator 14: Countries with systems	number of countries		1	1	
and frameworks for the continuous monitoring, reporting and review of adaptation	score				(if the scoring methodology is different from the recommended [see Sheet 2], please describe)
Reporting on GEF gender indicator	S				
Q1: Has a gender analysis been cond	ucted during project preparation	?		NA	
Q2: Does the project results framework include gender-responsive indicators, and sex- disaggregated data?					
Q3: Of the policies, plans frameworks and processes supported (see indicators 12 and 13 above), how many incorporate gender dimensions (number)?					
Q4: At mid-term/ completion, does the progress and results in terms of gende			NA		

ANNEX E: Terms of Reference

PROJECT STAFF

1. NATIONAL COORDINATOR OF THE PROJECT:

Functions and tasks:

Under the supervision of the UNDP Environment and Sustainable Development Program Officer, the SAP Project Coordinator, based in Conakry, ensures:

• the administration, execution and coordination of all project activities;

• the design, planning, monitoring and evaluation of the program in collaboration with assistants and other partners;

• the coordination of the partnership and the support to the CGCUE in the animation and the strategies of Management of Early Alerts in relation to the members of the Contingency Plan of the Agencies in charge of the Humanitarian in the SNU; the integration, coordination and animation of the team members working to achieve the objectives for which they are responsible.

He also animates the thematic platforms for consultation on the climate network and integration of priority adaptation actions in national and regional development policies and plans along with mobilizing resources and achieving the expected results of the project.

Required profile

• Have at least a Master of Science degree in Natural Resource Management or equivalent;

• Have at least 10 years of professional experience in the management and planning of development projects and programs, adaptation to the adverse effects of climate change and sustainable land management;

• Familiarity with UNDP and GEF mechanisms and procedures for proper management of incremental costs and costs;

• Have experience in developing and implementing adaptation projects to the adverse effects of climate change;

- Have integrated ecosystem management skills and production systems;
- Have communication skills and facilities;
- Being physically fit to endure sometimes harsh working conditions;

• Have a perfect command of computer tools, French and English and some of the local languages in Guinea

2. ADMINISTRATIVE AND FINANCIAL ASSISTANT:

Functions and tasks:

Under the authority of the National Coordinator of the Project, the Administrative and Financial Assistant, based in Conakry,

• Performs administrative, accounting and financial tasks according to National Execution Procedures (NEX);

Completes tax and social statements;

• Manages staff, contractors, and capital assets according to the provisions of current Guinean legislation;

- Provides timely documentation of expenses following quarterly cash advances;
- Produces quarterly financial reports on time;

• Produce the quarterly and annual financial statements;• Establishes timely supply requests for the project account;

- Manages fixed assets, material and logistical means;
- Participates in internal audits of the project.

Required profile

- Have at least a graduate degree in accounting;
- Have a minimum of a five year experience in administrative and financial management of development projects;
- Familiar with UNDP accounting procedures, national execution procedures or NEX;
- Have a proven knowledge of the management of contracts and contracts in accordance with the provisions of the Code des Marches Publics in Guinea;
- Have a perfect command of computer tools, French and English.

3. EXPERT ON MONITORING AND EVALUATION, SIG AND CLIMATE DATA BANK MANAGEMENT

Functions and tasks

Under the authority of the National Coordinator of the Project, the Assistant in charge of GIS, Databases and Monitoring-Evaluation, based in Conakry;

- Assures in connection with the DNM, the DNH and the CNGCUE the evaluation and the equipment process of hydrometeorological stations in the project areas;
- monitors and evaluates project activities;
- Leads the multidisciplinary team responsible for program implementation and composed of different partners at national and regional level *;
- Develops or identifies tools for the collection and analysis of both biophysical and socioeconomic statistical data necessary for the monitoring and evaluation of data bank performance measurements in the provision of reliable early warning information and climate products;
- Monitor the integration of adaptation priority strategies and options in national, regional and local development policies and plans;
- Provides quarterly an integrated assessment report of product achievement levels and performance measures and project weaknesses related to the Logical Framework and METT targets;
- Develops a dashboard for the UCP for critical parameters requiring regular monitoring and control for the efficient management of the project and integrating the management of likely risks likely to affect the project;
- Proposes relevant recommendations for improved project performance both in setting up the climate system, the database and integrating adaptation into national, regional and local policies and plans;
- Contribute to build the capacities of the institutions on GIS, Database and M&E of the Project activities;
- Feeds and updates the project database (Database and GIS) as well as the project website;
- Assists and advises the coordinator in the planning, organization of partnerships, mobilization of
 resources and the effective realization of activities necessary to achieve the expected effects of
 the project;
- Assists the National Coordinator in the animation of multidisciplinary teams;
- Ensures, in collaboration with the National Coordinator and the actors concerned, the coordination and the regular execution of the activities of the climate and environmental network of early warnings;

Required profile

• Have at least a Master of Science degree in Geomatics / SIG and Databases;

• Have proven expertise in meteorology / hydrology and adaptation to the adverse effects of climate change;

- Have proven expertise and experience in participatory approaches;
- Have communication skills;
- Being physically fit to endure sometimes harsh working conditions;
- Have a perfect command of the computer tool (GIS, MS Access, and MSOffice).

4. ASSISTANT INTEGRATING ADAPTATION IN POLICY AND PLAN AND SPECIALIST IN PARTICIPATORY APPROACHES AND COMMUNICATION

Functions and tasks

Under the authority of the National Coordinator of the Project, the Assistant in charge of integration of adaptation in policies and plans and specialists in planning and participatory approaches based in Conakry,

- Participates in the implementation, monitoring, monitoring and evaluation of all adaptation mainstreaming activities in national, regional and local policies and plans;
- Plans and implements capacity building activities of relevant stakeholders;
- Participates in the operational planning of project activities;
- Establishes and / or facilitates a consultation framework at national and regional level for effective dissemination and dissemination of climate and socio-economic products;
- Advises on aspects related to the overall and participative management of the project;
- Coordinates, integrates and guides all participatory and communication approaches undertaken as part of a massive and inclusive use of early warning information and products of the project.

Required profile

- Have a university degree or equivalent in planning, natural resource management with specialization in participatory approaches, communication and extension techniques;
- Have at least 10 years of professional experience in the field in question;
- Have proven expertise and experience in planning, facilitation and participatory approaches especially in extension, dissemination of climate and socio-economic products and updating of policies and plans at national and regional level;
- Have communication skills;
- Being physically fit to endure sometimes harsh working conditions;
- Agree to live in rural areas and work with grassroots actors.

5. ASSISTANT TO THE COORDINATION OF THE PROJECT

Functions and tasks:

Under the authority of the coordinator, the Project Coordination Assistant (e) in Conakry,

• Performs usual secretarial tasks: telephone switchboard, mail processing and mailing, computer input, layout of documents, photocopying and printing of documents and preparation of various

documents (letters, reports etc.), management of documents Schedules and RDV, the maintenance of the system of classification of the mail departure and arrival, the maintenance of the registers of the equipments.

- Manages the inputs and outputs of the works of the project library;
- Manages cash in advance and material accounting for the project.

Required profile

- Have at least a Higher Technician Certificate in the Secretariat;
- Have experience in shorthand typing;
- Have a professional experience of at least five years in the Executive Secretariat;
- Have a perfect command of the computer tool with electronic mail with a perfect command of the keyboard, French and English;
- Have solid expertise in project accounting.

6. DRIVER

Functions and tasks:

Under the authority of the coordinator, the driver at the base of the project in Conakry

- leads project staff and experts for work purposes;
- ensures the maintenance of the vehicles and fills out the log book which shows the use of the vehicles;
- Occasionally performs the duties of a messenger or clerk.

Required profile

- Have the qualifications of driver-mechanic;
- Have a light and heavy driver's license and have exercised more than five years;
- Have experience conducting field missions;
- Have a good command of French.

II. THE STEERING COMMITTEE (SC):

Composition

It consists of the different partners directly involved in the implementation of the project. It is in particular:

- Ministry in charge of meteorology
- Ministry in charge of hydrology
- Ministry in charge of environment ensures the presidency
- Ministry in charge of the economy
- Ministry in charge of budget
- Ministry in charge of planning
- Ministry in charge of agriculture
- Ministry in charge of livestock
- Ministry in charge of infrastructure
- Ministry in charge of gender
- Ministry in charge of decentralization
- GEF National operational focal point
- National focal points on climate change
- Direction / institute of research

- UNDP
- Representatives of active civil society in climate change (two).

Missions and tasks

The steering committee is responsible among other missions of:

- guide the Project;
- approve the project annual report on the implementation of the former work plan implementation and
- approve the project annual planned work plan including the budget (AWP) submitted by the project coordinator;
- approve the annual budget;
- provide overall supervision of the project through planning, programming and monitoring evaluation of achievements;
- ensure the continuous and annual evaluation of project implementation (notably through the approval of the annual technical and financial report and the organization of tripartite reviews);

Operating procedures

- the Steering Committee is chaired by the Ministry in charge of Transport;
- The SC meets twice a year in regular session to review the status of project activities in the context of technical monitoring and financial evaluation activities. The second meeting of the SC is the annual terminal evaluation meeting of project activities for the past year;
- the committee may meet in extraordinary session upon convocation by its chairman and at the written request of one of its members indicating the agenda;
- the SC Secretariat is provided by the project coordination unit, in particular the coordinator;
- the SC may call on the expertise of any structure or resource person likely, as an observer, to provide support for the proper implementation of project activities.

II. THE SCIENTIFIC AND TECHNICAL COMMITTEE (STCT):

Composition

The purpose of this committee is to provide, as its name suggests, scientific and technical support for the project. It consists of development, research and training structures involved in natural resource management, meteorology, hydrology, planning and environment, and primary sector and mining sector structures.

These are in particular the different national technical institutions involved in the management of natural resources and the environment that are:

- National direction of hydrology
- National environmental branch
- National forest direction
- National direction of planning
- National fishing directorate
- National directorate for agriculture
- National management of livestock
- National fish management directorate
- National center for disaster and environmental emergency management
- Institute for agricultural research for development

• National research center for development

Missions and tasks

The mission of the STC is to support the project in a number of areas including:

- planning of technical activities;
- Strategy development;
- The most appropriate technical and technological choices for the proper execution of project activities;
- Evaluation of technical documents developed by project experts and consultants at the request of the project;
- The STC precedes all SC meetings.

Operating procedures

- The STC provides advisory opinions and advice on the scientific and technical aspects of the project.
- It meets whenever necessary at the invitation of its Chairman
- The STC secretariat is provided by the PCU.

ANNEX F: UNDP Social and Environmental Screening Procedure and plans as needed

Project Information	
Project Title	Strengthening climate information and early warning systems for climate resilient development and adaptation to climate change in Guinea
Project Number	UNDP-GEF PIMS ID number: 5552
Location (Global/Region/Country)	REPUBLIC OF GUINEA

Part A. Integrating Overarching Principles to Strengthen Social and Environmental Sustainability

QUESTION 1: How Does the Project Integrate the Overarching Principles in order to Strengthen Social and Environmental Sustainability?

Briefly describe in the space below how the Project mainstreams the human-rights based approach

During the project preparation phase, stakeholder engagement and participation have been key elements for the successful work undertaken under the PPG activities in Guinea. The project design makes the assumption that the consultations during project preparation strengthen the transparency and legitimacy of the proposed project activities, notwithstanding that during project implementation, activities can and should be adapted to ensure that the human rights of stakeholders are preserved and/or reinforced. Besides, the project specifically promotes in Guinea, the development of strong and adequate institutional and technical capacities of stakeholders to reduce vulnerability and promote adaptation, through involvement of all concerned actors. Beyond the long-term planning and implementation of the project, the relevant legal instruments related to the project implementation will consist of arrangements that will be concluded between the government (represented by the MT), on the one hand, and the various stakeholders on the other hand such as -mainly Ministry of Environment, Ministry of Finance, Ministry of Planning, Ministry of Agriculture, Ministry of Livestock, Ministry of Land Use Management Plans, the Ministry in charge of Gender, various national and international NGOs, Decentralized Institutions etc. One of the purposes of the stakeholder's engagement is to restore the confidence and cooperation between the local populations on one hand and the national and decentralizes institutions, by offering them the capacity to take charge of a solidarity-based and inclusive sustainable adaptation. The strategy is aimed at reducing vulnerability and building capacities for inclusive sustainable adaptation through climatic and socioeconomic data bank establishment and integration of adaptation onto current sectorial policies, planning and budgeting processes for inclusive sustainable green growth.

Concerning Indigenous peoples: The Guinea EWS project will result in socioeconomic benefits which will contribute to the improvement of indigenous people livelihoods and rights access to climatic and socioeconomic information and EWS to ease adaptation, and thus strengthening social and economic sustainability of indigenous communities. The Guinean Constitution guarantees the protection of indigenous peoples' rights. Through their empowerment and accountability in the inclusive adaptation, in accordance with their vision and needs, the project promotes alternative options for creating environmentally friendly jobs and sustainable sources of income for local communities. The project will pursue implementation of a human rights-based approach by ensuring full participation of local and indigenous communities in the project activities, especially under Components 2 on building concerned actors capacities.

Concerning local communities: The Guinea EWS Project's theory of change concept will enable the local authorities to exercise their prerogatives in the administration and management of local development. On the managerial level, capacitybuilding efforts will be devoted through the project for promoting inclusive rural sustainable adaptation, together with an effective mastery of the values chain; including conservation sector jobs that promote sustainable development of local communities. The project Component 2 will benefit young people, women, indigenous peoples, and vulnerable groups via establishment Climate Change EWS. The project by addressing adaptation measure at the policy, budgeting and planning levels, will provide an enabling environment for positive effects on local communities and will ensure that human rights approaches are embedded in the project adaptation initiatives. In terms of participation, the project will enable regular meetings and consultations all concerned actors ensure human rights approach implementation.

A **Grievance Redress Mechanism** will be established to monitor effect of the project on local communities and respond quickly to their concerns about the project implementation. This mechanism will be based on experiences from past and current ongoing projects implementation. Decentralized institutions along with international institutions will participate in the project Steering Community and will have power to influence adaptive management of the project activities and ensure necessary balance of project profits among all concerned actors. Besides, the M&E framework of the project is fully participatory and allows all concerned stakeholders to share freely their opinion on the project, its results, and social impacts.

Briefly describe in the space below how the Project is likely to improve gender equality and women's empowerment

During PPG Phase at the consultation meetings in Conakry, discussed with the numerous women who attended the launching meeting. One of the plenary session was under women reporting the meeting, due to the principal role of women in climate change adaptation measures. The project will offer them alternative options for diversifying revenue sources in the project areas (51 % of the project beneficiaries are women). The project will help women to cooperate and engage into the socio-economic development at local level via implementation of the Component 2 through climatic modeling.

The Guinea EWS project also plans to help women involvement in both component 1 on establishing a climate data bank and on component 2 on capacity building on integrating climate change on current on-going policies and plans at the national and regional levels. Gender balance and gender rank will be ensured as much as possible regarding women participation in the Project Board and in the PMU. In response to very low women participation in the project development the project will incorporate gender considerations in the implementation procedures in a number of different ways:

Strong focus on gender within Component 1 and 2 and on the project institutional arrangements activities that have an emphasis on female-led activities will be enhanced

All awareness raising activities will specifically target women and encourage them to take responsibilities including for engagement with the authorities with respect to inclusive climate change adverse impacts adaptation.

