Community-based Climate Risks Management in Chad

CEO Endorsement (CEO) entry – Full Sized Project – GEF - 6

Part I: Project Information

GEF ID
8001

Project Type
FSP

Type of Trust Fund
LDCF

Project Title
Community-based Climate Risks Management in Chad

Countries
Chad,

Agency(ies)
UNDP,

Other Executing Partner(s):
Ministry of Agriculture and Environment, UNCDF

Executing Partner Type
GEF Agency

GEF Focal Area
Climate Change

Taxonomy
Focal Areas, Climate Change, Climate Change Adaptation, Disaster risk management, Community-based adaptation

Rio Markers
Climate Change Mitigation

Climate Change Adaptation

Duration
60In Months

Agency Fee($)
498,750

A. Focal Area Strategy Framework and Program

Objectives/Programs	Focal Area Outcomes	Trust Fund	GEF Amount($)	Co-Fin Amount($)
CCA-1	Reduce the vulnerability of people, livelihoods, physical assets and natural systems to the adverse effects of climate change	LDCF	2,419,925	7,000,000
CCA-2	Strengthen institutional and technical capacities for effective climate change adaptation	LDCF	2,830,075	5,500,000
		Total Project Cost($)	5,250,000	12,500,000

B. Project description summary

Project Objective

Strengthen the response capacity of vulnerable populations and enable them to cope more effectively with climate shocks through rapid responses to early warning and the introduction of financial mechanisms to transfer climate risks.

Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)

Component 1: Community-based early warning system for preparedness against climate related disaster risk	Technical Assistance	Outcome 1: Producing and disseminating relevant and timely climate information to enhance preparedness of national and local stakeholders and threatened communities to act appropriately and effectively in a timely manner in response to climate-related disaster risks	Output 1.1: A decentralized, reliable and functioning organizational system for managing climate risk and disasters, and for coordinating response is established Output 1.2: A communication and dissemination system to reach all end users is established Output 1.3: Reliable agromet advisory and Early Warnings by DREM and the NDM to target population are generated and disseminated Output 1.4: Personnel from the NDM and DGRE, ministries and communities are trained to run the Community Based-Early Warning systems	LDCF	2,817,925	7,000,000
Component 2: Enhancing risks management capacities	Technical Assistance	Outcome 2: Promote financial risk transfer mechanisms (e.g. the combination of microfinance and microinsurance) to help rural households	Output 2.1: Structural analysis of market and institutions to determine demand for micro-insurance and	LDCF	2,182,075	4,500,000

		minimize losses and provide safety nets against climate shocks	related risk-transfer mechanisms is conducted Output 2.2: Appropriate schemes and instruments for climate insurance are designed and implemented Output 2.3: Target communities were trained on financial services, index-based agricultural microinsurance and climate risk management Output 2.4: Financial risks mechanisms are tested and evaluated Output 2.5: Cross-community peer-review, learning and sharing mechanisms to support replication and up-scaling in other vulnerable communities are developed		
			Sub Total ($)	5,000,000	11,500,000
Project Management Cost (PMC)					
			LDCF	250,000	1,000,000

	Sub Total($)	250,000	1,000,000
	Total Project Cost($)	5,250,000	12,500,000

C. Sources of Co-financing for the Project by name and by type

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Amount($)
Government	Ministry of Agriculture	In-kind	8,000,000
GEF Agency	UNDP Chad	Grant	4,500,000
		Total Co-Financing($)	**12,500,000**

D. Trust Fund Resources Requested by Agency(ies), Country(ies), Focal Area and the Programming of Funds

Agency	Trust Fund	Country	Focal Area	Programming of Funds	NGI	Amount($)	Fee($)
UNDP	LDCF	Chad	Climate Change		No	5,250,000	498,750
				Total Grant Resources($)		**5,250,000**	**498,750**

E. Non Grant Instrument

NON-GRANT INSTRUMENT at CEO Endorsement

Includes Non grant instruments? **No**

Includes reflow to GEF? **No**

F. Project Preparation Grant (PPG)

PPG Amount ($)	PPG Agency Fee ($)
150,000	14,250

Agency	Trust Fund	Country	Focal Area	Programming of Funds	NGI	Amount($)	Fee($)
				Total Project Costs($)		0	0

Core Indicators	Provide additional explanation on targets, other methodologies used, and other focal area specifics (i.e., Aichi targets in BD) including justification where core indicator targets are not provided

PART II: Project JUSTIFICATION

1. Project Description

Section	Changes since PIF
Global environmental and adaptation problems, root causes and barriers that need to be addressed	The global adaptation problem has not significantly changed since the PIF endorsement. Chad is still one of the most vulnerable country to the impacts of climate change. In addition, the selection of sites and communes for the project enabled the identification of specific climate change impacts. In terms of barriers, the Prodoc the updated the barriers identified in the PIF to be more aligned with the outputs and activities of the project. 1. Poor management and coordination across the hydrometeorological network supposed to provide comprehensive data for the development of adaptation and forecasting measures. 2. Poor translation of drought and flood forecasts into early warning for rapid public response and action at community level. 3. Limited community understanding of climate change issues and financial risk transfer mechanisms that facilitate climate change adaptation. 4. Lack of experience in financial mechanisms for managing climate risks. 5. Weak synergy between institutions and agencies in early warning systems.
Baseline scenario and/or any associated baseline project	With the LDCF funding, the project will improve the quality of climate services in Chad. The recently approved LDCF project Chad National Adaptation Plan (NAP) is providing Chad with new meteorological stations, providing additional and more reliable climate information.
Proposed alternative scenario	The current project will build on the data from the NAP project and focus on improving the quality of services. This LDCF project focus its activities to improve the use and dissemination of information through training and capacity building, development of practical guides and scenarios to facilitate efforts to understand and interpret information on the provision and mainstreaming of climate services into the various programs and plans. It will also support the various stakeholders in the production and use of climate information. This initiative will also support the develo

	pment of a climate risk model for managing agriculture insurance policies in collaboration with microfinance institutions through market risk transfer instruments such as index-based insuran ce that provide rapid liquidity to the communites to reduce the financial and economic losses re sulting from drought and flooding. The project will pilot a program for microinsurance coupled with microcredit schemes and will target subsistence farmers and pastoralists and aim to provi de a financial safety net, protecting them against climate risks and crop losses.
Additional cost reaso ning	This proposed project has been designed to take into consideration lessons learned and best pr actices from previous and existing early warning systems and financial management mechanis ms for climate risks experiences in Africa such as the GIIF, R4 Resilience initiatives and CIMA o n index-based agricultural microinsurance as well as related literature to ensure its effectivenes s and efficiency
Global adaptation be nefits	The Project Document describes the global benefits more accurately.
Innovativeness, susta inability and potential for scaling-up	Through the studies and the analysis, the project formulation team has designed detailed innov ative, sustainable and scalable outputs
Stakeholders	A number of stakeholders has been identified by the project from government, MFIs, private sec tor, NGO's and commuities that will contribute to advance the objectives of this initiative
Gender equality and women's empowerm ent	Gender issues and women empowerment have been reflected in the Prodoc
Risks	The risks were updated and detailed following the changes in the context since the PIF endorse ment.
Institutional arrange ments	The institutional arrangements were discussed with national counterparts to ensure the owners hip of the project at the national level.

A.1. *Project Description*.

1) **Global environmental and adaptation problems, root causes and barriers that need to be addressed**

1. Climate change is now considered one of the major impediments to sustainable development, with negative consequences for production systems, human and animal health, food security, the economy, natural resources, and infrastructure (IPCC, 2014). Climate change is manifesting itself in sub-Saharan Africa through extreme weather and climate events, spread of desertification and loss of biodiversity. Africa, where more than 95% of agricultural production depends on seasonal rains is likely to be hit hard (IPCC, 2007). Particularly in the Sudano-sahelian zone whose populations are mostly rural and dependent on agropastoralism which in turn are vulnerable to the variation and unreliability of rainfall. These problems are also exacerbated by environmental degradation and destruction, poverty and lack of financial and technical capacity of the general public, which increases their vulnerability. In West Africa, knowledge about climate change is still vague and contradictory.

2. Chad is a sub-Saharan landlocked country with more than half (63%) of its territory being arid (MEE, 2001). This country is increasingly threatened by the adverse effects of climate variability and change, especially in sensitive sectors such as agriculture, livestock and water resources. Over the past 40 years, drought stands out as the most frequent hazard affecting large numbers of people in rural areas and their different income-generating activities. Chief among the impacts of climate change in this country, is the gradual disappearance of Lake Chad as a result of persistent droughts and human activity. The surface area of this Lake has diminished from 25,000 km^2 to less than 3,000 km^2 today (LCBC, 2008).

3. Climate change is observed in Chad through the decrease and irregularity of rainfall during the rainy season, seasonal variability, as well as the shortening of the rainy season, with more or less long dry spells. These rainfall deficits exceeded 40% during the severe droughts of the 1970s and 1980s (Andigué et al, 2006). There is a great variability of precipitation in Chad with a downward trend in the order of 200 mm/year and a shift of precipitation from north to south between 1960 and 1990 (UNDP, 2018). The National Action Program to Combat Desertification (2003) indicates that between 1967 and 2003, the precipitation moved 180 km to the south. In the city of Bol, the rainfall fell from 300 mm/year to 200 mm/year between 1967 and 2003, and that of N'Djamena from 600 mm/year to 400 mm/year in the same period (UNDP, 2018). There is, however, a slight recovery in rainfall inflows from the 1990s, but with a very pronounced variability, and an increase in extreme weather and climate events such as rainfall intensity. Over the last two decades, Chad has witnessed fluctuations in the level of precipitation, characterized by increasingly sharp alternations between droughts and floods (NSCCC – République du Tchad, 2017).

4. Both the National Adaptation Plan of Action (2010) and the Second National Communications (2017) indicate an increase of 0.5°C to 1.7°C in the minimum temperatures and 0 to 1.34°C maximum, but do not specify the reference period (Republic of Chad, 2010; Republic of Chad, 2012). The National Strategy to Combat Climate Change (2017) shows a temperature increase of 0.5 to 0.8°C since the late 1970s in sub-Saharan Africa as well as an increase in N'Djamena since the mid-1990s (MEE, 2017). The rise in minimum and maximum temperatures in N'Djamena over the last two decades is considered the highest, with 1.5°C respectively.

5. The models used for the First National Communications of Chad (MEE, 2001) give variable results in terms of future climate trends. As such, for a scenario of average climate sensitivity using three General Circulation Models (CSIRO-TR, CSIRO2-EQ and ECHAM4), by 2023 the country will record a moderate increase in temperature in the range of 0.6°C to 0.8°C in the South, from 0.9°C to 1.2°C in the Center, and from 1.0°C to 1.3°C in the Northern part of the country. In terms of high climate sensitivity, projections were at 1.1°C for the South and 1.5°C for the North. Using the HADCM2 General Circulation Model, the same report projected an average climate sensitivity at 1.1°C for the South and 1.3°C for the North. The high climate sensitivity with this model was projected at 1.5°C in the South and 1.7°C in the North. According to the report, the climate scenarios indicate that rainfall will be unevenly distributed over time during the rainy season in the months of July, August, and September and that this period

will be less rainy than the months of April, May, June and the end of October and November (MEE, 2001). All models predict an increase in precipitation in the Northeast and North (MEE, 2001).

6. Chad's Second National Communication on Climate Change (SNLCCC) (MEE, 2012) presented results on precipitation and temperature projections for the 2030, 2050, and 2100 horizons based on 29 global models derived from the fifth phase of the Coupled Model Intercomparison Project (Coupled Model Intercomparison Project) (CMIP5) and using the MAGICC and SCENGEN softwares. The Communication predicted a temperature increase in all areas compared to the 1961-1990 period. In the Saharan zone, the increase was shown at 1.2 °C in 2030; 2.2 °C in 2050; 4.1 °C in 2100. The Sudanian zone results were almost identical to the Saharan zone. For the Sahelian zone, the increase was projected at 1.3 °C in 2030; 2.4 °C in 2050 and 4.5 °C in 2100. The report also predicted a significant temperature increase in June, July and August and a minor increase in March, April, and May (the hottest time currently) (MEE, 2012). The SNLCCC indicates that the average temperature in Chad would increase by an average of 1°C in 2030 compared to the period 1981-2010 under the optimistic scenario (RCP 4.5), particularly in the Northern part of the Sahel and the entire Saharan zone. Under the pessimistic scenario, RCP 8.5, this increase would be around 1.5 ° C by 2030 in the extreme North of the country (Republic of Chad, 2017).

7. The Intergovernmental Panel on Climate Change Fifth Assessment Report (IPCC AR5) mean annual precipitation projections indicate that under the RCP 8.5 scenario, there will be an increase in precipitation over Chad throughout the 21st Century. These model projections indicate that in southern Chad there will be an increase in the wet season rainfall from July to September. They also project an increase in heavy precipitation events in Southern Chad with a decrease in the Northern part of the country (Climate Change Knowledge Portal, 2018). According to the projection of all models, the number of hot days and nights will increase yearly and the projected fastest increase will be from July to September. The South of Chad will see the quickest increase in these events (Climate Change Knowledge Portal, 2018). Recent climate projections (Climate Change Knowledge Portal, 2018) using 14 Global Circulation Models from the IPCC AR5 indicate that by the 2060s, mean annual temperature is projected to increase from 1.0 to 3.4°C and by the 2090s to between 1.6 to 5.4°C.

8. According to a study by FAO (2002), the main threat to food security could come from both gradual changes in climate and from the expected increase in the frequency and magnitude of extreme weather events. Based on the work carried out during the "Community-based management of climate risks in Chad" project design phase on selected communities from the different geographical areas, the impacts of climatic hazards (drought and flood) result in difficult or late start to the wet and dry seasons, dry episodes after sowing or at the flowering stage, early end of rains, flooding of fields in lowland areas before tillering, flooding in the mature phase – harvests, and out of season rains.

9. In addition to the threat to food and water security, rural communities face resource conflicts and are often forced to migrate (IUCN, 2009). Rural women in developing countries are considered more vulnerable than men to climate change (MEE, 2009). Women in Chad represent about 51% (INSEED, 2009) of the population, and often live in precarious conditions attributable to land degradation and declining water resources, especially in rural areas where female-headed households are generally poorer (SNRP2, 2008).

Alignment with National Policies

10. This initiative is fully in line with the priorities of the Government of Chad pursued in its development programs and plans, particularly in terms of disaster and risk management programs. This project supports the 2030 vision, specifically the objectives of "Pillar 4: Improving the quality of life of the Chadian population". It is also in line with sub-pillar 4.1 of the National Development Plan (NDP) 2017-2021 "A healthy environment with preserved natural "resources", in particular result 4.1.3 "Good management of natural resources is ensured", which aims to: (i) implement the policy of combating climate change and preserving biodiversity; (ii) introduce resilient agricultural practices with respect to climate; and (iii) roll out a mechanism for prevention and management of risks and natural disasters.

11. This project will ensure that the gender issues are addressed equitably across all its components by being aligned with the National Policy on Gender for 2011-2020, which aims at the following: "By 2020, Chad is a country free from all forms of gender inequalities and inequities, from all forms of violence, where men and women have equal opportunities to access and control resources and participate equitably in decision-making processes in the interests of achieving sustainable development." The proposed project is also based on the following National Adaptation Plan of Action priorities: Priority #3 “Improvement, Dissemination and Sustainability of agricultural Calendar for Small Farmers Vulnerable to Climate Change”; and Priority #10 “Climate Risk Management”.

12. The objective of this project is to strengthen the capacity of vulnerable populations to respond to climate change and to enable them to better cope with climate shocks by responding to early warning signals and introducing financial risk transfer mechanisms, such as index-based agricultural micro-insurance. This combined approach will provide a long-term response to the repeated effects of extreme weather and climate events. This initiative will strengthen the climate information system by supporting the development of early warning systems, the monitoring of climate variables and observation facilities, and building the capacity of the stakeholders involved. It will also contribute to strengthen the capacity of relevant ministries and directorates dealing with disaster risk management in Chad, as well as the local communities in terms of how they react and respond to climatic risks through the implemention of a participatory policy at different levels of governance (from the national to the local levels).