Where possible and where they exist, women's organisations will be targeted for involvement in the project adaptive management and capacity development. In addition to these activities, the project will adopt the following principles:

- gender stereotypes will not be perpetuated,
- women and other marginalized peoples will be actively and demonstrably included in project processes and activities whenever possible, and;
- derogatory language or behaviors will not be tolerated.

As such, the project falls within the **Gender Targeted** ranking – primarily because changes of the current women's status will require long-term work beyond the project's life. Project interventions will seek a greater and more even gender representation with the potential for gender mainstreaming-related activities. Furthermore, relevant gender representation on various levels of project governance will be pursued. All project staff recruitment shall be specifically undertaken inviting and encouraging women applicants. The TORs for key project staff all incorporate gender mainstreaming related responsibilities.

The project will promote gender mainstreaming and capacity building within its project staff to improve understanding of gender issues, and will appoint a designated focal point for gender issues to support development, implementation, monitoring and strategy on gender mainstreaming internally and externally. This will include facilitating gender equality in capacity development and women's empowerment and participation in the project activities. The project will also work with UNDP experts in gender issues and the UNWOMEN based in Addis Ababa to utilize their expertise in developing and implementing GEF projects. These requirements will be monitored by the UNDP Gender Focal Point during project implementation.

Briefly describe in the space below how the Project mainstreams environmental sustainability

The objective of the project is to strengthen the climate monitoring capabilities, early warning systems and information for responding to climate shocks and planning adaptation to climate change in Guinea. This project will include two outcomes: (i) Enhanced capacity of national hydro-meteorological (NHMS) and environmental institutions to monitor extreme weather and climate change; and (ii) . Efficient and effective use of hydro-meteorological and environmental information for making early warnings and mainstreaming CC in the long-term development plans.

The project's monitoring activities include indicators for monitoring the environmental and social benefits.

Part B. Identifying and Managing Social and Environmental Risks

QUESTION 2: What are the Potential Social and Environmental Risks?	QUESTION 3: What is the level of significance of the potential social and environmental risks?	QUESTION 6: What social and environmental assessment and management measures have been conducted and/or
Note: Describe briefly potential social and environmental risks identified in Attachment 1 – Risk Screening Checklist (based on any "Yes" responses).		are required to address potential risks (for Risks with Moderate and High Significance)?

Risk Description	Impact and Probabilit y (1-5)	Significan ce (Low, Moderate, High)	Comments	Description of assessment and management measures as reflected in the Project design. If ESIA or SESA is required note that the assessment should consider all potential impacts and risks.
Risk 1: Principles 1: Human Rights 1. Is there a risk that duty-bearers do not have the capacity to meet their obligations in the Project?	I = 2 P =1	Low	This question will be answered following the UNDP's micro analysis of the partners-	Micro analysis will be conducted. Sufficient funds to hire experienced staff and short-term experts have been allocated under the relevant component. There is overall institutional capacity with regards to community outreach and engagement, which can be tapped. Experienced partner organizations, may be engaged in the implementation of the component more formally.
Risk 2: Principles 1: Human Rights 8. Have local communities or individuals, given the opportunity raised human rights concerns during the stakeholder engagement process?	I = 3 P =1	Low	A limited number of consultations were held during the PPG process. Those consultations identified potential that living conditions will be improved by the project through promotion of well- designed social safety nets such as inclusive resilience building and adaptation mainstreaming to ongoing policies, budgeting and planning processes	For work to be carried out at the community level, the project design highlights in Conakry, the need for equitable distribution of benefits, resources and rights. It was stressed that relevant planning and implementation of adaptation governance structures and guidelines need to be enforced during project implementation. Relevant representation of the key beneficiaries is one critical aspect to ensure a voice on the highest project decision making level.
Risk3:Standard1:BiodiversityConservationandSustainableNaturalResource Management1.2 Are any Project activities proposed within or adjacent to critical habitats and/or environmentally sensitive areas, including legally protected areas (e.g. nature reserve, national park), areas proposed for protection, or recognized as such by authoritative sources and/or indigenous peoples or local communities?	l = 2 P =1	Low	Project will be established to work for institutions building capacities for reducing vulnerability and building inclusive growth. Social and Environmental Safeguards systems will be triggered where proposed new activities could potentially have negative impacts.	No special actions required. The project interventions focus on reducing the stressors and improving concerned actors livelihoods

Risk Description	Impact and Probabilit y (1-5)	Significan ce (Low, Moderate, High)	Comments		Description of assessment and management measures as reflected in the Project design. If ESIA or SESA is required note that the assessment should consider all potential impacts and risks.
Risk6:Standard1:BiodiversityConservationandSustainableNaturalResource Management1.6Does the project involve the harvesting of natural forests, plantation development, or reforestation?	l = 1 P = 5	Low	The project involves impro ecosystems services adaptation	ving overall through	Resilience building and adaptation promotion at the policy, budgeting and planning processes is targeted by the Guinea EWS project and especially in the most vulnerable rural development sectors.
 Risk 7: Standard 6: Indigenous Peoples 6.1 Are indigenous peoples present in the Project area (including Project area of influence)? 6.2 Is it likely that the Project or portions of the Project will be located on lands and territories claimed by indigenous peoples? 	I = 2 P =1	Low	Refugees, nomads and mobile indigenous people tribes are residents in the project pilot demonstration zones		The project took in account interests and values of indigenous people during development phase. Appropriate consultations with indigenous communities were organized. Moreover, the project will restore rights of the indigenous people through building an enabling environment for an inclusive adaptation to climate change adverse impacts
	QUESTION	4: What is the	overall Project risk cate	gorization?	
	Select one	(see <u>SESP</u> for	guidance)		Comments
	Low Risk			⊠	The Low Risk Rating is based on the low impact, low probability and low risk of the projects activities.
	Moderate R	lisk			
	High Risk				
1. Biodiversity Conservation and Natural Resource Management			n the identified risks irements of the SES are		
2. Climate Change Mitigation and	Check all the	at apply			Comments
Adaptation	Principle 1: Human Rights Principle 2: Gender Equality and Women's Empowerment				
			quality and Women's	□x	
				□X	

Risk Description	Impact and Probabilit y (1-5)	Significan ce (Low, Moderate, High)	Comments			Description of assessment and management measures as reflected in the Project design. If ESIA or SESA is required note that the assessment should consider all potential impacts and risks.
	3. Co Conditions	Community Health, Safety and Working nditions			□X	
	4. Cu	Cultural Heritage				
	5. Displacement and Resettlement			nt		
	6. Indigenous Peoples				□X	
	7. Po Efficiency	llution Preve	ention and	Resource	□X	

Final Sign Off

Signature	Date	Description
QA Assessor	XX	XX
QA Approver	XX	XX
PAC Chair		UNDP chair of the PAC. In some cases PAC Chair may also be the QA Approver. Final signature confirms that the SESP was considered as part of the project appraisal and considered in recommendations of the PAC.

SESP Attachment 1. Social and Environmental Risk Screening Checklist

Checklist Potential Social and Environmental <u>Risks</u>	
Principles 1: Human Rights	Answer (Yes/No)
1. Could the Project lead to adverse impacts on enjoyment of the human rights (civil, political, economic, social or cultural) of the affected population and particularly of marginalized groups? The Guinea EWP project has no negative impact on human rights (civil, political, economic, social or cultural) of the affected population, particularly on the right of marginalized groups. Rather, this project will strengthen the exercise of human rights by strengthening the concept of fairness and justice among the beneficiaries. Areas of high cultural conservation value will be protected within protected areas supported by the project. Several social and economic aspects will be taken into account in the context of the improvement of the living conditions of the populations through Climate Change EWS and resilience building capacities targeted by the Component 2.	No
2. Is there a likelihood that the Project would have inequitable or discriminatory adverse impacts on affected populations, particularly people living in poverty or marginalized or excluded individuals or groups? ¹⁰ The project has no inequitable or discriminatory adverse impact on the affected populations, particularly people living in poverty or marginalized or excluded individuals or groups. In this project, the discrimination will rather be positive because the mobile indigenous people such as nomads and refugees will benefit adaptation measures from the project component 2	No
3. Could the Project potentially restrict availability, quality of and access to resources or basic services, in particular to marginalized individuals or groups? The project does not restrict availability, quality of and access to resources or basic services, in particular to marginalized individuals or groups who will benefit from the inclusive resilience building and climate change adverse impacts adaptation	No
4. Is there a likelihood that the Project would exclude any potentially affected stakeholders, in particular marginalized groups, from fully participating in decisions that may affect them? The project rather encourages the full participation of potentially affected stakeholders, especially marginalized groups, in decisions that may affect them. Consultations with communities are planned throughout the implementation of the project. In addition, current legislation on the management of protected areas requires the establishment of governance structures and the representativeness of all social strata including nomads and mobile indigenous peoples and women.	No
5. Is there a risk that duty-bearers do not have the capacity to meet their obligations in the Project? See Part B. Identifying and Managing Social and Environmental <u>Risks above</u>	Yes
6. Is there a risk that rights-holders do not have the capacity to claim their rights? The capacity building program will also involve rights-holders and they will have the capacity to claim their rights	No
7. Have local communities or individuals, given the opportunity, raised human rights concerns regarding the Project during the stakeholder engagement process? See Part B. Identifying and Managing Social and Environmental <u>Risks above</u>	Yes
8. Is there a risk that the Project would exacerbate conflicts among and/or the risk of violence to project- affected communities and individuals? There are no risks because the project's actions will take place in close collaboration with all the stakeholders and in strict compliance with the legislation in force. On the other hand, continuous awareness accompanied by socio-economic achievements will prevent conflicts	No
Principle 2: Gender Equality and Women's Empowerment	
1. Is there likelihood that the proposed Project would have adverse impacts on gender equality and/or the situation of women and girls? The Guinea EWS project is not likely to have a negative impact on gender equality and / or the situation of women and girls. On the contrary, this project plans accompanying actions for men and women in the project area to clarify the equitable and fair distribution of adaptation labor by sex. Socio-economic activities specific to women and men are foreseen. Gender equality concerning the repartition of climatic products benefits	No

¹⁰ Prohibited grounds of discrimination include race, ethnicity, gender, age, language, disability, sexual orientation, religion, political or other opinion, national or social or geographical origin, property, birth or other status including as an indigenous person or as a member of a minority. References to "women and men" or similar is understood to include women and men, boys and girls, and other groups discriminated against based on their gender identities, such as transgender people and transsexuals.

Checklist Potential Social and Environmental Risks		
funding will be guaranteed and requirements for women's involvement in climatic products and adaptation governance structures will be applied.		
2. Would the Project potentially reproduce discriminations against women based on gender, especially regarding participation in design and implementation or access to opportunities and benefits? On the contrary, this project plans accompanying measures for men and women in the project area to clarify the equitable and fair adaptation information benefits distribution by gender. Gender equality concerning the repartition of funding will be guaranteed and requirements for women's involvement in adaptation governance structures will be applied.		
3. Have women's groups/leaders raised gender equality concerns regarding the Project during the stakeholder engagement process and has this been included in the overall Project proposal and in the risk assessment? No concerns has been raised by the women, however, women participation was very low during PPG due to their low number as staff in the meteorological and hydrologic institutions 3/27 (11%)	No	
3. Would the Project potentially limit women's ability to use, develop and protect natural resources, taking into account different roles and positions of women and men in accessing environmental goods and services? For example, activities that could lead to natural resources degradation or depletion in communities who depend on these resources for their livelihoods and well being	No	
Activities that may cause degradation or impoverishment of natural resources of communities will not be funded even if these activities improve livelihoods and well-being. This project is dedicated to inclusive adaptation for sustainable green growth		
Principle 3: Environmental Sustainability: Screening questions regarding environmental risks are encompassed by the specific Standard-related questions below		
Standard 1: Biodiversity Conservation and Sustainable Natural Resource Management		
1.1. Would the Project potentially cause adverse impacts to habitats (e.g. modified, natural, and critical habitats) and/or ecosystems and ecosystem services? For example, through habitat loss, conversion or degradation, fragmentation, hydrological changes The Guinea EWS project has no negative impact on habitats (eg, modified, natural and critical habitats) and / or on ecosystems and ecosystem services as it is a biodiversity conservation project. Activities that may cause degradation or impoverishment of natural resources of communities will not be funded even if these activities improve livelihoods and well-being	No	
1.2 Are any Project activities proposed within or adjacent to critical habitats and/or environmentally sensitive areas, including legally protected areas (e.g. nature reserve, national park), areas proposed for protection, or recognized as such by authoritative sources and/or indigenous peoples or local communities?	Yes	
See Part B. Identifying and Managing Social and Environmental Risks above	No	
 1.3 Does the Project involve changes to the use of lands and resources that may have adverse impacts on habitats, ecosystems, and/or livelihoods? (Note: if restrictions and/or limitations of access to lands would apply, refer to Standard 5) Activities that may cause degradation or impoverishment of natural resources of communities will not be funded even if these activities improve livelihoods and well-being. The project does not restrict the availability, quality 		
 and accessibility of resources or basic services, especially for marginalized individuals or groups. 1.4 Would Project activities pose risks to endangered species? 	No	
The Guinea EWS project through ecosystems adaptation will promote species conservation through enhanced ecosystem services through improving vulnerable production systems adaptation		
1.5 Would the Project pose a risk of introducing invasive alien species?	No	
No new specie will be introduced		
1.6 Does the Project involve harvesting of natural forests, plantation development, or reforestation?	Yes	
Please see Part B. Identifying and Managing Social and Environmental Risks above		
1.7 Does the Project involve the production and/or harvesting of fish populations or other aquatic species?	No	
It is an institution capacity building on adaptation integration onto ongoing policies, budgeting and planning		
1.8 Does the Project involve significant extraction, diversion or containment of surface or ground water?	No	

Checklist Potential Social and Environmental <u>Risks</u>		
For example, construction of dams, reservoirs, river basin developments, groundwater extraction		
It is an inclusive resilience building and adaptation to climate change adverse impacts.		
1.9 Does the Project involve utilization of genetic resources? (e.g. collection and/or harvesting, commercial development)	No	
It is an inclusive resilience building and adaptation promotion project to climate change adverse impacts		
1.10 Would the Project generate potential adverse transboundary or global environmental concerns?	No	
The project is to promote global environment conservation through enhancement of ecosystem services		
1.11 Would the Project result in secondary or consequential development activities which could lead to adverse social and environmental effects, or would it generate cumulative impacts with other known existing or planned activities in the area?		
For example, a new road through forested lands will generate direct environmental and social impacts (e.g. felling of trees, earthworks, potential relocation of inhabitants). The new road may also facilitate encroachment on lands by illegal settlers or generate unplanned commercial development along the route, potentially in sensitive areas. These are indirect, secondary, or induced impacts that need to be considered. Also, if similar developments in the same forested area are planned, then cumulative impacts of multiple activities (even if not part of the same Project) need to be considered.		
It is an ecosystem and rural productive systems adaptation project to climate change adverse impacts through Climate Change EWS		
Standard 2: Climate Change Mitigation and Adaptation		
2.1 Will the proposed Project result in significant ¹¹ greenhouse gas emissions or may exacerbate climate change?	No	
The project will rather contribute to carbon sequestration by maintaining the potential of standing trees in the concerned protected areas through ecosystems adaptation to climate change adverse impacts		
2.2 Would the potential outcomes of the Project be sensitive or vulnerable to potential impacts of climate change?	No	
The project will rather contribute to carbon sequestration by maintaining adaptation to policies, budgeting and planning systems at national and regional levels		
2.3 Is the proposed Project likely to directly or indirectly increase social and environmental vulnerability to climate change now or in the future (also known as maladaptive practices)?	No	
For example, changes to land use planning may encourage further development of floodplains, potentially increasing the population's vulnerability to climate change, specifically flooding		
The project will rather contribute to carbon sequestration by maintaining the potential of standing trees in the concerned protected areas		
Standard 3: Community Health, Safety and Working Conditions		
3.1 Would elements of Project construction, operation, or decommissioning pose potential safety risks to local communities? The project will not set up even small-scale infrastructure	No	
3.2 Would the Project pose potential risks to community health and safety due to the transport, storage, and use and/or disposal of hazardous or dangerous materials (e.g. explosives, fuel and other chemicals during construction and operation)? The project does not store or transport any hazardous or dangerous materials		
3.3 Does the Project involve large-scale infrastructure development (e.g. dams, roads, buildings)? The project will not set up even small-scale infrastructure	No	
 3.4 Would failure of structural elements of the Project pose risks to communities? (e.g. collapse of buildings or infrastructure) No structural failure will arise because the project does not put in place any infrastructure 		
3.5 Would the proposed Project be susceptible to or lead to increased vulnerability to earthquakes, subsidence, landslides, and erosion, flooding or extreme climatic conditions?	No	

¹¹ In regards to CO₂, 'significant emissions' corresponds generally to more than 25,000 tons per year (from both direct and indirect sources). [The Guidance Note on Climate Change Mitigation and Adaptation provides additional information on GHG emissions.]

Checklist Potential Social and Environmental <u>Risks</u>			
The project will rather contribute to erosion and flooding control by maintaining adaptation in ongoing policies and planning systems			
3.6 Would the Project result in potential increased health risks (e.g. from water-borne or other vector- borne diseases or communicable infections such as HIV/AIDS)? The consultation platforms set up by the project will be ideal frameworks for sensitization in synergy with other actors in the project area working in the field of health			
3.7 Does the Project pose potential risks and vulnerabilities related to occupational health and safety due to physical, chemical, biological, and radiological hazards during Project construction, operation, or decommissioning? No chemical handling is foreseen by the project			
3.8 Does the Project involve support for employment or livelihoods that may fail to comply with national and international labor standards (i.e. principles and standards of ILO fundamental conventions)? Support for inclusive adaptation and green growth income-generating activities will create jobs guided by the principles and norms of the fundamental ILO Conventions. For example, child labor will be prohibited for activities resulting from project funding.			
3.9 Does the Project engage security personnel that may pose a potential risk to health and safety of communities and/or individuals (e.g. due to a lack of adequate training or accountability)? No security personal is involved			
Standard 4: Cultural Heritage			
4.1 Will the proposed Project result in interventions that would potentially adversely impact sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture (e.g. knowledge, innovations, practices)? (Note: Projects intended to protect and conserve Cultural Heritage may also have inadvertent adverse impacts)			
The project will not work on a cultural heritage			
4.2 Does the Project propose utilizing tangible and/or intangible forms of cultural heritage for commercial or other purposes?			
The project will not work on a cultural heritage			
Standard 5: Displacement and Resettlement			
5.1 Would the Project potentially involve temporary or permanent and full or partial physical displacement?	No		
Project activities will not involve relocation or displacement of local people in mainstreaming adaptation in ongoing policies, budgeting and planning processes			
5.2 Would the Project possibly result in economic displacement (e.g. loss of assets or access to resources due to land acquisition or access restrictions – even in the absence of physical relocation)?	No		
Project activities will not involve relocation or displacement of local people in mainstreaming adaptation in ongoing policies, budgeting and planning processes			
5.3 Is there a risk that the Project would lead to forced evictions? ¹²	No		
Project activities will not involve relocation or displacement of local people in mainstreaming adaptation in ongoing policies, budgeting and planning processes			
5.4 Would the proposed Project possibly affect land tenure arrangements and/or community based property rights/customary rights to land, territories and/or resources?			
Project activities will not involve relocation or displacement of local people in mainstreaming adaptation in ongoing policies, budgeting and planning processes			
Standard 6: Indigenous Peoples			
6.1 Are indigenous peoples present in the Project area (including Project area of influence)?	Yes		
Please see Part B. Identifying and Managing Social and Environmental Risks above			

¹² Forced evictions include acts and/or omissions involving the coerced or involuntary displacement of individuals, groups, or communities from homes and/or lands and common property resources that were occupied or depended upon, thus eliminating the ability of an individual, group, or community to reside or work in a particular dwelling, residence, or location without the provision of, and access to, appropriate forms of legal or other protections.
Checklist Potential Social and Environmental <u>Risks</u>	
6.2 Is it likely that the Project or portions of the Project will be located on lands and territories claimed by indigenous peoples?	Yes
Please see Part B. Identifying and Managing Social and Environmental Risks above	
6.3 Would the proposed Project potentially affect the rights, lands and territories of indigenous peoples (regardless of whether Indigenous Peoples possess the legal titles to such areas)?	No
The proposed Project will not affect the human rights, lands, natural resources, territories, and traditional livelihoods of indigenous peoples in mainstreaming adaptation in ongoing policies, budgeting and planning processes	
6.4 Has there been an absence of culturally appropriate consultations carried out with the objective of achieving FPIC on matters that may affect the rights and interests, lands, resources, territories and traditional livelihoods of the indigenous peoples concerned?	No
The Guinea EWS project aims to mainstreaming adaptation in ongoing policies, budgeting and planning processes	
6.4 Does the proposed Project involve the utilization and/or commercial development of natural resources on lands and territories claimed by indigenous peoples?	No
No, and the project sites are not claimed by indigenous people	
6.5 Is there a potential for forced eviction or the whole or partial physical or economic displacement of indigenous peoples, including through access restrictions to lands, territories, and resources?	No
There is no potential for forced eviction or the whole or partial physical or economic displacement of indigenous peoples, in mainstreaming adaptation in ongoing policies, budgeting and planning	
6.6 Would the Project adversely affect the development priorities of indigenous peoples as defined by them?	No
Not at all, the project rather supports projects, initiatives and interests of mobile indigenous people and vulnerable groups	
6.7 Would the Project potentially affect the traditional livelihoods, physical and cultural survival of indigenous peoples?	No
Not at all, the project rather supports projects, initiatives and interests of vulnerable indigenous people	
6.8 Would the Project potentially affect the Cultural Heritage of indigenous peoples, including through the commercialization or use of their traditional knowledge and practices?	No
Not at all, the project rather supports projects, initiatives and interests of mobile indigenous people such as nomads	
Standard 7: Pollution Prevention and Resource Efficiency	
7.1 Would the Project potentially result in the release of pollutants to the environment due to routine or non-routine circumstances with the potential for adverse local, regional, and/or transboundary impacts?	No
Activities that may cause degradation or depletion of natural resources (release of pollutants to the environment, to routine or non-routine circumstances with the potential for adverse local, regional, and/or transboundary impacts) will not be financed even if these activities improve livelihoods and well-being	
7.2 Would the proposed Project potentially result in the generation of waste (both hazardous and non-hazardous)?	No
Activities that may cause degradation or impoverishment of natural resources of communities will not be funded even if these activities improve livelihoods and well-being	
7.3 Will the proposed Project potentially involve the manufacture, trade, release, and/or use of hazardous chemicals and/or materials? Does the Project propose use of chemicals or materials subject to international bans or phase-outs?	No
For example, DDT, PCBs and other chemicals listed in international conventions such as the Stockholm Conventions on Persistent Organic Pollutants or the Montreal Protocol	
Activities that may result in degradation or depletion of natural resources (manufacture, trade, rejection and / or use of hazardous materials and / or chemicals under international prohibitions or phasing out) of communities will not be funded even if these activities improve livelihoods and well-being	

Checklist Potential Social and Environmental <u>Risks</u>	
7.4 Will the proposed Project involve the application of pesticides that may have a negative effect on the environment or human health?	No
Activities that may cause degradation or impoverishment of natural resources of communities will not be funded even if these activities improve livelihoods and well-being	
7.5 Does the Project include activities that require significant consumption of raw materials, energy, and/or water?	No
Activities that could participate to degradation or over exploitation of natural resources will not be financed even if they improve communities' livelihoods and well-being.	

ANNEX G: Stakeholder engagement plan

201. The various key stakeholders in the project formulation and implementation process are presented below according to their roles and contributions:

Table 4. Stakeholder matrix

Stakeholders	Relevant function and role in the project
16. Ministry of Transport	The project will be implemented by the Ministry of Transport (MT) through the <i>Direction Nationale de la Météorologie</i> (DNM, National Directorate of Meteorology). This ministerial department ensures the technical supervision of the project and thus serves as the governmental agency for cooperation. It chairs the Steering Committee, which is the body for the strategic orientation and steering of project activities. It supervises the Scientific and Technical Committee (STC) for technical decisions based on scientific and technical aspects.
	It is responsible for and contributes to all the outputs of the two project components. Its roles are essential, especially for the entire production of information and products. This project supervision department is responsible for technical, administrative and financial management, particularly as regards monitoring and evaluation of project interventions, the achievement of project results and outcomes, and the efficient use of resources provided to the project by UNDP, through quarterly advances of funds, as part of the implementation of the annual work plans (AWPs).
17. inistry of Energy and Hydraulics (MEH)	This ministerial department oversees the <i>Direction Nationale de l'Hydraulique</i> (DNH, National Directorate of Hydraulics) and is therefore one of the fundamental pillars of the EWS project. It is member of the steering committee of the project. All of the hydrological activities of the project needed to achieve the expected outputs of the two project components are produced under the supervision of the DNH.
18. Ministry of the Environment, Water and Forests (MEEF)	The Ministry of Environment, Water and Forests (MEEF) oversees the implementation of the environmental policy integrating fisheries. It is responsible for sustainable development, which is a multi-sectoral and integrated aspect across all development sectors, including the departments responsible for agriculture, livestock farming, hydrology, hydraulics, forestry and mining. It thus serves as an interface with all parties concerned with regard to sustainable development standards. Through its divisions, including its decentralized local technical departments, it is responsible for matters concerning evaluating environmental impacts by integrating the economic and social aspects in line with the provisions of the environment code. It supervises the <i>Centre National de Gestion des Catastrophes et Urgences Environnementales</i> (CNGCUE, National Centre for Managing Environmental Disasters and Emergencies), an institution whose missions and support will focus in particular on: the effective monitoring of extreme weather events (Activities 1.3.1 and 1.3.2) of Output 1.3; the creation and management of a reliable climate data bank (Activities 1.4.1 to 1.4.3); climate forecasts and warnings (Activities 2.1.1 to 2.1.4); and coordination of risk and disaster management actions of Output 2.4. Accordingly, this Centre will be responsible for managing the data bank and EWS products with the cooperation of the DNH and the DNM. It will also be responsible for aspects of national and sub-regional dissemination of products with EWSs

Stakeholders	Relevant function and role in the project
	for preventing climate-related transboundary conflicts (Output 2.6) through the CNGCUE.
19. Ministry of Economy and Finance (MEF)	This project will follow the National Execution Procedure (NEX), with UNDP serving as the executing agency for GEF funds. UNDP and GEF funds will be managed according to UNDP procedures and the advance of fund -using the Funding Authorization and Certificate of Expenditure (FACE) of the project. Funds from both the GEF and the Ministry of Finance (cash co-financing) will be deposited in a bank account opened for this purpose.
20. Ministry of Planning and International Cooperation (MPIC)	This ministerial department is in charge of the development planning of the country. The revision of PNDES 2016-2020 will provide the opportunity for an effective mainstreaming of adaptation into development planning at the national, regional and local levels. In addition, it will also provide the opportunity for this planning at the various levels to include a plan for priority adaptation actions. The climate and socio-economic products will serve as a guide for directing the processes according to the forecasts of risks and vulnerabilities while providing solutions for the best adaptation options based on the results of projections and analyses. This will also provide the opportunity to demonstrate that for any development planning action to be effective and efficient, it must now include climate adaptation planning.
	This ministerial department is at the core of all project outputs, integrating action planning that includes gender equity and inclusive resilience building. It will focus in particular on Outputs 2.2 (capacity building in mainstreaming adaptation into ongoing processes) and 2.3 (mainstreaming adaptation into national, regional and local plans). This department is a member of the Steering Committee (SC) and the Scientific and Technical Committee (STC) of the Project.
21. Ministry of Agriculture (MA)	This Ministerial Department is engaged in private sector activities that are among the most vulnerable to the adverse effects of climate change. The outputs of all of the project components consist in inputs into the planning of this important department for the economic and social development of the country.
	It will contribute to the project through activities for updating the PNIA, the Poverty Reduction Strategy Paper (PRSP), the Local Development Plans (LDPs) and the agricultural policy towards an effective streamlining of adaptation. Accordingly, it will focus on all of the project outputs of Component 2. It is a member of the Steering Committee (SC) and the Scientific and Technical Committee (STC).
22. Ministry of Livestock Farming (ME)	After agriculture, this is one of the most vulnerable sectors to the negative effects of climate change. Just like the Ministry of Agriculture, the Ministry will focus on all 6 outputs of component 2. It is a member of the project's Steering Committee (SC) and Scientific and Technical Committee (STC).
23. Ministry of Decentralization	This Ministry department is responsible for the local authorities, including all the decentralized bodies throughout the country. It is responsible for managing the LDPs. Its role in the EWS project is essential for mainstreaming climate risks and adaptation strategies into policies, plans and budgets (Output 2.3) and for disseminating and using climate adaptation information and products at the national and subregional levels (Output 2.6). It is a member of the Steering Committee (SC) of the project.