Specific barriers addressed by the project

Poor management and coordination across the hydrometeorological network supposed to provide comprehensive data for the development of adaptation and forecasting measures: data inconsistencies are frequently found due to gaps in time series, usually because data was missing from the recording station or because non-functional equipment prevented recording. This situation makes an optimal assessment of the vulnerabilities and impacts of climate change difficult at the community level. These problems are compounded by the weak capacity and inadequacy of technical staff.

Poor translation of drought and flood forecasts into early warning for rapid public response and action at community level. Chad currently does not have the technical capacity to produce hydro-meteorological forecasts that are useful and suited to the specific needs of populations, end-users and the affected socio-economic sectors. In addition, there is no capacity to provide forecasts for each region and community, which is essential for local planning development.

Limited community understanding of climate change issues and financial risk transfer mechanisms that facilitate climate change adaptation. The technical, financial and educational background of communities makes it difficult for them to grasp the issues related climate change and understand the notion of risk. In this context, defining risk and translating this concept into local languages is challenging. This lack of understanding also affects the insurance sector, which is still in its infancy in sub-Saharan Africa and is not culturally accepted by communities, requiring specific training and outreach.

Lack of experience in financial mechanisms for managing climate risks. Chad does not have a legal and regulatory framework for the management of agricultural insurance policies and systems, nor climate risk sharing and index-based risk transfer and insurance mechanisms. This lack of experience in risk financing mechanisms poses a major barrier to the development of products and initiatives, and affects both state institutions and those of the private sector (microfinance institutions). This in turn makes public-private collaboration even more difficult when developing risk financing mechanisms for adaptation in Chad.

Weak synergy between institutions and agencies in early warning systems. The coordination between projects and within technical and government institutions is too limited to influence the production and dissemination of alerts. This situation leads to a duplication of efforts during the production of alerts and a lack of sharing of information and experiences. The systems currently in use are not very efficient and do not allow the collection of reliable information in suitable periods of time.

2) Baseline scenario and/or any associated baseline project

13. Putting in place an early warning system to guard against the risks of drought and flood in Chad i an extremely urgent matter. However, the coordination between the observation network and hydro-climatic information measurements in the country is limited. This lack of coordination calls for the establishment of a proper early warning system that allows sharing of data and information across the interested parties. In its primary mandate, the NDM is responsible for the development of climate information products, including daily, ten-day and seasonal weather forecasts, special seasonal forecasts bulletins, agro-hydro-meteorological news bulletins, agro-meteorological advice, consulting services and provisional schedules for sowing. However, the current National Meteorological Directorate observation network continues to suffer from capacity and coverage constraints, especially in the Central and Northern parts of the country (figure 4), which are critical for the development of an early warning system. Currently, Chad's National Meteorological Directorate has a network of:

- 22 Synoptic Stations, 16 of which are operational;
- 28 Agro meteorological stations, 4 of which are operational;
- 8 Climatological Stations, of which only 1 is operational;
- 153 Pluviometric Posts, 87 of which are operational.

14. Most of the installed stations require equipment maintenance and improved network coordination in order to ensure better coverage for the various zones. A database for climate data management is currently being used, but requires additional work to ensure data transfer from the various stations to the base and put in place adequate quality control processes. All of this will contribute to strengthening the monitoring of climate variables.

15. Some early warning systems are already in place, but with very limited technical and human capabilities to manage them, alerts cannot be triggered within an appropriate timeframe for a rapid response. Weather forecasts are produced by the National Meteorological Directorate and broadcasted by various means, including radio and television. However the system needs improvement, especially for reaching rural communities who need access to this information, while making provision for monitoring and evaluation in order to adjust andupgrade the system in the future. There is also a need to build capacity on the various risk management services at national, regional and community levels. This reinforcement must include the analysis and interpretation of the information produced for early warning purposes.

16. At the regional level, there are early warning systems, but these are mainly geared towards food security and organized into a multidisciplinary working group. This reveals the need to develop and strengthen a system taking into account multiple risks and coordinated on a national level, rather than decentralized alert systems.

17. Today, due to climate change, subsistence farmers in Chad suffer from rainfall variability and extreme weather events that affect their livelihoods. Chad suffers from unreliable weather conditions and few national programs include financial mechanisms for climate risk transfer to the international insurance market as a response to climate change. However, at regional and sub-regional levels, initiatives do exist, such as the World Bank Group's Global Index Insurance Facility (GIIF) program and the African Risk Capacity (ARC) program. Program experiences also exist in countries of the subregion, notably in Senegal, Burkina Faso, Mali

and Benin. Several Microfinance Institutions (MFI) operate in Chad, such as Finadev (the first accredited MFI institution in the country), and the *network of savings and credit unions and community associations (baobab)*. However, there is a lack of legal and regulatory framework for the management of agricultural insurance policies and systems.

18. The access of local populations to micro-insurance and microfinance products is very limited. The purchase of seeds and agricultural inputs has become a challenge for people that have seen their income shrinking with the increased unreliability of climatic conditions. Also, the low control of climate risks severely limits the access of small farmers to micro-credit for the supply of agricultural inputs (improved seeds, fertilizers and small equipment) and other production goods. This vulnerability of the agriculture sector is likely to worsen due to the increased variability of rainfall in Chad, with a shift of precipitations towards the South of the country and with intra-seasonal variations in rainfall at times causing dry spells. Not to mention the degradation of natural eco-systems (water, soil, forests) and agricultural infrastructure. The low capacity of local populations to adapt to climate risks in the long term and adopt sustainable strategies is also a well-known barrier.

Associated baseline projects

19. The project will build on the following baseline projects to avoid overlapping and ensure complementary interventions.

Project name and implementation period	Intervention zones and areas	Areas of collaboration
World Bank: Hydromet Project: Scheduled to start in 2018, for a period of 5 years, the project will provide hydrological and piezometric monitoring (groundwater, with the level of groundwater). The Ministry of Environment, Water and Fisheries is in charge of the project.	Zones: perennial watercourses Monitoring the behavior of surface water will be an area for collaboration with the project through the hydrological network that the PNA project envisages.	The project will benefit from the strengthened coordination of the hydrological network that will be achieved through the Hydromet project. This will therefore support component 1 of the project on the early warning system.
IFAD: "Improving Agricultural Resilience to Climate Change". The project is aimed at reducing the impacts of climate change on natural resources and ecosystems supporting agricultural production and food security. Duration 2014-2021	Zones and Areas: Guéra, Batha and Hadier-Lamis regions (Sudanese zone) The area of cooperation will focus on the promotion of agro-pastoral production systems resilient to climate change: cereals (millet, sorghum), complementary crops (groundnut, sesame, cowpea), market gardening and small-scale f	The project will capitalize on the adaptation practices, techniques and technologies developed, in particular, the intensification of CC-resilient agro-pastoral production systems in the Sudanese-Sahel zone. This will strengthen component 2 of the project on climate risk management systems and agricultural insurance products

	arket gardening and small-scale f arming.	ance products.
European Union: Climate Change/ GCC A under the supervision of the Ministry of Environment, Water and Fisheries wi th the Directorate for Combating Climat e Change as delegated project manage r. Launched in December 2013 for a pe riod of 7 years, the project is based on 2 important components (components shown in the next column)	Zones: national level Component 1: Strengthen govern ance of climate change through i ntegration of climate change into development policies and strateg ies; Component 2: Implement field ac tivities that promote adaptation t o climate change in the agricultu ral and livestock sector.	This project will build on the results achieved in regard to climate chang e adaptation strategies. This will str engthen component 1 of the project on community-based management of climate risks, especially in the cli mate information part.
UNITAR-UNOSAT: Early Warning Syste m for floods in the Chari-Logone Basin. It will be implemented for a period of 3 2 months from 2018 to the end of 202 0.	Zones: Chari-Logone basin The objective of this project is to increase Chad's resilience to nat ural disasters and the adaptive c apacity of the Chadian populatio ns in the Lake Chad Basin, throug h the establishment of a sustain able early warning system in Cha d.	This project will cooperate with the UNITAR-UNOSAT initiative in terms of Early Warning Flood System to e nsure complementarity, synergies a nd coordination between both initiat ives, in particular Component 1 com munity-based early warning system for preparedness against climate re lated disaster risks.
WMO/GFSC: Green Climate Fund - Regi onal Programme: Linking Climate Kno wledge to Action for Resilience in the S ahel - CHAD Component. It will be impl emented from 2018 to 2022.	Zones: National The collaboration will focus on th e WMO/GFSC Program outcome s that address hydro-meteorologi cal information, weather and cli mate information services and e arly warning systems and index-based insurance.	To ensure complementarity, this pro ject will establish technical coopera tion and coordination with the WM O/GFSC regional programme in the areas focusing on hydro-meteorolo gical information, products, service s and tools, early warning, use of cli mate services and index-based insu rance.
Ministry of Agriculture: Information Sys tem for Food Security in Chad (SISA/S AP)	Zones: National The collaboration will focus on f ood security risk assessment, de tection, monitoring and predictio n	This project will establish cooperati on and coordination with the SISA/ SAP framework as basis for the co mmunity-based early warning syste m, and even be extended to address

	''.	specific climate change issues.