Stakeholders	Relevant function and role in the project
24. National Directorate of Meteorology (DNM)	This Directorate is one of the main pillars in the implementation of the EWS project. It is responsible for producing meteorological information and products needed by the EWS. Accordingly, it is responsible for all activities in Output 1.2 and contributes to Outputs 1.3 to 1.6. It plays an important role in the outputs of Component 2. It contributes to feeding the data bank (Outputs 1.4 and 2.4) and to the outreach and extensive dissemination of early warning and climate information and products for their effective use by stakeholders concerned at the 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 Scientific and Technical Committee (STC) of the Project.
25. National Directorate of Hydraulics (DNH)	This Directorate is at the core of the production of early warning hydrological information and products (Activities 1.1.1 to 1.1.3). It carries out effective monitoring of extreme hydrological events, particularly by monitoring water levels, and also provides flood alerts. It contributes to the data bank (Outputs 1.4 and 2.4) and to the outreach and extensive dissemination of climate information and products for their effective use by stakeholders (Activities 2.6.1 and 2.6.2). Under the supervision of the Ministry of Transport, It is member of the Project's Scientific and Technical Committee (CST).
26. Directorate of Water and Forests	This Directorate is under the direct technical supervision of the Ministry of the Environment water and forest. Its mission is to coordinate actions in the fight against climate change across all development sectors. It ensures the technical supervision of projects on the theme of the fight against climate change. Its role will be fundamental in the project.
	It will guide all the actions related to the other directorates responsible for the budget and national planning, and the sectoral directorates. As part of the EWS project, this Directorate will contribute to mainstreaming adaptation into the sectoral plans of the Environment. Specifically, the Directorate will contribute to achieving all the outputs needed to provide climate information, including: the climate and socio-economic data bank (Output 1.4); information on food security (Output 1.5); the mainstreaming of adaptation into sectors vulnerable to climate change through Output 2.5; and outreach and dissemination of climate information and products for their inclusive use (Output 2.6).
27. Deconcentrat ed Departments of the Territorial Administration	These departments support the administrative regions and the entire deconcentration mechanism through the <i>Départements</i> ' prefectures and sub-prefectures. Through this mechanism, national directives and policies are transmitted, implemented and managed; laws/regulations are implemented and security is maintained; public expenditures are allocated; and all regional and prefectural boards of directors and their agents are led, coordinated and supervised. In addition, opinions are given on the transfer, promotion and support of public servants; and decentralization and community groups, cooperatives, NGOs are supported in the management of their projects and plans; and socio-economic and cultural development are promoted in the regions, prefectures and sub-prefectures. Under the supervision of the governors responsible for development planning at the regional level, these bodies representing the State at the regional, departmental and sub-prefectural levels will play a central role in updating the plans of the region, the <i>départments</i> and sub-prefectures with priority action plans. Their contribution to the project will focus in particular on: capacity building (Output 2.3); guiding the planning within the updating of

Stakeholders	Relevant function and role in the project
	LDPs for an effective mainstreaming of priority adaptation actions (Output 2.3); disseminating climate information and products (Output 2.6).
28. The NGOs and civil	The NGO's and the civil society's role is to serve as the interface between the ministerial actors and the communities.
society	In this context, they will play a key role in training programmes and mainstreaming of climate risks and adaptation strategies in policies and planning processes (Outputs 2.3) and on inclusive outreach and massive dissemination of climate information and products (Output 2.6). They will also be represented in the project steering committees.
	The key NGOs/CSOs that have been identified as potential partners in this project are: Guinée Ecologie, Carbone Guinée, PRONG (Plateforme de Plaidoyer, Recherche et de Renforcement des Capacités des ONGs), ReNaSCEDD (Réseau National de la Société Civile pour l'Environnement et le Développement Durable), PREM (Partenariat Recherche, Environnement et Media).
29. ocal points of Environmental conventions	Focal points for United Nations Framework Convention on Climate Change (UNFCCC), the <i>Lutte contre la Désertification</i> (LCD, Fight against Desertification), the Convention on Biological Diversity (CBD) and the Ramsar Convention will play an active role in networking and information sharing for the project and will be invited to participate at the steering committee of the project
30. rassroots community organizations and farming associations	These organizations will be among the main beneficiaries of the project activities and will participate in the design, implementation and monitoring of project activities for all components. They will participate in the project's performance evaluations, and in identifying the corrective measures to be taken as the EWS project is implemented in Guinea.

ANNEX H: Gender Analysis and Action Plan

I. Introduction

202. The proposed project is designed to strengthen the capacities of climate monitoring and early warning and information systems to respond to climate shocks and plan climate change adaptation into Guinea. The total direct beneficiaries will be 9,600,000 (51% female and 49% male) who will benefit from improvements to climate information and EWS in Guinea.

203. This gender assessment provides an overview of the gender situation in Guinea, with a specific focus on Early Warning System and climate-resilient, identifying gender issues that are relevant to the project and examining potential gender mainstreaming opportunities. This gender assessment is based on:

204. A desk review of relevant national policy documents, including the National Gender Equity and Equality Policy (PNEEG), the Growth and Poverty Reduction Strategy Paper (PRGSP), Guinea development strategy (PNDES) 2016-2020 and others;

Recommendations and lessons learned from past studies and assessments on gender from the Government of Guinea, the United Nations, civil society organizations, the private sector and multilateral development banks;

Stakeholder consultations.

II. Gender equality and social inclusion in Guinea

Guinea is a least developed country (LDC), with one of the lowest human development Index which is estimated at 0.411 (compared to an average of 0.52 for sub-Saharan Africa), placing Guinea 182nd out of 188 countries in terms of human development.¹ The Government of Guinea recognizes the importance of gender mainstreaming in ensuring sustainable development and reducing poverty through various policies and actions.

Despite the principle of gender equality enshrined in the Basic Law and the various legal texts, women's lives are still largely governed by customary rules and practices which devote the traditional division of roles and tasks between women and men. Moreover, the woman is still too often considered as a minor to remain under the tutelage of a man, (father, husband or brother) at the same time as it constitutes a manpower available for the latter. This reality is perceptible and duly formalized during ceremonies of religious and civil marriages where the feelings of superiority of the man are exacerbated to the detriment of the woman considered as a simple instrument in the service of the spouse. All things that jeopardize the many legal instruments that advocate equal rights for men and women.

As guardians of certain customs, women contribute, through traditional family education, to perpetuate some of these sociocultural concepts and weightings that are unfavorable to them; the result is a lack of trust, which is highly detrimental to self-empowerment in the face of the demands of modern society and development.

At the legal level, Guinea has an arsenal that affirms and guarantees equal rights for men and women. This is the case of the Basic Law, the Penal Code, the Civil Code, the Labor Code, the Social Security Code, the Land and Land Code, the Children's Code and various ordinances that complement these different texts.

¹Guinea: Economic Development Documents; IMF Country Report No

...https://www.imf.org/~/media/Files/Publications/CR/.../cr17388.ashx

Notwithstanding the existence of an international, regional and national legal framework for women enshrined in the main legal instruments, the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW), the African Charter on Human and Peoples' Rights (ACHPR) and its additional protocol, it should be noted that this asset has not, however, so far made it possible to eradicate inequalities and disparities between men and women because of the bad application of these texts as well as legal loopholes in certain sectors.

Certain legal texts and instruments even prejudge women by containing discriminatory articles. In addition, illiteracy, ignorance of the law, as well as sociological and economic reasons considerably limit women's access to justice. In the matrimonial field too, injustices persist insofar as practices such as female repudiation, physical abuse, marital rape, forced and / or early marriage, sexual harassment, etc., still persist.

It should be noted that the juxtaposition between the three factors (persistence of sociocultural restraints, misinterpretation of certain religious precepts and positive law) limits women in the enjoyment of their rights.

All these practices constitute violence against women and major obstacles to their full participation in the life of society. In addition, this violence is not considered by the community to be a reprehensible act and is therefore not the subject of any legal proceedings. At the level of the public administration, certain practices such as the systematic and exclusive attribution of the family allowance to the father, constitute discriminatory situations against the woman.

Poverty

In Guinea, poverty has worsened from 52 percent in 2005 to 55 percent in 2015. Poverty and food insecurity affect more than half of the population. The incidence of poverty has increased from 53% in 2007 to 55% in 2012 with large spatial, regional and gender disparities.

As mentioned earlier, Guinea's human development Index is estimated at 0.411 in 2015 (compared to an average of 0.52 for sub-Saharan Africa), placing Guinea 182nd out of 188 countries in terms of human development.⁶

Despite all the efforts made by the government, many problems are still crucial. Many women lack climate information, even in national languages; information that could help them to better plan their income-generating activities, protect children from illness, access credit and family welfare, and fully enjoy their rights.

As far as young people (boys and girls) are concerned, mostly between the ages of 15 and 25 have not had the chance to go to school or have abandoned it very early. They constitute the largest proportion of the population and represent the rising force in the production of goods and services.

Education

According to the Poverty Reduction Strategy Document (PRSP2, 2007-2010), the analysis of the education sector shows that, despite the progress made in recent years, the Guinean education system still needs to significantly improve its performance in order to reach the objectives of universal quality education.

At the pre-school education level, the Guinean Government adopted in 1987, a policy document of education and protection of the early childhood. It has also developed a program based on the integrated approach (taking into account the awakening of health / hygiene, nutrition, environment, protection and recreational activities) of the young child.

At the primary level, according to data provided by the Planning and Statistics Service of MEPU-EC (2008), the gross enrollment rate for girls is 66% (2003-2004) against 71% (2007-2008) an increase of 5% for the same period; while the rate for boys is 85.7% for 2003-2004 school year and 86.2% for 2007-2008, an increase of 0.5%.

At secondary level, we recorded 105,335 girls (2003-2004) against 187,289 (2007-2008), for boys, we have a workforce of 235,065 (2003-2004) against 332,358 students (2007-2008), an increase of 97,293 students.

At the Technical Education and Vocational Training (ETFP) level, according to the METFPSECS / SEEB, for the primary sector of socio-economic development, there is a significant decline in the number of girls, which decease from 147 out of a total of 545 boys (2003-2004) to 97 out of a total of 696 (2008-2009).

For the secondary sector of socio-economic development, for the same period, there were 330 girls out of a total of 3,661 (2003-2004) against 1031 girls out of 7569 students (2008-2009).

For the tertiary sector of socio-economic development, there is an increase in the number of girls: 5,124 girls out of a total of 8,884 in 2003-2004 against 8,705 girls out of a total of 16,206 in 2008-2009.

At the level of literacy and non-formal education, according to the service in charge of literacy, the general illiteracy rate for men is 55% against 74% for women. At the level of Higher Education and Scientific Research, the gross admission and attendance rate has an overall increased. However, the attendance of girls is still weak. It went from 0.25% in 2003-2004 to 1.29% in 2007-2008, while that of boys went from 1.21% to 4.9% for the same period.

The numbers of both girls and boys are constantly increasing. The percentage of girls in Higher Education Institutions (HEIs) increased from 17.3% in 2003-2004 to 24% in 2007-2008. For external scholarships, the percentage of Guinean female students is constantly decreasing (21.60% in 2004-2005 against 13.45% in 2007-2008). The situation at the faculty level is even more drastic, as women professors represent only 5.75% of which 3.64% at the doctoral level (2006-2007).

Social and legal sectors

Despite the principle of gender equality enshrined in the Basic Law and the various legal texts, women's lives are still largely governed by customary rules and practices which devote the traditional division of roles and tasks between women and men. Moreover, woman is still too often considered as a minor to remain under the tutelage of a man, (father, husband or brother) at the same time as it constitutes a manpower available for men. This reality is perceptible and duly formalized during ceremonies of religious and civil marriages where the feelings of superiority of man are exacerbated to the detriment of woman considered as a simple instrument in the service of the husband. All things that jeopardize many legal instruments that advocate equal rights for men and women.

As guardians of certain customs, women contribute, through traditional family education, to perpetuate some of these sociocultural concepts and weightings that are unfavorable to them; the result is a lack of trust, which is highly detrimental to self-empowerment in the face of the demands of modern society and development.

At the legal level, Guinea has an arsenal that affirms and guarantees equal rights for men and women. This is the case of the Basic Law, the Penal Code, the Civil Code, the Labor Code, the Social Security Code, the Land and state Code, the Children's Code and various ordinances that complement these different texts.

Notwithstanding the existence of an international, regional and national legal framework for women enshrined in the main legal instruments, the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW), the African Charter on Human and Peoples' Rights (ACHPR) and its additional protocol, it should be noted that this asset has not, however, so far made it possible to eradicate inequalities and disparities between men and women because of the bad application of these texts as well as legal gaps in certain sectors.

Certain legal texts and instruments even prejudge women by containing discriminatory articles. In addition, illiteracy, ignorance of the law, as well as sociological and economic reasons considerably limit women's access to justice. In the matrimonial field also, injustices persist to the extent that practices such as female repudiation, physical abuse, marital rape, forced and / or early marriage, sexual harassment, etc., still persist.

It should be noted that the juxtaposition between the three factors (persistence of sociocultural restraints, misinterpretation of certain religious precepts and positive law) limits women in the enjoyment of their rights.

All these practices constitute violence against women and major obstacles to their full participation in the life of society. In addition, this violence is not considered by the community to be a reprehensible act and is therefore not subject of any legal proceedings. At the level of the public administration, certain practices such as the systematic and exclusive attribution of the family allowance to the father, constitute discriminatory situations against woman.

Agricultural sector

Agriculture participates in 30% in the constitution of the gross domestic product (GDP). These agricultural activities are practiced largely by women, 85% of whom live in rural areas. They predominate over men in the agricultural sector, averaging 144 women per 100 men in the nationally active agricultural population, or 87% of the female labor force. They represent 53.3% of the agricultural labor force and are mostly illiterate and ignorant of their rights.

Women in general, are present throughout the entire process of agricultural production, that is from the preparation of soil to the harvest through the semi. They devote 80% of their working time to agriculture. Despite this obvious reality of their contribution to agricultural development, they do not control any resources derived from this sector. The little money they earn from this activity is spent on maintaining the family and educating the children. They belong to the lower category in the agricultural sector, 78.5% of which are agricultural helpers.

Although men have a low rate of participation in the work, decision-making about land-sharing and the choice of areas to be developed is theirs. They have more access to inputs, means of production and technology than women. Even though there are provisions in favor of the latter in the Land and Land Code, customary law deprives them of the enjoyment of this right.

There is also an inequitable distribution of work between men and women. In addition to agricultural work, women perform most of the unpaid and non-valued reproduction activities such as: cooking, collecting wood, transporting water, washing clothes among others.

At the level of livestock, in some communities, women at the time of marriage are traditionally endowed with livestock. This kind of acquisition does not benefit them in general because it is a family management. They play a role in maintaining livestock operations in addition to its traditional social role. As for the men, they control the resources resulting from the breeding to the detriment of the women although these latter are sometimes owners also by inheritance.

In the artisanal or maritime fishery, women are in large numbers in this sector, but they do not make as much profit compared to men, since they only ensure the sale of these fish products which are once again controlled by men. In addition, they have no means of production (canoes / boats, engines ...) nor working capital for this activity. They have no protection against the risks they may face in this area. They have the status of simple resellers. However, they are now asserting themselves through formal marketing organizations that are increasingly recognized at the national level.

Environmental Protection and Management Sector

Today, the issue of the environment in Guinea no longer arises at the level of a city or a natural region but rather it has reached a national dimension and requires practical and appropriate responses.

With the advent of the growing number of industrial and mining companies and the uncontrolled and increasing urbanization of our cities as a result of the growing population, the degradation of the environment and ecosystems is becoming more and more visible.

Indeed, the anarchic exploitation without accompanying measure of the soil and subsoil resources in Guinea contributes enormously to the degradation of the fauna and the flora.

It is obvious that the preservation of the environment involves the protection of the living environment, the prevention of risks and the effective management of the environment. This preservation of the environment requires the political will of the decision-makers at all levels but also a citizen response to perpetuate the Guinean fauna and flora in order to ensure a healthy living environment for the Guinean population.

In Guinea, it is traditionally recognized that women play an important role in preserving the environment, but also that they have a central role in the process of poverty reduction because of the causal link between poverty and degradation of the environment. They are the majority in the food production sector and spend a great deal of time collecting wood and transporting water, especially in rural areas.

Despite the role they play in protecting the environment, they do not participate in decision-making the management of this sector and do not control natural resources. for In terms of sources of energy, Guinea has enormous hydroelectric potential, unused and deteriorated by desertification due to mismanagement and bush fires. Most West African rivers originate in Guinea, but the Guinean population still lives almost in the dark. This increases the workload of women who need a lot of energy for domestic work, especially for processing agricultural products.

In general, the constraints in terms of gender promotion are summarized as follows:

- The lack of a general policy, planning and coordination framework between the different interventions in the gender promotion;
- The absence at the national level of a basic intersectoral consensus between the State, the private sector and civil society on gender promotion;
- The weak institutional and human capacities of the governmental and non-governmental structures involved in gender promotion;
- The concentration of jobs held by women in a relatively small number of occupations and "women's" sectors, low pay and low prestige;
- Under evaluation of women 's contribution to the national economy and the integration of the product of their labor into household subsistence production, with no monetary value;
- The high concentration of female labor in the underfunded and low-productivity informal sector;
- The higher unemployment rate among women;
- The limited, indirect and precarious nature of women's right of access to resources and factors of production.

Gender question in response to climate change threats

On the economic level, the mother / child couple is a labor force and a valuable human capital valued with their contribution to the material and cultural well-being of the family. The child's work begins very early; from the age of 5 in rural areas, the boy and the girl provide several services to their stay-at-home mom: singing for newborns, approaching and clearing kitchen utensils, accompanying them to the river. From the age of 8, the child assists the parents in the household (washing clothes, pounding, drawing water, searching for dead wood, cooking, etc.), in agriculture, in breeding, in the small business and in the craft industry. The participation of women and children in the production and management of property is a fundamental factor in the life of the household and the family in Guinea. There is a social division of labor that gives each social category some obligations in the family and in the community.

However, the work of the child and adolescent is not counted and valued as such. Their activity is so important that it is considered as a means, an element of his education, his learning for life under maternal and paternal authority.

Children, women and adolescents do all this work in unsustainable weather conditions: exposed to the sun, cold, rain, high winds, etc.

Despite the significant contribution of women, children and the senile to family life, they are discriminated against in the redistribution of household income and victims of customary injustice and, as a result, they are vulnerable to climate disruption.

In Guinea 85% of the population is Muslim. This culture is firmly rooted in traditions and customs. Religion has a strong influence on gender roles emphasizing male interests and power. In this way, Islam clearly indicates the position of the housewife, with little power and inferior status to men.

Guinean women often have decision-making power in the family, especially in urban areas where the husband has been disrupted by the structural adjustment that has led to mass dismissal of civil servants. They can look for employment outside the home. This shows signs of openness to women's participation in society. Women do not own land under customary laws. In addition, drawing water and collecting firewood are the daily tasks that are normally assigned to children and women in rural areas. They may, however, have the right to speak about decisions made regarding the availability and use of key resources.

Often, because of existing social norms, women and girls are more vulnerable to the effects of climate change than other members of the society. The risks and impacts of climate change further exacerbate the relative poverty of women and youth.

These considerations may limit the influence of women in decision-making that is relevant to field activities. Similarly, women's access to leadership positions in society is limited by constraints due to their lack of access to school and training. As stakeholders, this could constrain the ability of women to have a say in this component.

Indeed, in most households in Guinea, paternal authority is indisputable. It applies rigorously especially in the sharing of income and various household assets since the family meal in the home. Women and children are subjected to this form of dependence at times against their will.

Under the influence of these sociocultural practices deeply rooted in society, the opportunities for socio-economic advancement offered to women, children and the disabled are limited, both at the family and at the community level. Access to land, education, certain categories of professional activities, the decision-making process, etc.

These constraints hinder the development of these vulnerable groups individually and collectively and determine the particular poverty in which a large majority of women in the country live. Yet the mobilization of this vulnerable segment of society, which accounts for nearly 52% of the population towards development objectives, can pay off in that they can inject dynamism into the development initiatives of their communities.

Addressing these constraints that are rooted in gender disparities and promoting equality through empowerment and emancipation of women in the design of this project is therefore necessary. This contribution of the project to empowerment and gender emancipation in general at the level of society, help Guinea in these considerations of gender and empowerment in the implementation of its commitments under the Convention for the Elimination of all forms of Discrimination Against Women (CEDAW). In doing so, it is more in line with government policies, including the National Gender Policy (PNG) and the UNDP for the country.

In order to translate gender mainstreaming and conflict prevention into local development (PDL, PAI), the program will strive to engage vulnerable groups in the development of these plans and help identify their specific problems to be taken into account. In addition, the program will ensure that women and young people are involved in the design and implementation of all community mechanisms for consultation and management at the local level (watch committee, prevention and conflict management, etc.).

Special programming efforts are based on designing activities in which rural women will be engaged. In this context, the project will provide for the specific representation of these vulnerable groups in the technical platforms. It is important that all innovations in project design are followed, applied and monitored by gender considerations in the cultural context of the country. Several indicators will also be tracked with gender considerations in the composition of the project teams and equal opportunities will be offered.

Women are responsible for the majority of household food production in Guinea. Agriculture is affected by climate variability and lack of water with increasing food shortages. Women are forced

to tap into their already limited budgets to buy food for their families, which aggravates their financial situation.

Girls are disproportionately affected by climate change compared to boys. In general, when resources are limited and families have to choose which children to send to school, boys usually have priority. Moreover, when more help is needed in households (for example after climate shocks), girls are kept out of school to help, not boys. These girls are thus subjected to the activities of the household: surveillance of the cattle and field, maintenance of babies, washing of linen and dishes, etc., then exposed to the climatic phenomena.

Women's place in political decision-making

Women have very little power of influence at the national level. Studies show that women's empowerment and equality are important for sustainable development in terms of increased productivity, efficiency, climate resilience and improved health and well-being. Guinean women have the right to vote and to be elected. Officially, they are not discriminated against in relation to civil and political rights.

In Guinea, there are several gender management structures such as:

- the Directorate for the Promotion of Women and Children;
- the National Directorate of Social Action;
- the National Directorate of Equity and Gender;
- School of the deaf-mutes;
- Women's Centers of Promotions;
- the City of Solidarity.

The government's willingness to include more women and to adopt a gender perspective is important. However, progress is slow and women are rarely elected to political office.

In Guinea, the National Assembly has 25 women, or 21.93% despite the growing number of women candidates available. In practice, poverty and women's high illiteracy rate translate into limited or uneven progress in terms of gender equality and the protection of women's rights.

At the community level, women are generally more involved in decision-making and often carry important aspects of climate-related projects. Unfortunately, when community projects are put in place, women are sometimes vaguely consulted.

Gender Access to Resources

Women have limited access to resources and do not control them. In Guinea, women entrepreneurs are often unable to comply with loan requirements and, as a result, they are unable to access conventional bank credit. This second reality is due to the requirements of microfinance institutions that are summarized by:

- the property guarantee;
- the high interest rate;
- the high repayment rate;
- unrealistic payment deadlines.

The integration of the gender approach into sectoral policies, given its cross-cutting vision of development issues, is one of the solutions to balance and humanize the balance of power between men and women and to overcome the many difficulties associated with Equitable and equal redistribution of resources and benefits from the implementation of policies and programs.

Despite the declared will and the efforts made, socio-cultural sequelae and other discriminatory factors persist and have not so far been able to overcome these disparities, of which the vast majority of women are victims in terms of access to resources and to the exercise of power.

The right to own land is an important right that Guinean women do not enjoy. According to a tradition of patrilineal domination, women can inherit and own land only in urban centers.

In the area of gender, all studies on the issue of poverty have established that women are the poorest, the most vulnerable, the least equipped and empowered to make their rights and interests prevail in arbitrations where they are involved alongside men (86% of the poor live in rural areas and are made up of 53.3% of women - PRSP2).

From the foregoing, it appears that one of the essential results of the analysis of Guinea's situation is that the living conditions of women and young people remain very difficult.

III- Gender equality and social inclusions

The Human Development Index (HDI) of Guinea is 182/188, according to the United Nations System classification with an economy highly dependent on agriculture, livestock and mining activities. The Guinean government recognizes the importance of gender mainstreaming in sustainable development and poverty reduction through various policies and actions. This denotes the strong influence of religion in the role of gender in Guinea.

In this way, Islam is preaching the inferiority of the housewife, concentrating its role on the exclusive maintenance of the family, with little or no power and income. Income differences between men and women are important. This difference in income is due to the majority of women doing unpaid work (such as housework, agricultural activities on land that is not owned and non-farm).

Despite the strong patrilineal Islamic tradition, Guinean women are gradually gaining a certain presence in society and can even obtain jobs at national and international level. The study found that women, children, the disabled and girls are the most vulnerable to the effects of climate change.

Guinea is a strongly Muslim country (85%) and this culture is deeply rooted in customs and traditions, we are dealing with a religious syncretism.

In this study, Guinean women are perceived not only as agents of change, but also as key actors in adaptation and resilience to the effects of climate change, hence the need to train women and young people to natural resource and climate management techniques.

IV- Direct beneficiaries of the project

All socio-professional categories (farmers, breeders, fishermen, miners, transporters, craftsmen, etc.) are directly affected by climate information. The survey shows that the delay in rainfall, the long periods of rain interruption and the early cessation of the rainy season are largely responsible for the suffering of the populations.

Women will be the main beneficiaries thanks to the reduction of weather and climate-related risks with multiple and varied causes (limited water resources, drought, desertification, soil degradation, erosion, hail, early floods, plains scalding and frost).

In this project, the expected results in terms of gender are as follows:

- 1. Reducing the vulnerability of women, girls and children to the effects of climate change for improved resilience;
- 2. Increased awareness of the importance of gender equality and women's participation in project activities related to climate variability and change;
- 3. Extension and district-level training on adaptation to the adverse effects of climate change;
- 4. Improving health and social well-being through better use of climate information;
- 5. Improving the livelihoods of communities through better adaptation to climate change;
- 6. Strengthening women's empowerment in communities;
- 7. Contribution of the project to the promotion of gender mainstreaming;
- 8. Increase in the number of women trained in the collection and use of hydrological and climate information;
- 9. Increased participation of women in community decision-making and integrated resource management;
- 10. Women's increased access to climate information in planning agricultural and non-agricultural activities;
- **11.** Increased involvement of women's organizations in the implementation of project activities.

Table 5: Gender action plan

Objectives	Action	Target indicators	Respo nsible body	Timelin e	Allocat ed budget \$)			
Outcome 1: The capacities of the national hydro-meteorological services are strengthened for monitoring extreme weather phenomena and climate change								
Output 1.1 : The hydrological network is strengthened for the hydrological monitoring and the data collection needed to provide reliable hydrological information	involvement of women in the climate and socio-economic	5% of observers are women	MEH/M EEF /MASP FE	By mid- term				
Output 1.2: The meteorological network is strengthened for climate monitoring and the provision of reliable early warning climate information and products with options for adapting to the adverse effects of climate risks		10% meteorological observers are women	MT/ME EF/MA SPFE	By mid- term				
Output 1.3: The mechanisms for monitoring violent weather phenomena are strengthened through the lightning sensors to be used as an alternative to weather radar	consideration gender equity, encourage women's involvement in the inclusive	Class III meteorological personnel are	MT/ME EF/MA SPFE	By the end of the project				
Output 1.4 : An operational national climate data bank is set up	Take into consideration the gender approach in staff recruitment and training on the coordination and management of the national data bank.	10% of Class II or Class III meteorological personnel are women	MT/ME EF/MA SPFE	By the end of the project				
Output 1.5: The satellite data/images are coupled with the data from meteorological network to provide the	Involve women in the meteorological network in strategic simulation and modelling job positions; these are positions in which they	5% of Class I or Class II meteorological personnel are women	MT/ME H/MEE F/MAS PFE	By the end of the project				

Objectives	Action	Target indicators	Respo nsible body	Timelin e	Allocat ed budget \$)
climate information and products needed for simulation	are currently absent in the baseline situation.				
Output 1.6: The capacities of female and male staff of the DNM, DNH and DNA are strengthened for using and maintaining equipment	Promote the involvement of women in the capacity building of staff in the use and maintenance of equipment.	5% of Class I or Class II hydrometeorologic al woman personnel are trained as well as those from others structures	MEH/M T/MA/M EEF /MASP FE	By mid- term	
Outcome 2: The climate pr effectively for the product climate resilient developm	on of warnings for prod				g-term
Output 2.1: Women's and men's capacities are built to develop and use climate products and services.	Promote the participation of women in the provision and use of daily, weekly and seasonal early warnings on climate events in the specific short-, medium- and long-term adaptation actions.	use of early warning	I/MT	By end of project impleme ntation	
Output 2.2: The climate products and services that meet the needs of end- users (men and women) are developed	dominated priority adaptation activities in	beneficiaries of the output 2.2 shall be	MT/ MEH /ME EF/ MAS PFE/ MAT D	By end of project	
Output 2.3: Capacities for integrating climate products and services into development planning processes are created for the benefit of female and male staff involved in	Promote women's access to climate information to better guide mainstreaming of priority gender actions into the adaptation and	beneficiaries of the	MEH /MT/ MEE F/M ASP FE/ MEF	By end of project	

Objectives	Action	Target indicators Respo nsible body		Timelin e	Allocat ed budget \$)
planning and in the most vulnerable sectors.	the development policies and plans.				
Output 2.4: The institutional capacities are strengthened for coordinating the early warning systems and sharing climate information and products	and training of women management staff in in the EWS output 2.4 shall be		MT/ MEH /MA/ MEE F/M ASP FE	By end of project	
Output 2.5: A strategy is developed on the financial sustainability of EWS and on the production and dissemination of climate information	Strengthen the role of women in the mechanisms and strategies for the sustainability of financing the meteorological network.	involved in the mechanism and strategies for the	MEP /MT/ MEH /MA/ MEE F	as possible	
Output 2.6: Access and use of early warning and climate information and products are encouraged for various users, both men and women	Encourage the active role of women in the drafting, implementation, monitoring and evaluation of the environmental awareness, training, information and communications programme, and in allowing them to benefit from specific climate products in order to anticipate, prepare and respond to the adverse effects of climate change.	50% of the staff involved in the Output 2.6 shall be women	MPC I/MT /ME H/M EEF/ MAS PFE	as possible	
Adaptive Project Management	Involve women in the project coordination and management mechanism by assigning them roles in the Steering Committee (SC) and Scientific and Technical Committee (STC) of the project.	staff of the project	MT/ MEH /ME EF/ MAS PFE/ MAT D	the impleme ntation	

ANNEX I: UNDP Risk Log

Descriptio	Туре	Impact & Probabilit	Mitigation measures	Owner	Status
The required expertise and data are not available	Type Administrativ e /Technical	Probabilit y Probabilit y: 2 Impact: 4	Mitigation measures The issue of the lack of available qualified human resources will be resolved through support of the UNDP/CIRDA during the upscaling of the hydro-meteorological network and the recruitment an international consultant who will work closely with the project team, including the counterparts of the hydrometeorological network and the national consultants, with the specific aim of strengthening national capacities. To this end, the project has planned on building the capacities of the hydrological network through Output 1.6 with activities 1.6.1 and 1.6.2. These training activities will be strengthened by those of Output 2.3 (Activities 2.3.1 and 2.3.2). The hiring of international consultants who have been trained in staff activities will accelerate the ownerships of the system 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 hydro-meteorological network staff will also be part of the risk reduction options. In addition, the hydro- meteorological network institutions will be encourage to recruit, strengthen and train staff for five years in the station. The combination of the effects of these actions will reduce and eliminate this risk.	Owner MT/UN DP	Status
Weak IT communicat ion infrastructur es and expertise of the local mobile telecommun ications network	Technique Technical	Probabilit y: 2 Impact: 3	The use of the mobile telecommunications network will be a priority for the observation network because this infrastructure will provide, in time, the strongest communication means and security set-up of the IT equipment. The integrated Cloud services will also be used as an alternative option to minimize this risk locally in the computer rooms. The hiring of international consultants with staff training activities requirement will accelerate the ownership of the mechanisms by national staff (Outputs	MT/UN DP	Decreasi ng