3) Proposed alternative scenario

20. The main objective of the project is to improve the capacities of the populations of the vulnerable communities to face the various climatic risks. The project will build on the partnership to be established between the Ministry of Agriculture, the Ministry of Environment, Water and Fisheries, NDM, the Directorate-General of Water Resources (DGWR), UNDP and other grass-roots stakeholders, to better meet early warning and index-based microinsurance expectations.

Component 1: Community-based early warning system for preparedness against climate related disaster risks

21. A community-based early warning system will be established and operationalized as a platform for climate-related disaster risk reduction and for guiding the implementation of climate change adaptation. Resources from the LDCF will enhance the preparedness capacities of national and local stakeholders for the production and dissemination of relevant and timely climate information and alerts on risks to allow threatened communities to be prepared and respond effectively in a timely manner.

22. With the LDCF funding, the project will improve the quality of climate services in Chad. The recently approved LDCF project Chad National Adaptation Plan (NAP) is providing Chad with new meteorological stations, providing additional and more reliable climate information. The NAP will also implement training programs on the operation and maintenance of the hydro-meteorological network equipment together with data processing and analysis and on the integration of adaptation on climate sensitive sectors. The NAP initiative will create a database that will provide climate products for early warnings. The current project will build on the data from the NAP project and focus on improving the quality of services at the regional level in the project areas. This will include the development of customized climate products, trainings and capacity-building to improve the understanding and use of climate data for the formulation of climate products, formulation of thresholds to characterize climate risks, data management and observations, and the design of a monitoring and evaluation mechanism tool. These resources taken together will lay the groundwork for the early warning system that will be put in place in the project areas.

23. The LDCF financing will also improve the use and dissemination of information through training and capacity building, development of practical guides and scenarios to facilitate efforts to understand and interpret information on the provision and mainstreaming of climate services into the various programs and plans. It will also support the various stakeholders in the production and use of climate information.

24. In cooperation with the NAP, the project will strengthen institutional capacities and coordination by encouraging participation in various meetings at national, regional and local levels, enlisting the support of various sectors through cross-cutting mechanisms. It will establish a platform with other projects with similar objectives for coordination, information management and sharing and pursuing advocacy efforts.

25. This initiative will also support the development of a climate risk model for managing agriculture insurance policies in collaboration with microfinance institutions through market risk transfer instruments such as index-based insurance that provide rapid liquidity to the communites to reduce the financial and economic losses resulting from drought and flooding.

Output 1.1: A decentralized, reliable and functioning organizational system for managing climate risk and disasters, and for coordinating response is established

Output 1.2: A communication and dissemination system to reach all end users is established

Output 1.3: Reliable agromet advisory and Early Warnings by DREM and the NDM to target population are generated and disseminated

Output 1.4: Personnel from the NDM and DGRE, ministries and communities are trained to run the Community Based-Early Warning system

Component 2: Enhancing risks management capacities

26. With LDCF funding, the project will pilot a program for microinsurance coupled with microcredit schemes. The program will target subsistence farmers and pastoralists and aim to provide a financial safety net, protecting them against climate risks and crop losses. This builds on efforts from the Government and other projects such as GIIF and ARC program, and will entail building the capacity of the Goverment institutions, financial institutions and communities to better understand and access micro-insurance, and develop a market for it. This will require a market and institutions analysis (output 2.1), the design of appropriate schemes and insurance products (output 2.2), the strengthening of capacities and education (output 2.3), the testing and evaluation of financial risk instruments (2.4) and cross-community peer review mechanisms.

27. The development of microinsurance will require the involvement of the public sector, through national regulations and incentives, to foster the investment of the private sector in micro-finance for smallholder farmers. Indeed, micro finance institutions perceive the investment in microfinance for vulnerable populations as a highly risky transaction, and increased financial incentives are expected to improve investment conditions. This will be achieved through the formulation of clear guidelines for the Ministry of Finance with financial incentives (subventions or reduced taxes)

28. The development of those insurance products appears today as a national priority to help small producers secure investments and adapt to climate change. This project supports the Government of Chad in its efforts to build resilience and climate risk management mechanisms in the pilot areas of the Central and Southern parts of the country.

29. The main target groups of the project are the vulnerable farmers and pastoralists populations in the pilot communities associated with the project. The project will particularly target young people and women who play an important role in the development of activities in the community areas, in particular, resilient and sustainable agriculture, household food and nutrition security. The main objective of this component is to contribute to strengthening the resilience of communities in the face of climate change, and to facilitate access to credit through the development of the agricultural insurance market. The component will contribute to risk prevention and management while modifying the behavior of populations (farmers and pastoralists) in the direction of more sustainable investments and the use of financial services for climate risk management. Inspired by ongoing initiatives in other countries, this program marks a change in Chad's climate risk management. This project will focus more on the development of microinsurance and microfinance in close collaboration with MFIs at the community level albeit in conjunction with the initiatives implemented at the national level, including the program currently being implemented with ARC-African Risk Capacity).[1]

Output 2.1: Structural analysis of market and institutions to determine demand for micro-insurance and related risk-transfer mechanisms is conducted

Output 2.2: Appropriate schemes and instruments for climate insurance are designed and implemented

Output 2.3: Target communities were trained on financial services, index-based agricultural microinsurance and climate risk management

Output 2.4: Financial risks mechanisms are tested and evaluated

Output 2.5: Cross-community peer-review, learning and sharing mechanisms to support replication and up-scaling in other vulnerable communities are developed

4) Incremental/additional cost reasoning and expected contributions from the baseline, the LDCF and co-financing

Baseline

30. The Government has initiated steps for the integration of climate change adaptation into planning, including in the water sector and there is an increased understanding of the challenges climate change is posing on the development of the country. However, very limited resources were already allocated to finance interventions.

31. In addition, a large range of initiatives, mainly financed by international donors and implemented by national institutions, including the SE/CNEDD, are being implemented and are generating a critical database of experience and lessons learned. However, these lessons fail to be capitalized and centrally recoreded to inform future investments.

Co-financing

- The project of communautary action for climate resilience (PAC/RC), financed by the World Bank from 2012 to 2019, supports the integration of climate change considerations into planning through the implementation of its first component “integration of climate resilience inot development strategies at the national and local level”. This project is expected to contribute to the LDCF project through a co-financing contribution of US$ 7,000,000.
- The project for the implementation of the PANGIRE, under its outcome 2 “mobilize and enhance natural water resources and develop socioeconomic activities”, will install hydraulic infrastructures for drinking water access, sanitation, agriculture or livestock. This project, financed by the AfDB and the African Water Facility (FAE), will contribute for US$ 1,210,000 for co-financing.
- The third phase of the support programme for the water and sanitation sector (PHRASEHA III), financed by the Swiss Cooperation and implemented by the MHA, will support the project by providing lessons learned in the implementation of its project interventions under its second component which aims at giving access to equitable and affordable access to water resources for drinking and sanitation and hygiene for rural populations. This project is expected to provide US$ 18,350,000 in co-financing.
- Furthermore, in parallel, the LDCF interventions will be aligned with the GCF NAP project, implemented by the SE/CNEDD, following activities: (i) 1.2: Identifying available information on climate change impacts, vulnerability and adaptation, and assess gaps, (ii) 4.1: Enhancing capacity to monitor the NAP process and adaptation progress; Conduct outreach on the NAP process and report on progress and effectiveness and, (iii) 5.3: Conduct studies or research programmes to estimate future investments in adaptation in all sectors. This project will be implemented in close coordination with the LDCF project, and will participate to the project by contributing US$ 2,997,282 in co-financing.