Descriptio n	Туре	Impact & Probabilit y	Mitigation measures	Owner	Status
			1.1 and 1.2) to mitigate or eliminate this risk.		
Weak institutional support and policy engagemen t	Policy	Probabilit y: 2 Impact: 3	The proposed project is strongly supported by the Government of Guinea, stakeholders and development partners. The project, together with UNDP, will therefore consider this opportunity to request substantial support from the Government to build strong partnerships with other development partners. Direct links with the ongoing baseline activities through the Government for securing the necessary co-financing as well as local ownership will minimize this risk. This ownership will be attained as soon as possible in the other different ministerial departments that will be involved in the provision of data and information, and eliminate this risk.	MT/UN DP	Decreasi ng
Fragmented progress of the work with a weak integration and a refusal of the department s to share data and information	Policy	Probabilit y: 2 Impact: 3	This risk is very common in projects like this one. With the guarantee that capacity building concerns all the ministerial departments concerned in the implementation of the project, a rapid change in behaviour is expected for effective risk mitigation. To this end, Output 2.3 targets the capacity building of 200 decision-makers across all ministerial departments of the most vulnerable sectors in addition to those of the financial, planning and budget departments, as well as targeting locally elected officials and members of parliament. The creation of an official database with the support of the highest authorities by an administrative act on the creation, organization and operations of the data bank (Output 2.4) will be conducive to forging synergies in the collection and updating of data, which will reduce or even eliminate this risk.	MT/UN DP	May decrease
Lack of cooperation of the main actors in the successful implementat ion of the project	Administrativ e	Probabilit y: 2 Impact: 4	Participatory and inclusive project implementation with a monitoring of UNDP procedures will be effective measures to mitigate this risk. Given that the implementation of the project activities has been expressed by the concerned actors as urgent, the risk of non-cooperation will be mitigated, reduced or even eliminated. The	MT	May decrease

Descriptio n	Туре	Impact & Probabilit y	Mitigation measures	Owner	Status
			capacity-building outputs (Outputs 1.6 and 2.3) in synergy with the awareness, information and communication activities of the adaptation at the national and sub- regional levels (Output 2.6) of the project will reduce or even eliminate this risk.		
The occurrence of climate shock during the formulation and implementat ion of the project	Environment al	Probabilit y: 2 Impact: 3	There may be delays in meeting deadlines because some actors could be mobilized in these emergencies. It is not very likely, however, that this situation could change the direction of the project or cause it to be stopped. However, should this occur, the capacity-building activities (Outputs 1.6 and 2.3) will provide the upmost visibility to the actors concerned on the importance of managing adaptation for a rapid recovery in the event of a disaster. This will encourage diligence in the pursuit of project activities.	MT/UN DP	May increase
Weak will to adjust the governance frameworks (e.g. policies, plans, strategies and programme s, etc.)	Policy	Probabilit y: 2 Impact: 4	Raise awareness and involve 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. This aims to strengthen political will to inform the systematically review policies, plans and budgets to effectively integrate the priority adaptation actions. This would eliminate this risk while considering that since this project is a national initiative with a large ownership of all the stakeholders who are very eager to see a very rapid launching this important project for reducing vulnerability and strengthening of resilience and adaptation as through the capacity of forecasting, anticipating, responding and adapting to the effects of climate risks.	MT/UN DP	May decrease
Low willingness of manageme nt staff to be trained with respect to the weak technical knowledge	Financial/ad ministrative	Probabilit y: 2 Impact: 3	The project will develop the technical capabilities of hydrometeorological departments in managing and maintaining the network. The capacities of the sectoral ministries will be strengthened (Outputs 1.6 and 2.3) for a better understanding of the EWS process and by providing them with integration tools during planning. In	MT	May decrease

Descriptio n	Туре	Impact & Probabilit y	Mitigation measures	Owner	Status
and expertise of their staff (e.g. Ministry of the Environmen t, Water Resources and Meteorolog) and the targeted Ministries in the support to the EWS process			addition, the implementation of the environmental awareness, training, Information and communications programme for outreach and extensive dissemination of reliable early warning climate information and products may help mitigate or even eliminate this risk.		
Lack of sustainabilit y of the investments in hydrometeo rological observation	Financial/Op erational	Probabilit y: 3 Impact: 4	The long-term maintenance of investments in hydro-meteorological observations is ensured by the Government of Guinea under the DNM and the DNH who have a dedicated staff with a budget allocation for maintenance and operations of monitoring and early warning systems. The financial sustainability of the institutions will be assessed to accommodate the management needs of additional stations during the preparatory phase. The project plans on developing a fee for service model to cover recurrent costs. This activity will be paid by the budget of institutes that request climate products. Given the importance of this risk, a specific output is reserved for the effective management and elimination of this risk (Output 2.5) through activities 2.5.1 to 2.5.3.	MT	May decrease

ANNEX J: Results of the Capacity Assessment of the Project Implementing Partner and HACT Micro assessment

MICRO ÉVALUATION

PARTENAIRE DIRECTION NATIONALE DE LA METEOROLOGIE (DNM)

- RAPPORT DE MICRO EVALUATION
- LETTRE DE CONTROLE INTERNE
- QUESTIONNAIRE DE MICRO EVALUATION

PARTENAIRE DIRECTION NATIONALE DE LA METEOROLOGIE (DNM)

RAPPORT DE MICRO EVALUATION SUR LA CAPACITE DE GESTION FINANCIERE



Monsieur Eloi Kouadio Directeur Pays Adjoint au Programme du PNUD Micro évaluation Direction Nationale de la Météorologie (DNM) Conakry, République de Guinée

RAPPORT DES AUDITEURS INDEPENDANTS SUR LA MICRO-EVALUATION DE LA DIRECTION NATIONALE DE LA METEOROLOGIE

Nous avons, suite à la nouvelle approche harmonisée des Nations Unies en matière de transferts et virements d'argent en espèces (HACT) mise en place par les agences du Système des Nations Unies, procédé à la micro-évaluation du système de gestion financière de la Direction Nationale de la Météorologie. Les données et informations sur la base desquelles nous avons procédé à notre micro-évaluation relèvent de la responsabilité de la Direction. Notre responsabilité consiste à émettre notre rapport de micro-évaluation basé sur les résultats de nos travaux.

- 1. Nous avons conduit nos travaux selon les Normes Internationales applicables aux missions d'assurance autres que celles applicables aux audits des états financiers et à l'audit d'informations financières. Ces procédures, énumérées ci-dessous, ont été mises en œuvre dans le seul but d'obtenir une évaluation raisonnable du niveau de risque lié au système de gestion financière mis en place par le partenaire concerné.
- 2. Dans ce cadre, nous avons obtenu et examiné toute la documentation que nous avons jugé nécessaire en la circonstance notamment les statuts, les actes officiels de création de l'organisation, les procès-verbaux des réunions des organes statutaires, les listes du personnel et leurs dossiers individuels, les prévisions budgétaires, les rapports d'exécution budgétaire, les livres comptables, les rapports financiers, les manuels des procédures, les rapports d'activités, les rapports d'évaluation, les rapports d'audit interne et externe. Notre travail a consisté également en des entretiens avec les membres de la direction et le personnel.
- 3. Nos travaux ont couvert 7 domaines principaux liés à l'organisation administrative, à la gestion du programme, à la dotation en personnel, aux politiques et procédures comptables, aux immobilisations et aux stocks, à l'élaboration des rapports et suivi, ainsi qu'à la passation des marchés. Notre méthodologie a consisté notamment en :
 - l'examen des données et des informations provenant des documents clés de l'organisation y compris les rapports annuels et périodiques, les états financiers vérifiés, les pièces justificatives des dépenses, les livres de caisse, les budgets, les rapports d'audit interne et externe, les documents de stratégie, les manuels des procédures et politiques comptables, etc. ;
 - les entrevues avec la Direction du partenaire d'exécution, le personnel clé des finances, de la comptabilité et du service d'audit interne du partenaire ;
 - la collecte de la documentation ;
 - la restitution avec les représentants du partenaire.

Fiduciaire de Guinée, Sarl, Immeuble FAWAZ, n° 623, 3ème étage - Route du Niger, (face Marché Niger), B.P. 478, Conakry, République de Guinée

T: (224) 664 00 00 17, www.pwc.com

Société à responsabilité limitée au capital de GNF 5 000 000. RCCM/GC-KAL/012.652A/2006. Certificat d'Immatriculation Fiscale 00313N – TVA 7R

PNUD GUINEE Direction Nationale de la Météorologie (DNM) Micro-évaluation Page 2

- 4. Sur la base des niveaux de risques obtenus au regard des différents critères correspondant aux sept domaines principaux retenus dans notre présent rapport, le niveau global de risque lié au système de contrôle de l'organisation du partenaire pourrait, dans tous les aspects significatifs, être considéré comme Significatif.
- 5. Notre rapport n'a pour seul objectif que celui indiqué dans le paragraphe 2 ci-dessus et ne peut être utilisé à d'autres fins, ni diffusé à d'autres parties. Ce rapport ne concerne que la microévaluation des capacités du système de gestion financière et ne s'étend pas aux états financiers du partenaire Direction Nationale de la Météorologie pris dans leur ensemble.

Conakry, le 30 juin 2017

Fiduciaire de Guinée, membre de PwC

Houclaire de Guinée Almmeuble FAWAZ N°623 Sèrre Eta C Face Marché Niger-Conakry BP: 478 Tel: 663 00 00 17

Lucény Fofana Associé -Gérant **PricewaterhouseCoopers**

PricewaterhouseCoopers

Souleymane Coulibaly Soro Partner

ANNEX K: Letters of Cofinancing

N°



/MA/CAB//2018

RÉPUBLIQUE DE GUINÉE Travail - Justice - Solidarité

Conakry, 18 6 101 2291

Le Ministre

Madame La Présidente Directrice Générale du FEM

<u>**OBJET</u></u> : Lettre de Confirmation et d'engagement de co-financement**</u>

Conakry

Madame la Présidente Directrice Générale du FEM,

En ma qualité de Ministre de l'Agriculture, j'atteste que le projet "Renforcement du système d'informations climatiques et d'alertes précoces pour un développement résilient et l'adaptation au changement climatique en Guinée" est complémentaire avec nos activités et les axes stratégiques de la politique nationale de développement agricole.

Dans ce cadre, je confirme que 30 000 000 \$US de nos financements sectoriels sur l'ensemble des quatre zones climatiques du pays, prévus pour la période 2018-2022, serviront de cofinancement en nature au profit du projet "Renforcement du système d'informations climatiques et d'alertes précoces pour un développement résilient et l'adaptation au changement climatique en Guinée". Ces investissements couvrent prioritairement les domaines des aménagements hydro-agricoles en riziculture, la production durable du sel et autres activités génératrices de revenus ainsi que la gestion durable des ressources naturelles pour le renforcement de la résilience des communautés vulnérables.

Veuillez agréer, Monsieur le Directeur, l'expression de mas consideration distinguée.

Madame Mariama CAMARA

République de Guinée Travail – Justice – Solidarité

Ministère des Transports

DIRECTION NATIONALE DE LA METEOROLOGIE

 N° O48/MT/DNM/18

V/réf: N°



Conakry, le 01/06/2018

LE DIRECTEUR NATIONAL DE LA METEOROLOGIE

A

Monsieur Titus OSUNDINA Directeur du pays PNUD en Guinée, Conakry.

<u>Objet</u> : Contrepartie nationale au financement du projet « Renforcement de l'information climatique et des systèmes d'alerte précoce pour le développement résilient et l'adaptation au changement climatique en Guinée.»

Monsieur le Directeur,

Dans le cadre de la mise en œuvre du projet cité en objet, j'ai l'honneur de porter à votre connaissance l'engagement de la Direction Nationale de la Météorologie (DNM) à participer au financement dudit projet pour un montant de 1.503.000\$US. Cette contribution en nature couvre les quatre années de la vie du projet (2019-2022) et portera aussi bien sur la composante 1 traitant des informations climatiques que sur la composante 2 relative aux aspects d'adaptation à long terme.

La contribution de la DNM à cet important projet se fera notamment à travers une effective synergie avec les actions des projets sous tutelle de la DNM et comprenant le projet DataRescue et EarthNeatworks. Elle intègre également les actions de la Direction Nationale de la Météorologie chargée d'assurer le suivi du projet« Renforcement de l'information climatique et des systèmes d'alerte précoce pour le développement résilient et l'adaptation au changement climatique en Guinée.», les équipements complémentaires, les bureaux abritant le projet et devant servir d'espace de travail aux agents chargés d'exploiter les stations qui seront installées.

Ces cofinancements interviendront dans la mise en œuvre de cet important projet dont les activités sont complémentaires à celles de la Direction Nationale de la Météorologie.

Je voudrais saisir cette occasion pour vous renouveler mes sincères remerciements pour les appuis constants que le PNUD ne cesse d'apporter à la Guinée pour une amélioration des informations et produits climatiques d'alertes précoces, une réduction de la vulnérabilité, un renforcement de la résilience et la promotion de l'adaptation inclusive pour un développement durable.

Veuillez agréer, Monsieur le Directeur, l'expression de ma haute considération.

Dr Mamadou Lamine BAH e Directeur National

MINISTERE DE L'ENERGIE ET DE L'HYDRAULIQUE

DIRECTION NATIONALE



REPUBLIQUE DE GUINEE Travail-Justice-Solidarité Conakry, le <u>31-05-2018</u>

Le Directeur National

Madame la Représentante Résidente du PNUD en Guinée.

CONAKRY -

Nº 0096 /MEH/DNH/2018

Objet : Contrepartie nationale au financement du projet « Renforcement de l'information climatique et des systèmes d'alerte précoce pour le développement résilient et l'adaptation au changement climatique en Guinée ».

Madame la Représentante,

Dans le cadre de la mise en œuvre du projet cité en objet, j'ai l'honneur de porter à votre connaissance l'engagement de la Direction Nationale de l'Hydraulique (DNH) à participer au financement dudit projet pour un montant de 384.300\$US. Cette contribution en nature couvre les quatre années de la vie du projet (2019-2022) et portera aussi bien sur la composante 1 relative à l'information climatique que sur la composante 2 traitant des aspects d'adaptation à long terme à travers notamment une effective synergie avec les actions des projets sous tutelle de la DNH et comprenant le projet de Gestion Intégrée des Ressources en Eau et Développement des Usages Multiples (PGIRE II) le projet Appui au Programme de Développement Durable du Delta Intérieur et le Programme de Renforcement de la Gestion Intégrée des Ressources en Eau (GIRE).

Cette contribution intègre également les actions d'équipement et d'exploitation des données des stations hydrologiques de la Direction Nationale de l'Hydraulique chargée de la gestion des stations qui seront installées dans la phase de mise en œuvre du projet « Renforcement de l'information climatique et des systèmes d'alerte précoce pour le développement résilient et l'adaptation au changement climatique en Guinée».

Je voudrais saisir cette occasion pour vous renouveler mes sincères remerciements pour les appuis constants que le PNUD ne cesse d'apporter à la Guinée pour une réduction de la vulnérabilité, le renforcement de la résilience et la promotion de l'adaptation inclusive pour un développement durable.

Veuillez agréer, Madame la Représentante, l'expression de ma haute considération.

DIRECTEUR NATIONAL Mandiou CONDE

BP: 642 Conakry -Tel (00224) 662 44 44 70/628 88 52 97- Email : mandioucde@yahpo.fr République de Guinée

Ministère de L'Agriculture

INSTITUT DE RECHERCHE AGRONOMIQUE DE GUINEE



République de Guinée Travail – Justice - Solidarité

2 4 OCT 2017

Monsieur le Directeur Général

Nº /IRAG/ DG/ 2017

A

Monsieur Titus OSUNDINA Directeur du Pays PNUD en Guinée Conakry

Objet: Cofinancement du projet « Renforcement de l'information climatique et des systèmes d'alerte précoce pour le développement résilient et l'adaptation au changement climatique en Guinée »

Monsieur le Directeur,

J'ai l'honneur de vous informer de notre engagement à cofinancer le projet cité en objet à hauteur de 240.000 £ US pendant la période 2018-2022.

Ce montant représentera les couts liés à l'entretien et au gardiennage des sites des riz station agrométéorologique qui seront installées dans nos centres de recherche.

Je voudrais saisir cette occasion pour vous renouveler mes sincères remerciements pour les appuis constants que votre institution ne cesse d'apporter à la Guinée.

Vous agrée monsieur le Directeur, l'expression de ma haute considération.

Le Directeur Général Directeur Général Dr Famoï BEAVO

Boulevard du Commerce, Commune du Kaloum, Conakry, Quartier Almamya BP: 1523 Tel.: (224) 67586510 – 63586510 – 6616459 E-mail : <u>famoi.beavogui@irag-guinee.org</u>; <u>iragdg@irag-guinee.org</u>



Société Guinéenne de Palmiers à Huile et d'Hévéas Capital 40 000 000 000 GNF Siège Social Diécké RC N° 1 YOMOU



N° Réf : DGS/034/2017



Conakry, le 9 Novembre 2017

La Directrice Générale

Α

Monsieur Titus OSUNDINA

Directeur du pays PNUD en Guinée

- Conakry -

<u>Objet</u> : intégration dans le projet de renforcement de l'information climatique en Guinée

Monsieur le Directeur,

J'ai l'honneur de vous signifier tout l'intérêt de la SOGUIPAH de voir sa station météorologique intégrée dans le réseau des stations automatiques que le projet envisage d'installer à l'échelle nationale.

A cet égard, j'i le plaisir de vous informer de notre engagement à cofinancer le projet à hauteur de 120.000 USD représentant le salaire du personnel durant la mise en œuvre du projet.

Pour toutes fins utiles, je vous prie de trouver ci-joint notre note relative à ce cofinancement.

Je saisis cette occasion pour vous renouveler mes sincères remerciements pour les appuis que votre institution ne cesse d'apporter à la Guinée.

Vous en souhaitant bonne réception, recevez, Monsieur le Directeur, l'expression de mes meilleures salutations.





Antenne de Conakry : Coléah corniche sud – Tel : (224) 46 44 81 / 46 46 03 - Fax : 46 36 92 E-mail : soguipah@biasy.net BP: 123 Conakry – République de Guinée United Nations Development Programme



Ref: PRO/300/PNUD RR/142/2018 Conakry, June 04th, 2018

Object: Letter of Commitment for the co-financing of the project "Strengthening the Climate Information and Early Warning System for Climate Change Resilience and Adaptation in Guinea"

Madame the CEO and Chairperson of the GEF,

The United Nations Development Programme (UNDP) is pleased to confirm its commitment and interest in contributing to the mobilization of co-financing funds for the project mentioned above. This financial contribution, amounting to **Three Hundred and Fifty Thousand US Dollars (US \$ 350,000)**, covers a period of four years corresponding to the implementation of the project.

Sincerely Yours,

Dr. Naoko Ishii CEO & Chairperson Global Environment Facility Washington DC, USA

<u>sc:</u> Mrs. Adriana Dinu Executive Coordinator UNDP/GEF, New York, NY 10017, USA

> Mr. Ahmadou Sebory Touré GEF Operational Focal Point Conakry, Guinea



ANNEXE K: National Focal Point Endorsement signed letter





MINISTERE DE L'ENVIRONNEMENT, DES EAUX ET FORETS



FONDS POUR L'ENVIRONNEMENT MONDIAL GLOBAL ENVIRONMENT FACILITY

...../MEEF/FSE/20/4

23-12-2014 Conakry, le.

(Point Focal l'Operationnel du FEM)

To: Adriana Dinu.

Executive Coordinator and Director a.i. UNDP GEF 304 East 45th Street 9th Floor New York, N.Y. 10017USA +1-212-906-6998 (Fax)

Subject: Endorsement for the project "Strengthening climate information and early warning systems in for climate resilient development and adaptation to climate change in Guinea" In my capacity as GEF Operational Focal Point for Guinea. I confirm that the above project proposal (a) is in accordance with my government's national priorities including, the priorities identified in the National Adaptation Plan of Action and our commitment to the relevant global environmental conventions; and (b) was discussed with relevant stakeholders, including the global environmental convention focal points.

I am pleased to endorse the preparation of the above project proposal with the support of the GEF Agency listed below. If approved, the proposal will be executed by National Direction of Meteorology. I request the GEF Agency to provide a copy of the project document before it is submitted to the GEF Secretariat for CEO endorsement.

The total financing (from GEFTF, LDCF, or SCCF) being requested for this project is US\$5,639,250, inclusive of project preparation grant (PPG), if any, and Agency fees for project cycle management services associated with the total GEF grant. The financing requested for Guinea is detailed in the table below.

Source of Funds	GEF Agency	Focal Area	Amount (in US\$)				
			Project Preparation	Project	Fee	Total	
LDCF	UNDP	Climate Cl	150,000	5,000,000	489,250	5,639,250	
(select)	(select)	(select)				0	
(select)	(select)	(select)				0	
Total GER	Resource	5	150,000	5,000,000	489,250	5,639,250	

Sincerely,

AHMADOU SEBORY TOURE/THE GEF OFP GUINEA

Convention Focal Point for UNFCCC Convention Focal Point for UNCBD Convention Focal Point for UNCCD Convention Focal Point for Stockholm (POPs) Convention Focal Point for Minamata Convention

GEF Operational Focal Point Maloum Quartier Almamya BP: 2830 Tél: (+224) 628 25 07 25 - 655 25 07 25 - 631 90 09 90 / E-mail:fseguinée@yahoo.fr

ANNEX L: Stakeholders consulted during the PPG

N°	First Name and Name	Structure/Function	Sex	Contact
1	Mamadou Diawara	Guinée Ecologie	М	diawaramadou83@gmail.com
2	Sékou Amadou Diakité	RENASCEDD	М	cheickouyate2012@gmail.com
3	Ibrahima sory Sylla	Carbonne Guinée	М	carboneguineé@gmail.com
4	Zaoro Kolié	DNH	М	zaoro.kolie@gmail.com
5	Alpha Oumar Bah	D.N Environnement	М	bahalphaoumar2@gmail.com
6	CDT Ibrahima Bangoura	DNEF/MEEF	М	iboubang2003@gmail.com
7	Sékou Kourouma	PFNCDB	М	
8	Boubacar Diallo	GOWAMER	М	boubadiallo2011@gmail.com
9	Abdoulaye M'Mah Sylla	DNAAHP/élevage	М	asylla417@gmail.com
10	Mamadou Sadio Diallo	CERESCOR	М	mamadmar154@gmail.com
11	Sékou Mohamed Camara	Cabinet/MEEF	М	
12	Pr Mamadou Lamarana Diallo	Projet REMECC-GKM	М	dmlamarana@gmail.com
13	Kerfalla Camara	MGE	M	Kerfala.camara.mge@gmail.com
14	Sounkary Condé	DNPF/G	M	ge e groot en
15	Aboubacar Bangoura	DNPM/MPAEM	M	ivanobangoura@gmail.com
	Mohamed Lamine			
16	Doumbouya	Point focal FVC	М	dml54@live.fr
17	Dr Ahmed Faya Traoré	Ехр сс	М	655 94 72 42
18	Pr Selly Camara	DN/PEDD	М	camaraselly@gmail.com
19	Sékou Camara	Assemblée Nationale	М	sekoucamara1957@gmail.com
20	Mamadou Ciré Camara	PNUD/CPENV	М	mamadou.cire.camara@undp.org
21	Sékou Gaoussou Sylla	BSD-MEEF	М	
22	Pr Sékou moussa Keita	CERE/UGANC	М	sekoumoussa@gmail.com
23	Elhadj Alpha Oumar Sow		М	
24	Ibrahima Aziz Diallo	ONG APHEG	М	saladouyebeh@gamail.com
25	Mamadou Cellou Souaré	IRAG	М	kotocellou@gmail.com
26	Oumou Doumbouya	PF/NA	F	oumoudoumbouya@yahoo.fr
27	Elhadj Mamadou Billo Diallo	DNLP/MPCL	М	
28	Sékou Chérif Traoré	SNPV-DS	М	sekoucheriftraore@gmail.com
29	Madiou Condé	DNH/MEH	М	madioucde@yahoo.fr
30	Dr Mohamed Douno	BSD/MEH	М	donkomadi@gmail.com
31	Lanciné Condé	BSD/MA	М	condelancin55@yahoo.fr
32	Mamady Seyba Keita	OGUIPAR/MEEF	М	
33	Ibrahima Sory Cissé	BJD/MT	М	cissesory67@yahoo.fr
34	Dr Mamadou Lamine BAH	DN METEO	М	lamine_bah@yahoo.fr
35	Yaya Bangoura	DT METEO	М	alphayaya2009@yahoo.fr
36	Aboubacar youla	PEED/PNUD	М	aboubacar.youla@undp.org
37	Henry Réné Diouf	RTA UNDP	М	
38	Ngamini Jean Blaise	Consultant SAP	М	jean.ngamini@undp.org
39	David Soumares	Consultant -FBD	М	davidsoumares@gmail.com
40	Kemo Camara	BGEEE	М	camara78@gmail.com
41	Ibrahima sow	Gui-Météo Climat	М	sowboudare@gmail.com
42	Alpha Boubacar Barry	Gui-Meteo Climat	М	barry_ab@yahoo.fr
43	Seny Soumah	Consultant SAP	М	sseny54@yahoo.fr
44	Mamadou Tounkara	Consultant SAP	М	tounkara218@gmail.com
45	Abdoulaye Barry	Consultant	М	abdoulayeb380@gmail.com
46	Aboubacar kaba	DNDL/MATD	М	aboulayk2@gmail.com

List of participants at the Start-up workshop- Conakry, 17 July 2017

N°	First Name and Name	Structure/Function	Sex	Contact
47	Mamadouba Sylla	Projet RGDE/PEDD	Μ	syllaaicha2002@yahoo.fr
48	Dr Fanta Mara	Unité climat	F	
49	Mariama Ciré Soumah	PEED	F	
50	Néné Ousmane Diallo	Projet biogaz	F	manediallo88@gmail.com
51	Sankoumba Diakité	DNLP/MPCI	Μ	diakitésankoumba@gmail.com
52	Ismael Sam Kourouma	DNP//MPAEM	Μ	Kouroumaismaeil4@gmail.com
53	Abdoulaye Barry	SOGUIPAH	Μ	
54	Bangaly Camara	COSIE	Μ	
55	Ibrahima Sory Youla	PRONG	Μ	
56	Lamine Fodé Doumbouya	RTG	Μ	bouyalamine@gmail.com
57	Ousmane Sylla	UGANC	Μ	syllaousmane@gmail.com
58	Mariama Sow	biogaz	F	mariamaso35@gmail.com
59	Mamadou Kaba	MHE	Μ	
60	Thérèse Nyiondiko	BCR/UNDP	F	
61	Aboubacar Maimouna Camara	Biogaz	М	camaraaboubacar46@gmail.com
62	Bangaly Soumah	PEDD	Μ	
63	Falaye Koné	DNEF	Μ	falayek2002@yahoo.fr
64	Mohamed Sankoumba Fadiga	FAO	М	mohamed.fadiga@gmail.com
65	Komia Mara	PEDD	Μ	
66	Camara Idiatou	Radio Environnement	Μ	radioenvironnementgn@gmail.com
67	Tafsir Bah	AGP	Μ	664 56 68 28
68	Aboubacar Pastoria Camara	Lejourguinée.com	Μ	apastoria88@gmail.com
69	Mamadouba Soumah	Cell/com/MEEF	М	mamadoubasoumah76@gmail.co m
70	Néné Oumou Baldé	Evasion	F	neneoumou8al@gmail.com
71	Robert Kourouma	Evasion	Μ	622 46 32 89
72	Mamoudou Diallo	Radio Parlementaire	М	mamoudoudiallomd87@gmail.com
73	Aboubacar Soumah	Soleil FM	Μ	assoumah13@gmail.com
74	Alpha Oumar Kaloga	Fond Vert Climat	М	akaloga@gmail.com
75	Ibrahima Bayo	Biogaz	Μ	bayoibro1963@gmail.com
76	Mamadou Saliou Boiro	Biogaz	Μ	mamadou.saliou.boiro@undp.org
77	Joseph Sylla	DNE/MEEF	Μ	628 44 38 88
78	Mamadou Saliou Diallo	PNUD	Μ	664 24 40 49
79	Mamadou Oury Diallo	PNUD	Μ	oury.diallo@undp.org
80	Seydouba Camara	PEDD	Μ	622 31 95 96

List of people met during consultations

NI0	First Name and Name	Structure/Eurotion	Sav	Contact
IN °	First Name and Name	Structure/Function	Sex	Contact
1	Foulayah, le 15 Juillet 2017		М	
	Dr Aboubacar Amadou Camara	CRA Foulaya		
2	Mamadi Camara	CRA Foulaya Chef station Météo de Kindia	M M	
3	Ibrahima Sory Diallo		M	
4	Mamadou Aliou Barry	Météo Kindia	IVI	
1	Coyah, le 15 Juillet 2017	Chof Station mátáo	М	
1	Lanciné Cissé	Chef Station météo	IVI	
4	Dubréka, le 17 Juillet 2017	Chaf Ctation Mátáa	N 4	000 000 005
1	Moussa Soumaoro	Chef Station Météo	М	622 932 895
1	Boffa, le 17 Juillet 2017	Chaf station Mátás	М	000 001 000
1	Daouda Binty Camara	Chef station Météo	IVI	666 061 869
4	Boké, les 17 et 18 Juillet 2017		N /	
1	Daouda Fofana	Dir. Régional Adjt Hydraulique	M	
	Mamadou Saliou I Diallo	Observateur Station Cogon	M	
3	Mamadou Camara	Assistant de l'Observateur	M M	
4 5	Alpha Amadou Diallo	Chef Station Météo		
5 6	Abou Bamba Maurico Einaly Condó	Observateur Météo	M M	620 250 470
б 7	Maurice Finaly Condé Ibrahima Kaba	Chef Aéroport Kawass	M	628 358 470
7 8	Ibrahima Kaba Ibrahima Kobélé Kéïta	Département 55 CBG	M	
0		Département 55 CBG	IVI	
9	Ousmane Camara	Commandant Aéroport Kawass	Μ	
10	Mouctar Yoro Diarra	Dir. Personnel CBG	М	
11			M	
11	Mory Sanda Kéïta	Sur intendant Département 55 Directeur Flotte et	IVI	
12	Kabiné Dioubaté	terrassement CBG	Μ	
	Conakry, le 19 Juillet 2017			
1	Dr Youssouf Condé	DG CERESCOR	М	
2	Dr Alhousseyni Barry	CERESCOR	M	
3	Hadja M'Balia Sangaré	DAFF CERESCOR	F	
4	Mamadou Kéïta	CERESCOR	M	
5	Dr Zoumana Bamba	CERESCOR	M	
6	Mandiou Condé	DN Hydraulique	M	
	Faranah, le 2 Août 2017		111	
1	Mamady Kourouma	Agent Météo	М	626 761 550
		Directeur Régional		
2	Mamady Bérété	Environnement	Μ	622 946 927
3	Cdt Balla Kourouma	Coord. RCPCN	М	620 145 511
		Chargé Aires Protégées		
4	Ibrahima Camara	Biodiversité	М	622 163 464
5	Abdoulaye Oularé	Chargé Assain. Cadre de vie	М	628 377 352
6	Djiba Kéïta	Chef SERACCO	M	622 243 250
7	Yacouba Condé	Directeur Régional Agriculture	M	628 362 053
8	Mamady Konaté	Chef station	M	010 001 000
		Inspection Régional		
9	Moussa Sacko	Agriculture	Μ	
		Inspection Régional		
10	Lansana Béavogui	Agriculture	Μ	
11	Pr. Sara Baïllo Diallo	DG ISAV F	М	
12	Alpha Barry	Comptable	M	
	Dabola, le 3 Août 2017			
		1	l	