5) Global adaptation benefits

32. The project will provide significant adaptation benefits by reducing the vulnerability of rural communities to the climate induced water stress in Niger. The targeted population are selected based on their access to water resources and its vulnerability to climate change. By providing sustainable water resources for drinking and farming, the project will increase the adaptation for the beneficiaries. In addition, the project will also strengthen the resilience to climate-induced events, such as drought and flood, which are increasingly occuring in Niger as an effect of climate change.

33. The project will also help systematically collect and record lessons learned and knowledge on adaptation practices in the water sector for improved and increased investments by local and national actors. This will be translated in the formulation of a comprehensive NAP framework for the water sector.

34. Finally, the project will have a broader adaptation impact by setting up an on-line platform that will serve as a sharing interface between the different adaptation actors. Under this project, it will be fed with water-sector related knowledge, but, through the partnerships and other sensitization activities, it is expected that other sector will be incentivized to make use of the platform.

6) Innovativeness, sustainability and potential for scaling up

Innovation

35. The project's goal is to develop a people-centred Early Warning System that is capable of involving and reaching communities, positioning them in relation to national-level decision-making, and also closing the gap between climate change adaptation measure and DRR interventions. With regards to microfinance, the project will innovate in terms of product (micro-insurance), process (holistic approach involving needs and market analyses, identification of suitable instruments, capacity building of client, and testing/evaluating the products), and organization (coordinating a range of stakeholders from central to local levels and the private sector). This combined early warning and micro-insurance approach will help make a difference in key sectors to become more effective in terms of climate resilient development that will impact vulnerable communities in terms of improving their prevention and response capacities. It will provide planners, policymakers and development agency leaders with tools and expertise to ensure that climate change is embedded in the country's planning policies and documents. It is a way of ensuring that the Government of Chad is in a position to tackle the adverse effects of the changing climate not only today but also for the future. This is an innovative approach to value for money, capacity building, knowledge sharing and partnership with the various organizations already on the ground, building on existing work and successes. Innovative partnerships will be established because the planning process embraces not only government agencies and ministries, but also communities, local municipalities, NGOs and other relevant stakeholders.

36. In this country the concept of access to credit through the development of index-based agricultural insurance products is a new and innovative concept for farming communities, which will help them to reduce their vulnerabilities to extreme weather and climate events. The agricultural micro-insurance and availability of micro-credits with low interest rates will allow farmers to make investments and use crop and risk management measures that will help them stabilise their income. The advantage of the index-based insurance is that it reduces transaction costs. It favors early payment in the event of a claim, and there is generally little dispute over the valuation of losses as it is defined at the outset. In addition, because of the low level of savings of targeted farms, it plays a role in guaranteeing a return on investment for financial institutions.

Sustainability and scaling-up

37. This project will adopt sustainability strategies that will include a thorough analysis of both governmental and non-governmental institutions involved in project implementation, baseline assessments of household livelihood security and resilience, appropriate risk analysis, and formulation of exit strategies. Empowering all local-level stakeholders, including the dissemination of timely and meaningful climate and warning information through a whole range of capacity building activities tailored to their specific needs and defining and implementing an efficient knowledge management and sharing system to efficiently capitalize

lessons learned will also contribute to institutional sustainability. A strong focus on building on local knowledge, capacities and incentives, as well as strong project focus on ensuring gender equity in all operational matters are expected to lead to social sustainability. These measures will ensure the project long term viability and sustainability.

38. Chad will use the LDCF resources to develop and test tools for community-based climate risk management. Tools and technologies can be used to integrate management issues into sectors and regions not targeted by this project. The capacity building activities envisaged in the project will strengthen the ownership and institutionalization of tools, thereby ensuring the long-term viability and sustainability of not only this project but also other adaptation projects implemented in Chad.

39. The best practices and lessons learnt from the implementation of this project will be replicated and up-scaled to other communities and regions of Chad in terms of EWS and the adoption of index-based agricultural insurance. This initiative will ensure a wide adoption and diffusion of best practices by developing cross-community peer review and learning and sharing mechanisms to support replication and up-scaling in other vulnerable communities.

40. In addition, scaling up at the political level will be facilitated by integrating climate change concerns into the political agenda by encouraging government commitment. At the same time, participatory processes and other collaborative planning approaches will enable multiple stakeholders to share knowledge, develop awareness and improve learning and replication. Strengthening the expertise of the Ministries' staff and at the decentralized level on vulnerability and climate risk management will facilitate the scaling up and dissemination of the tools for integrating adaptation into the development process. An increase in the access to credit through the development of the agricultural insurance market would scale up the effects of this initiative.

Cost efficiency and effectiveness

41. This proposed project has been designed to take into consideration lessons learned and best practices from previous and existing early warning systems and financial management mechanisms for climate risks experiences in Africa such as the ARC, GIIF, R4 Resilience initiatives and CIMA on index-based agricultural microinsurance as well as related literature to ensure its effectiveness and efficiency.

42. As index-based agricultural insurance is a new field in Chad, an extensive consultation process was adopted during the project design with national, regional and local institutions, climate scientists and vulnerable populations on the project areas to ensure the understanding and ownership of the project by key stakeholders.

43. The proposed project will include training and capacity-building activities to improve the understanding and use of climate data, index-based agricultural microinsurance, financial education, and community-based management of climate risks. The approach of the project was designed to ensure that the interventions targeted climate sensitive sectors in support of the adaptation efforts of the country by contributing to integrate adaptation into the national efforts of sensitive sectors of the government and society both at national, regional and at local level and in support of community income. The project cost efficiency and effectiveness are supported by the full alignment with the priorities of the Government of Chad in terms of disaster and risk management programs.

44. This project not only will complement the efforts of the NAP project at the regional level in the project target areas but will also contribute to the implementation of the Ministry of Agriculture national program. This ministry will use its regional delegations to monitor the implementation of project activities. This approach will be cost efficient as it will avoid creating new structures and will reduce the costs of implementation

[1] See http://www.undp.org/content/undp/en/home/operations/transparency/information_disclosurepolicy/

A.2. Child Project?

If this is a child project under a program, describe how the components contribute to the overall program impact.

N/A

A.3. Stakeholders

Please provide the Stakeholder Engagement Plan or equivalent assessment.

1. Ministry of Agriculture will be the lead entity for the project, the Ministry of Agriculture is the structure in charge of the implementation of project activities. The Ministry's efforts will focus on project coordination and management. The project components are oriented toward the main themes of the ministry. The resulting outputs will then be integrated into ministry plans and policies and will influence the debate on climate risk management in Chad. The Ministry of Agriculture is the body overseeing the project.

2. The Ministry of Environment, Water and Fisheries is the Governmental Cooperation Agency. It ensures the implementation of the environmental policy including fisheries. It is responsible for sustainable development, a multisectoral and integrated issue encompassing the primary and secondary sectors. It ensures the technical supervision of the project, as well as the supervision of the Scientific and Technical Committee.

3. It is also in charge of the management of surface water and groundwater, as well as the entire system for setting up and operating the hydrological data bank. The Ministry is a member of the Steering Committee (CP) and the Scientific and Technical Committee of the Project (CST). Its activities in the project will focus on the outputs related to improving the hydrological observation network on capacity building for network sustainability. This Ministry is in charge of hydrological data and database management in collaboration with NDM. Its involvement will also include technical training modules on integrating adaptation into vulnerable sectors, assessing vulnerability and incorporating adaptation issues into the revision of existing policies and plans.

4. Ministry of Civil Aviation and National Meteorology will provide technical supervision over the NDM, which is the structure responsible for the collection, analysis and supply of climate information. The NDM will be in charge of the management of the information system, including the climate and socioeconomic database. It ensures the implementation of conventions and protocols on climate change with the Ministry in charge of the Environment. The NDM is a member of the project steering committee and a member of the Scientific and Technical Committee of the Project.

5. Ministry of Finance and Budget This Ministry is responsible for the implementation of the CIMA framework through its National Insurance Directorate and is also the focal point for the ARC. In this context, it will provide guidance and regulatory oversight to the project to ensure that the index-based agricultural insurance complies with the legal framework for insurance.

6. Ministry of Public Health This ministry will provide guidance to the project in the context of water and food security and contributing to the good health of the beneficieries of this initiative.

7.Directorate for the Fight against Climate Change This Directorate is under the direct technical supervision of the Ministry in charge of the Environment. 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. This directorate will play a key role in the project activities but specifically in the production of climate information produced through component 1, the integration of risk management into sectors vulnerable to climate change.

8.Center for Documentation and Geographic Information This documentation center is an independent scientific and technological public institution that is part of the Ministry of Environment, Water and Fisheries.This project will collaborate with the center's Early Warning System Department to ensure complementarity with the Center's ongoing work in terms of Early Warning System, hydrological risk, weather data and mapping of flood areas.

9. **Microfinance institutions** As private sector institutions, MFIs will participate actively in project activities by providing credit and insurance coverage to people. This will facilitate community access to credit for production. Under the project, MFIs will be more involved in Component 2.

10.**NGOs and Civil Society** Their role is to provide the interface between the ministerial stakeholders and the communities. The role of NGOs and civil society will be fundamental throughout the project, particularly in training and awareness-raising, and in the emerging partnership between the public and the private sector. They will also play a key role in the dissemination of climate products and services, including alerts, thereby mainstreaming gender equity and sharing project experiences. The Information Liaison and Support Unit for Women (CELIAF), in particular, will disseminate information on climate risks to women.

11.**Community grassroots organizations and agricultural associations** They are the main beneficiaries of the project services since the project is about community-based management of climate risks. Grassroots community organizations will be the cornerstone of the production of the services and products of the whole project.

Outcomes	Outputs	**Institutions**
Institutions of coordination, animation, resource mobilization, and impetus for reforms and monitoring and evaluation of effects and impacts		
Outcome 1: Producing and disseminating relevant and timely climate inf	Output 1.1: A decentralized, reliable and functioning organizational system for managing climate risk and disasters, and for coordinating response is established	Ministry of Agriculture
		National Directorate of Meteorology Directorate General of Water Resources Ministry of Public Health
	Output 1.2: A communication and dissemination system to reach all end users is established	Ministry of Agriculture Ministry of Public Health National Directorate of Meteorology Directorate General of Water Resour

rt and timely climate information to enhance preparedness of national and local stakeholders and threatened communities to act appropriately and effectively in a timely manner in response to climate-related disaster risks		ces Directorate General of Civil Protection
	Output 1.3: Reliable agromet advisory and Early Warnings by DREM and the NDM to target population are generated and disseminated	Ministry of Agriculture National Directorate of Meteorology Directorate General of Water Resources NGOs Civil Society
	Output 1.4: Personnel from the NDM and DGRE, ministries and communities are trained to run the Community Based-Early Warning systems	Ministry of Agriculture Ministry of Environment, Water and Fisheries Ministry of Public Health National Directorate of Meteorology Directorate General of Water Resources Ministry of Agriculture, the Ministry of Environment, Water and Fisheries Center for Documentation and Geographic Information NGOs Civil Society
Outcome 2: Promote financial risk transfer mechanisms (e.g. combination of microfinance and micro-assurance) to help rural households minimize losses and provide safety nets against climate-related shocks	Output 2.1: Structural analysis of market and institutions to determine demand for micro-insurance and related risk-transfer mechanisms is conducted	Ministry of Agriculture Ministry of Environment, Water and Fisheries Ministry of Finance and Budget Microfinance Institutions
	Output 2.2: Appropriate schemes and instruments for climate insurance are designed and implemented	Ministry of Agriculture Ministry of Finance and Budget Microfinance Institutions

	Output 2.3: Target communities were trained on financial services, index-based agricultural microinsurance and climate risk management	Ministry of Agriculture Ministry of Finance and Budget Microfinance Institutions
	Output 2.4: Financial risks mechanisms are tested and evaluated	Ministry of Agriculture Ministry of Finance and Budget Microfinance Institutions
	Output 2.5: Cross-community peer-review, learning and sharing mechanisms to support replication and up-scaling in other vulnerable communities are developed	Ministry of Agriculture Community grassroots organizations and agricultural associations
Project implementation		Ministry of Agriculture Ministry of Environment Water and Fisheries Ministry of Metereology Ministry of Finance and Budget Ministry of Public Health

Table 2: Matrix of stakeholders' participation

Documents Title Submitted

In addition, provide a summary on how stakeholders will be consulted in project execution, the means and timing of engagement, how information will be disseminated, and an explanation of any resource requirements throughout the project/program cycle to ensure proper and meaningful stakeholder engagement.

Select what role civil society will play in the project:

Consulted only;

Member of Advisory Body; Contractor;

Co-financier;

Member of project steering committee or equivalent decision-making body;

Executor or co-executor;

Other (Please explain)

A.4. Gender Equality and Women's Empowerment

Please briefly include below any gender dimensions relevant to the project, and any plans to address gender in project design (e.g. gender analysis).

1. According to the National Gender Policy Document, with the exception of N'Djamena, the proportion of the population aged 18 and over is much higher among women than men in all regions of the country. In the agricultural or rural sector, the active population represents more than 78% of the general population, 53% of whom are women, and lives mainly agro-silvo-pastoral productions. In spite of Chad's economic potential, poverty affects 56.9% of the Chadian population and is particularly characterized by increased vulnerability and endemic women, increasingly marginalized because of their status. With over 80% of the rural population deriving its livelihoods from climate-sensitive sectors such as agriculture, livestock, or fisheries, climate change increases the vulnerability of rural communities and reduces consequently their adaption capacity. The impacts are thus numerous and characterized by the accentuation of heat stress situations for people, livestock and plants, the reduction of agricultural yields, the continuous change of crops and animal species, pressures on water resources and the rise in the price of agri-food products.

2. In this predominantly agro-pastoral economy dominated by traditional farming practices, women play a very important role in family and socio-economic activities. However, their social status leaves something to be desired due to the socio-cultural pressures and prejudices of all kinds that privilege and emphasize its role, especially procreation. While access to factors of production can positively transform the livelihoods of millions of families in rural areas, women, including young people, have very little access to the essential inputs of land, materials and equipment, new technologies, not to mention the extension services.

3. Regarding the operating modes and trends of climatic factors, women and men relate mainly to the effects of climate risks experienced daily. Every year, in July and August, floods prevent rice growing in Bébédjia, regularly, Moundou knows upheavals in the cultural calendar, regularly, Déli knows upheavals in the cultural calendar and the drying up of wells of water, Bere knows, in all cases, a decline in yield, Bongor, sometimes a drop in productivity in the arboriculture sector.

4. In terms of the knowledge of maps and data related to climate risks, women recognize that floods occur almost everywhere in Bébédjia, the enemies of culture, according to the women, are rife in several localities in Moundou, Déli, according to women and men, has no knowledge about maps and data related to climate risks, floods, according to women and men, are experienced in West Bere while the east undergoes droughts, according to women and men, problems are also perceived in the plains as in the open areas.

5. The triggering of accurate and timely alerts, relative to the triggering of accurate and timely warnings, the points of view are divergent. For women of Bébédjia, it is only possible to trigger alerts given the regularity, for example, rain, wind, heat, or cold. The women of Moundou, however, say that information delivered, as the case may be, have assisted women's organizations in their activities. Significant alerts to those at risk, are not accessible to producers. Thus, if the alerts arrive in the same manner to women and men in Moundou, Déli and Bongor through the channels of local or community radio stations, this is not the case in Béré who accuses a difficult access and to Bébédjia who calls for the involvement of women in alerting devices.