N°	First Name and Name	Structure/Function	Sex	Contact
1	Ibrahima Sy Savané	Préfet	M	628 177 668
2	Amara Kouyaté	Chef Station Météo	M	628 289 748
	Anala Rouyate	Chef Station Radio Rurale	IVI	020 209 740
3	Namory Diéné Traoré	Dabola	Μ	622 717 647
4	Lansana Camara	SGAdministration	Μ	622 904 461
5	Tamba Camara	Directeur Préfectoral Agriculture	М	621 819 034
6	Daniel Tamba Tinkiano	Agent Météo	М	620 572 004
7	Sama Oularé	DP Environnement (OGUIP)	М	628 103 059
8	Boubacar Camara	DP Elevage	M	622 459 193
9	Mamady Doumbouya	DP Habitat	M	622 406 848
-	Dinguiraye, le 3 Août 2017			
1	Mamadou Oury Diallo	Secrétaire Général Administration	М	628 194 106
2	Débré Sacko	DMR	М	628 804 136
3	Mamadou Alpha Condé	DP Mines & Géologie	Μ	622 634 889
4	Dr Nfamba Kamano	DPA	М	628 528 329
5	Aly Cissé	Chef Station Météo	Μ	622 621 218
6	Adjdt Mamadouba Fofana	Coord. Préfec. Eaux & Forêts	М	620 107 992
	Kouroussa, le 4 Août 2017			
1	Ibrahimagbè Kaba	Secrétaire Général Administration	М	628 344 148
2	Batrou Sékou Kéïta	SG Collectivités Décenralisées	М	622 409 236
3	Sékou Traoré	DP Elevage	М	628 217 381
4	Aboubacar Diaby	DP Jeunesse	M	622 535 404
5	N'Faly Traoré	Chef Section Assainissement	M	622 543 950
6	Ibrahima Sory Bérété	Contrôleur Statistique Agricole	M	622 224 367
7	Elhadj Boubacar Diallo	DP Urbanisme et Habitat	M	622 409 236
8	Namory Kourouma	Maire Commune Urbaine	M	621 765 961
9	Tankoulé Camara	Commissaire Central de Police	М	622 343 865
10	Fatoumata Dounoh	Promotion Féminine	F	622 301 276
11	Boubacar Sidiki Camara	DPPD	M	654 407 174
12	Mamadi I Condé	Radio Rurale Kouroussa	M	622 099 121
13	Sakoba Kéïta	Radio Rurale Kouroussa	M	621 730 453
	Kankan, le 3 et le 7 Août 2017			021700100
1	Simbaly Camara	Directeur de Cabinet	М	623 452 323
2	Balla Traoré	Dir. Régional Hydraulique	M	622 704 888
3	Mory Sanyo	Hydrologue	M	622 474 574
4	Alphonse Yombouno	Société Civile	M	628 548 765
5	Amara Camara	Chef station Météo	M	621 215 656
6	Cheik Abdoul Khader Sidibé	DRA	M	622 048 538
7	Cdt Lanciné Faro	DREEF	M	628 590 387
8	Hadja Kouraba Sacko	DRASPFE	F	622 573 419
9	Louis Camara	DRA/BSD	M	628 436 064
9 10	Kadiata Madi Diallo	AbE/HG	M	628 423 610
11	Sékou Kaba	Action Humanitaire	M	020 423 010
12	Mamadou Baïllo Ditinn Diallo	PDL	M	622 049 050
12				622 948 058
	Souleymane Kourouma	DP Environnement	M	622 555 942
14	Morodian Sangaré	Directeur CRA Bordo	М	628 782 227
	Siguiri, le 4 Août 2017			

N°	First Name and Name	Structure/Function	Sex	Contact
1	Kaba Laye	Ing. Météo en retraite	M	622 389 825
2	Aboubacar Sidiki Kéïta	DPEEF	M	622 875 663
3	Abdoulaye Magassouba	DPA	M	664 516 093
4	Agbé Mamoudou Bérété	Conseiller Agricole	M	628 416 924
5	Moussa Camara	ANPROCA	M	622 069 447
6		Chef Section Q. Fonçière	M	628 005 664
7	Mory Diaby Lanciné Magassouba			
8	Karifa Traoré	Chargé des semences ANPROCA	M M	622 232 790
			M	622 470 030
9 10	Dibou Kouyaté SoumaïlaCamara	Cultures vivrières ANPROCA	M	622 834 856
11	Bakary Kamissoko	Conseiller Agricole Doko	M	628 255 582
	Dakary Kamissoko	Conseiller Agricole	IVI	020 200 002
12	Siné Sako	Gnakassola	М	621 801 205
13	Lanciné Sangaré	Agent Météo	М	622 996 487
14	Yoro Sidibé	Croix Rouge Siguiri	M	622 073 891
<u> </u>	Mandiana, le 6 Août 2017			022 010 001
1	Cheik Mohamed Diallo	Préfet	М	622 310 411
· ·		SG Collectivités		
2	Elhadj Frantoma Condé	Décentralisées	М	628 529 223
3	Fatoumata Sékou Kéïta	SGA	Μ	628 164 083
4	Issiaga Diallo	DPA	М	622 473 282
5	Youssouf Diakité	Chef Section ANASAA	М	628 690 758
6	Dr Tassy Kourouma	Dir. Adjoint Elevage	М	628 307 155
7	Sékouba Condé	Chef Section Environnement	М	628 199 551
8	Traoré Kanko Bouréma	Chef Section Eaux & Forêts	М	623 065 158
9	Kabiné Magassouba	Chef Section GR	Μ	628 123 132
10	Moussa Dian Condé	ANPROCA	Μ	622 148 757
11	Saloum I Camara	PV	М	622 923 470
12	Sylvain Nathaël Haba	Centre de Prestation Agricole	М	628 563 976
	Kissidougou, le 8 Août 2017			
1	Samba Sangaré	SG Administration	М	628 586 212
2	Djiba Koné	DP Eaux & Forêts	М	628 151 528
3	N'Fa Ousmane Camara	FDSS	М	625 161 336
4	Kaman Haoulomou	Section Eaux et Forêts	М	622 777 965
5	Souret Diaora	DPA	М	620 440 303
6	Thierno Ibrahima Camara	AbE/HG	М	622 011 474
7	Balla Guilavogui	Observateur Météo	М	625 326 980
8	Aboubacar Demba Condé	Chef section Environnement	М	628 355 769
9	Famo Condé	organisation paysanne	М	622 616 778
	Guéckédou, le 8 Août 2017			
1	Fodé Traoré	SGCD	М	622 477 038
2	Boubacar I Diallo	DPEEF	M	622 027 311
3	Fara Joseph Komano	Chef Section Envi.	М	622 748 628
4	Damou Sacko	DPA	М	664 894 078
5	Nestor Ifono	Centre Traitement et Conditmt	M	622 792 445
6	Karamo Kourouma	Promotion Agricole	M	625 223 690
7	Elhadj Mamadou Yawa Condé	Centre Prestation Agricole	М	620 555 581
	Macenta, le 9 Août 2017			
1	Elhadj Sékouba Camara	COC	М	621 126 788
2	Sékouba Dioubaté	DPGR	M	628 651 029
3	Alexis Siné Guilavogui	COA	M	621 489 801
4	Saa Koundouno	Météo en retraite	M	
L				

N°	First Name and Name	Structure/Function	Sex	Contact
5	Dr Mamady Kourouma	Directeur CRA Sérédou	M	622 271 300
6	Zézé Guilavogui	Chef Station Agro météo	M	622 722 934
7	Hopper Kalivogui	Météo en retraite	M	622 028 873
-	N'Zérékoré, les 9 et 10 Août 2017			022 020 01 0
1	Aboubacar Mbopp Camara	Préfet	М	664 347 870
2	Amara Kaba	SGCC	M	622 295 125
3	Youssouf Soumaoro	Attaché Administratif	M	664 451 944
4	Soromou Gonona	DPA	M	620 450 305
5	Emile Tamba Tolno	COC	M	621 749 470
6	Antoine Kourouma	DPE	M	628 673 475
7	Victor Haba	DPE	M	628 224 542
8	Sylvain Loua	Président CPA	M	620 909 824
9	Mamadou Camara	PV-DS	M	622 553 877
10	Florent Lama	FNPCG	M	623 427 791
11	Cé Dominique Niamy	ANPROCA	M	628 416 166
12	Naby Camara	Chef Station Météo	M	657 525 873
13	Zoumana Bamba	Agent Météo	M	001 020 010
14	Bazigué Inapogui	Agent Météo	M	620 009 782
	Diéké, le 10 Août 2017			020 000 102
1	Fodé Soumah	Chef Service Administratif	М	620 162 878
		Chef Service Administratif		
2	Lamine Sylla	Adjoint	М	628 615 252
		Chef Service Documentation		
3	Gamy Peloh	Adjoint	М	621 953 388
		Dir.Adjt Création et Dév. Des		
4	Prosper Gamy	Cult. Ind.	М	622 680 660
5	Prosper Kpoghomou	Directeur plantations Indstri.	М	625 250 760
6	Gamamou Souanan	Météo	М	622 720 792
7		Service Documentation et		
7	Ali Traoré	Statis.	М	
	Beyla, le 11 Août 2017			
1	Abdoulaye Kéléba Kéïta	SGCC	М	622 881 870
2	Amara Bayo	SGAA	М	622 424 413
3	Frank Condé	DPEEF	Μ	628 002 379
4	Mohamed Billo Sangaré	C/SPA	М	622 426 573
5	Abdoulaye Yattara	Radio Rurale	Μ	623 023 182
6	Aboubacar Sidiki Kourouma	Radio Rurale	Μ	622 610 425
7	Mathieu Lama	Météo en retraite	М	622 123 840
8	Abraham Doua	Chef Station Météo	М	
	Lola, le 11 Août 2017			
1	Bakary Komara	SGA	М	628 103 061
2	Adama Traoré	Chef sect.Ress. Foncières et Rur.	М	622 103 550
3	Mansa Guilavogui	Chef Station Météo	М	666 281 973
5	Bareing, le 13 Août 2017		IVI	000 201 913
1	Elhadj Sanoussy Bah	Directeur du Centre	М	621 994 525
2	Dr Mamadou Dian Dalaba Barry	Chercheur	M	621 994 525
2				
	Dr Kim Choe	Expert Coréen	M	623 879 034
4	Amadou Ciré Souaré	CSTG	M	628 821 589
5 6	Thierno Hamzata Diallo	Stagiaire	M M	622 509 457
0	Abdoulaye Bah	Agent Météo	IVI	622 473 257
	Timbi Madina, le 13 Aoüt 2017			

N°	First Name and Name	Structure/Function	Sex	Contact
1	Moussa Para Diallo	Président Fédération PPTM	M	622 408 495
2	Thierno Balla Diallo	Chercheur	M	022 100 100
	Tolo, le 14 Août 2017		101	
1	Karifa Kéïta	Sous Préfet	М	622 085 761
2	Daouda Diallo	Directeur Ecole Primaire	M	623 039 415
	Labé, le 5 Septembre 2017		101	020 000 110
1	Sadou Keita	Gouverneur de Labé	М	622 247 887
2	Ouremba Traore	Chef de Cabinet Gouvernorat	M	022 211 001
3	Pr Mamadou Lamarana Diallo	Coordinateur projet REMECC- GKM	M	622 415 874
4	Mr Marwana Diallo	Expert S&E Projet REMECC- GKM	М	628 570 275
5	Alpha Boubacar Bah	Dir.Environnement, Chef cellule BSD	М	628 172 068
6	Haja Halimatou Dela Diallo	Chef Station météo Labé	F	622 570 978
7	Aboubacar Soumah	Observateur météo Labé	М	655 583 992
8	El Mohamed Toure	Inspecteur Regional de l'Agriculture	М	664 313 567
	Mamou, le 6 Septembre 2017			
1	Issiaga Camara	SAAF Gouvernorat	М	620 880 720
2	Samba Hery Camara	Chef de Cabinet Gouvernorat	М	628 359 884
3	Mamadou Hady Barry	Inspecteur du Commerce	М	622 035 365
4	Ibrahima Sory Diallo	DRH Mamou	Μ	622 069 557
5	Ismael Bonfi Diallo	Directeur Régional SNAPE	М	622 086 081
6	Mamadou Tounkara	Directeur Régional Environnement	М	622 517 314
7	Mamadou Diao Diallo	Directeur Régional Agriculture	М	628 039 130
8	Oumar Doumbouya	Coordinateur ANASA	М	622 539 733
9	Amadou Salma Barry	Coordinateur Adjoint ANASA	М	628 234 420
10	Diane Mamadou	D P Agriculture Mamou	М	628 934 330
11	Ibrahima Sory Barry	Coordinateur AMPROCA	М	622 255 568
	Kindia, le 7 Septembre 2017			
1	Dr Ditinn Diallo	Chef de Cabinet Gouvernorat	М	628 495 380
2	Aly Sacko	Directeur CAPF	М	622 148 464
3	Dr Almamy Seny Soumah	D R Agriculture	М	622 171 169
4	Fode Camara	D R Semence et Fertilisant	М	620 137 193
5	Mory Wagnabou Bangoura	Président Chambre Agriculture	М	622 979 432
6	Aboubacar II Camara	D P Agriculture	М	622 608 866
7	Abdoulaye Soumah	BSD	М	664 213 959
8	Famoro Conde	D P Environnement	М	622 621 195
9	Oumar Camara	Cellule Environnement	М	626 709 054
10	Sekou Sylla	Cellule Environnement	М	622 147 072
	Koundara, le 27 Juillet 2017			
1	Elhadj Bafodé Dramé	Secrétaire GI/Admin	М	622 612 219
2	Felix Ifono	Chef station météo	М	628 760 546
3	Kovana Koulémou	Observateur	М	624 109 773
	Gaoual, le 27 Juillet 2017			
1	Mamoudou Condé	D P Environnement	М	628 848 277
2	Simon Pierre Welamou	Chef Station Météo	М	621 458 006
	Mali, le 28 Juillet 2017			
1	Elhadj Harouna Souaré	Préfet de Mali	Μ	622868644

N°	First Name and Name	Structure/Function	Sex	Contact
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4	Thierno Aliou Tounkara	Agent météo	М	
	Lélouma, le 23 Août 2017			
1	Lancény Kamiss Camara	DP Agriculture	М	628519319
2	Mamadou Lamarana Diallo	DP Environnement	М	628281839
3	Lamarana Bah	CDA	М	622142935
	Koubia, le 24 Août 2017			
1	Mobhi Diallo	DP Agriculture	М	628250335
	Tougué, le 28 Août 2017			
1	Mamadou Malal Baldé	DPEEF	М	628518946
2	Abou Camara	Garde Forestier	М	628263348
3	Oumar Baldé	Chef Section	М	621535681
4	Alhassane Bayo	Chef Station Météo	М	



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Assessor doctoch

N°.	Prénoms et Nom	Structure /Fonction	Email/Téléphone	Sexe	Emergement
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7	Moussa CONDE	The second s	meendeprinci Symaili		Monde
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۷*	Prénoms et Nom	Structure /Fonction	Email/Téléphone	Sexe	Emergement
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