6. Regarding the preferences marked for information channels, the vast majority of people met (women and men) opt for the dissemination of information by local or community radio (Moundou, Déli, Bongor), followed by mobile telephony (Moundou, Béré) and extension agents (Bébédjia, Déli). With regard to access and exploitation even to climatic information, only the women of Moundou say that they are guaranteed to everyone, without distinction of

any kind. Unanimously, Bongor's men and women always find them confused, often misleading. For this reason, they require, for example, that accurate information on the beginning and end of seasons be released every five (5) days.

7. In terms of management and transfer of financial risks and whether women are involved in the management of household finances, favorable conditions for their involvement in the management and transfer of financial risks, the women and men interviewed replied in the affirmative. While women in other localities claim that they sometimes take care of the education and health of their children, Bongor says they and men do almost the same work in the fields.

8. Even if the most important sources of income are distinguished from one locality to another, in the five (5) localities visited, we can classify, in order of importance, rice, sesame, peanut, millet (millet / sorghum / millet), sorghum, oilseeds, *fruits and vegetables. And while the most important sources of income for both women and men are rice, sesame and groundnuts, women are generally and easily doing well with millet, maize, oilseeds, fruits and vegetables*.

9. According to the information collected in the field, women and men do not use the products of their activities differently: those produced within the associative framework are much more for sale (90%) and those produced by small family farms by households. From the responses obtained, 100% of the people interviewed are in favor of setting up a risk management and transfer mechanism if the price to be paid is not exorbitant and it is possible to have the costs covered. potential risks in kind.

10. In this context, gender will be taken into account when collecting information and also establish a gender sensitive communication and climate information dissemination system. The capacity of stakeholders should be strengthened to prepare and disseminate climate information, taking into account gender considerations and operationalize information and communication channels accessible to all segments of the population, including the most vulnerable segments. Another recommendation was to develop a cartography of risks and climatic hazards and integrate the perspectives related to gender.

11. The project will also promote the participation of women in the development of the early warning system, which should identify specific priority needs of women and men. Develop a national early warning strategy integrating the gender dimension and regional plans for preparing and responding to climate-related climate emergencies and guarantee an equitable access of women and men to emergency relief. The project will also capitalize on the available knowledge, tools and community-based early warning systems sensitive to gender to better address climate risks and should also strengthen the capacities of actresses and local actors on climate forecasts.

12. In terms of financial risk management and transfer the project will conduct campaigns to raise the awareness of women and men about the importance and the merits of setting up a mechanism for managing and transferring financial risks. At the same time promote policies and strategies to improve the conditions of access to productive resources, particularly for women and young people, by developing legislative reforms that will guarantee them the right of access to these resources and by involving community leaders in implementation of these reforms. Another import action is to develop and implement measures that will strengthen the financial capacity of women and young people through legal and institutional reform measures, in order to reduce the constraints of all kinds that characterize their lives in rural areas. The project will organize, facilitate and guarantee relationships between financial institutions and producers in the context of financial risk management and transfer.

Documents

Title	Submitted

Does the project expect to include any gender-responsive measures to address gender gaps or promote gender equality and women empowerment?

Yes

If yes, please upload document or equivalent here

If possible, indicate in which results area(s) the project is expected to contribute to gender equality:

Closing gender gaps in access to and control over natural resources;

Improving women's participation and decision making

Generating socio-economic benefits or services or women

Will the project's results framework or logical framework include gender-sensitive indicators?

Yes

A.5. Risks

Elaborate on indicated risks, including climate change, potential social and environmental risks that might prevent the project objectives from being, achieved, and, if possible, the proposedmeasures that address these risks at the time of project implementation.

Description	Type	Impact & Probability	Mitigation Measures	Owner
Risk of land dispute for the implementation of measuring instruments, eg automatic rain gauges, etc.	Regulatory	Probability: 2 Impact: 2	Sensitization and community involvement in the choice of equipment installation sites, involvement of local decision-makers and state decentralized bodies. This will ensure that the identified land is not subject to conflict.	PMU
The risk that the definition and development of early warning systems and financial and insurance mechanisms will not focus on vulnerable groups such as women and youth.	Operational	P = 3 I = 1	Employ different consultation methods, not only limited to meetings and workshops in major centers and at the national level, but also community level interviews and field surveys with directly affected groups.	PMU
The basic risk in insurance, that the product does not accurately reflect the reality of the ground	Strategic	P = 1 I = 3	Work with a firm specialized in index agricultural insurance and with extensive experience in climate risk transfer mechanisms and climate and financial risk modeling capabilities.	PMU
Risk of an extreme weather and climate event taking place during the implementation of the project	Environmental	P = 3 I = 3	The project approach to implement early warning systems and adopting financial risk transfer mechanisms will provide a response to the repeated effects of extreme weather and climate events	PMU
Low political will to adjust the "governance fram	Political	P = 3 I = 3	Awareness and involvement of key decision-makers at the highest leve	PMU

eworks" (policies, plans, strategies, programs)		I = 2	l of government to ensure understa nding of the opportunities and ben efits of integrating climate change i nto policies	

57. 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 im-pact is rated as 5, and when impact is rated as 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.

A.6. Institutional Arrangement and Coordination

Describe the Institutional arrangementfor project implementation. Elaborate on the planned coordination with other relevant GEF-financed projects and other initiatives.

1. Below is a list of the institutional arrangements for project implementation:

• Project Board: The Project Board (also called Project Steering Committee) is responsible for making by consensu, 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.

• 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 project-level M&E is undertaken by national institutes, and is aligned with national systems so that the data used by and generated by the project supports national systems.

• 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. Supervision mission reports will be circulated to the project team and Project Board within one month 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.

• 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.

• 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).

• Project Management Unit: it is the operational body in charge of planning, management, and coordination of the implementation of the project. It will be placed under the authority of the project manager, and it will include a Project Director, Project Manager, SAP Technical expert, Technical expert agriculture insurance, Monitoring and evaluation expert, Communication expert, Administrative and financial specialist and two drivers

• 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.

58. The project will also put an emphasis on the creation of partnerships at the national and regional level to ensure the sustainability of the actions. It will capitalize and create synergies with past and existing GEF-financed projects such as:

The World Bank's Emergency Agricultural Production Support Project, for a period of five years, aims to provide support to communities and producer organizations to increase: i) the production of certain plant and animal species; Mandoul, Moyen Chari, Salamat, Dar Sila, and Guera regions; and ii) the use of sustainable soil and water management practices in ecosystems vulnerable to climate shocks. The project focuses on high-potential areas where significant increases in productivity and production are possible or where food security and poverty problems are serious. The project budget is USD 34.25 million, including

an International Development Association (IDA) grant of USD 25 million, a grant from the Global Environment Facility (GEF) in the amount of USD 4.62 million, and a grant from the Least Developed Countries Fund in the amount of USDD 4.62 million.
The Agricultural Susceptibility to Climate Change Project (PARSAT) is being implemented with funding from IFAD-GEF for a budget of USD 36.20 million for a a period of seven years. This project is intended to reduce the impacts of climate change on natural resources and ecosystems supporting agricultural production and food security. Approved on 31 October 2014 over a period of seven years structured in two phases, the overall objective of PARSAT is to contribute to the sustainable improvement of the food security and income of rural households in the Project area. The project's development objective is to improve the resilience of farming systems and the economy of rural households in relation to climate change and external shocks. PARSAT intervenes in the 4 departments of the Guéra region, the Fitri department in the Batha region and the Dababa department in the Hadjer-Lamis region. The PARSAT target group is made up of vulnerable farming households whose livelihoods are mainly provided by food production (60% of which is cereals) over an average area of 2-3 ha, small livestock and various other activities (including in the off-season, with market gardening in particular, which is a resilience activity highly sought after by rural populations). This target group includes two sub-groups constituting particularly at-risk households: (i) female heads of household including widows, with many young dependent children; (ii) newlyweds who have just moved. The project will make sure to address both women and men, without forgetting to integrate young people for all the actions initiated.
The Climate Network Mesh Project. With the financing of the National Directorate of Metereology budget, the project concerns the establishment of 28 agro-meteorological stations, 22 synoptic stations, 153 rain stations, 8 climatic stations, 9 automatic stations. The project also acquired 4 High Resolution Radars for a total amount of US$ 6 million from Government funds in support of National Directorate of Metereology. The radars must however be installed, and 6 synoptic stations rehabilitated among the 22 existing ones. The intervention of the UNDP-GEF project through the LDCF funds will rehabilitate and reinforce some of those devices with a focus on the Sahelian and Sudanian zones. LDCF funds will also be used to train climate network staff in the operation, maintenance and maintenance of equipment for sustainability. With regards to the hydro-monitoring network, 20 limnometer stations exist, though it is estimated that the whole country would need 60. The Government's contribution covers a total of USD 16 million over the four-year period of project implementation, the salaries of National Directorate of Metereology staff, the Hydrology Directorate and the 85 observers, as well as the contributions from the Ministry in charge of the Environment and from the members of the Steering Committee and the Scientific and Technical Committee of the project.

Additional Information not well elaborated at PIF Stage:

A.7. Benefits

Describe the socioeconomic benefits to be delivered by the project at the national and local levels. How do these benefits translate in supporting the achievement of global environement benefits (GEF Trust Fund) or adaptaion benefits (LDCF/SCCF)?

59. The National Adaptation Plan (NAP) project, will strengthen part of the observation network, improve the access to information, build capacity for national, regional and local stakeholders to collect, analyze and use climate information. The "Community-based management of climate risks in Chad" initiative will ensure full coordination, synergies and complementarity with the NAP. In this context, the project will be implemented in the identified departments and will put an emphasis on the assessment of hydro-meteorological equipment and facilities, strengthening the data infrastructure necessary for the development of the early warning system and the development of agricultural insurance products in these zones. This in turn will call for efforts to strengthen stakeholders' capacities in the management of equipment and infrastructure, capacity-building for the National Directorate of Meteorology (NDM) and Directorate-General of Water Resources (DGWR) in the use of the collected data for monitoring and early warning purposes, and in translating climate-related information into policy advice for local communities. These initiatives will improve the quality of the forecasts and the understanding of the specific needs of the populations as well as facilitate the integration of the project results into decision-making processes. Stakeholders will thus experience improvements in their capacity to interpret climate information and convey this information to communities. Improved stakeholder capacity is essential for the delivery of reliable climate prediction, warning and projection outputs that are essential at the national level to inform, guide and oversee the planning process in the country. In addition, this initiative will contribute to the development of the agricultural insurance market, particularly index-based insurance. By strengthening the response and planning mechanism at the regional level, the project will enable Chad to become more effective and efficient in allocating existing resources to climate risk management.

Benefits at the local level
The project will be an opportunity to promote a new form of climate risk management through index-based microinsurance and access to information for decision-making. Local communities will be a major beneficiary of those services, which will give them improved access to credit, and will bring climate risks insurance options managed on the international insurance market to local levels. These efforts will serve to improve the living conditions of vulnerable groups and enhance their involvement in the national economic and social development process. The project will also be a tool for promoting social cohesion at the local community level through awareness-raising, training and information on adaptation and will limit the many conflicts, particularly between farmers and pastoralists, thanks to the adoption of the best adaptation techniques and technologies. Thus, communities will have regular access to climate information, which is crucial for decision-making in a climate crisis (flood and drought). They will also experience a noticeable increase in their capacity to respond expeditiously to climate shocks.

At the same time, this project will make it possible to mainstream the project community concerns by feeding into the NAP process in terms of national policies, plans and strategic documents. Through the multi-scale scheme (from the national and regional to the local level) that will be put in place, the specific needs of the populations will be easier to capture and the public authorities will be better able to meet the expectations of the local communities. In addition, the development of agricultural micro-insurance will enable vulnerable populations in communities to benefit quickly from credit and coverage in case of loss of the crop due to a climate shock.

The benefits involved in taking gender issues into account

In Chad, the involvement of women in the climate system is very low. The project will provide women with regular access to information and credit for production. Since women play a vital role in community-based production systems, this initiative will involve women in the implementation of all the project deliverables, ranging from the access to information and its use, credit and microinsurance. Thus, special emphasis will be placed on building women's capacities throughout the project. As such, the design of training modules on climate risk management will enable women to benefit from current knowledge on climate change adaptation and risk management.

A.8. Knowledge Management

Elaborate on the Knowledge management approach for the project, including, if any, plans for the project to learn from other relevant projects and initiatives (e.g. participate in trainings. conferences, stakeholder exchanges, virtual networks, project twinning) and plans for the project to assess and document ina user-friendly form (e.g. lessons learned briefs, engaging websites, guidebooks based on experience) and share these experiences and expertise (e.g. participate in community of practices, organize seminars, trainings and conferences) with relevant stakeholders.

A Knowledge Management (KM) strategy will be put in place and will develop a mechanism with the appropriate tools and methods that will support in identifying, sharing, eavaluating, storing and managing the knowledge produced at different stages by the activities of this initiative. The Output 2.5*: Cross-community peer-review, learning and sharing mechanisms to support replication and up-scaling in other vulnerable communities are developed,* will contribute to the knowledge management strategy of the project. This will be done by ensuring that new knowledge and innovative ideas and concepts are captured and that knowledge and experiences will be shared with individuals, institutions, organizations and this is documented and stored for retrieval and use. As such, it will be shared to relevant actors in the country and internationally to promote the replication of good practices. In particular, the project will support the sharing of the projects results and lessons learned during regional and international events (i.e. COP).

Knowledge and information pertaining to the project will be extracted, codified and disseminated in terms of best practices and lessons learned through publications, networks, presentations, websites, among others. The KM will be integrated in the project Monitoring & Evaluation and it will build synergies with the UNDP LCDF NAP initiative. In support of the KM, a communication strategy will be developed to ensure the dissemination of information to the project stakeholders and ways for their participation and feedback for the capture and capitalization of accumulated knowledge.

This output will also coordinate with other CCA initiatives in Chad to develop a centralized data base for CCA lessons learned. This will support the development and dissemination of efficient practices at the national level and avoid the recurrence of failures. Under this output an activity will promote a partnership with other on-going adaptation projects, and will develop an on-line platform for the sharing of lessons learned on climate change adaptation in Chad.

In addition the best practices and lessons learnt from the implementation of this project will be replicated and up-scaled to other communities and regions of Chad in terms of EWS and the adoption of index-based agricultural insurance. This initiative will ensure a wide adoption and diffusion of best practices by developing cross-community peer review and learning and sharing mechanisms to support replication and up-scaling in other vulnerable communities.

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.

B. Description of the consistency of the project with:

B.1. Consistency with National Priorities

Describe the consistency of the project with nation strategies and plans or reports and assessements under relevant conventions such as NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, INDCs, etc.

B.1 Consistency with National Priorities. Describe the consistency of the project with national strategies and plans or reports and assessements under relevant conventions such as NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, INDCs, etc.:

63. This initiative is fully in line with the priorities of the Government of Chad pursued in its development programs and plans, particularly in terms of disaster and risk management programs. This project supports the 2030 vision, specifically the objectives of “Pillar 4: Improving the quality of life of the Chadian population". It is also in line with sub-pillar 4.1 of the National Development Plan (NDP) 2017-2021 "A healthy environment with preserved natural ”resources", in particular result 4.1.3 "Good management of natural resources is ensured", which aims to: (i) implement the policy of combating climate change and preserving biodiversity; (ii) introduce resilient agricultural practices with respect to climate; and (iii) roll out a mechanism for prevention and management of risks and natural disasters.

64. This project will ensure that the gender issues are addressed equitably across all its components by being aligned with the National Policy on Gender for 2011-2020, which aims at the following: "By 2020, Chad is a country free from all forms of gender inequalities and inequities, from all forms of violence, where men and women have equal opportunities to access and control resources and participate equitably in decision-making processes in the interests of achieving sustainable development." The proposed project is also based on the following National Adaptation Plan of Action priorities: Priority #3 “Improvement, Dissemination and Sustainability of agricultural Calendar for Small Farmers Vulnerable to Climate Change”; and Priority #10 “Climate Risk Management”.

65. The objective of this project is to strengthen the capacity of vulnerable populations to respond to climate change and to enable them to better cope with climate shocks by responding to early warning signals and introducing financial risk transfer mechanisms, such as index-based agricultural micro-insurance. This combined approach will provide a long-term response to the repeated effects of extreme weather and climate events. This initiative will strengthen the climate information system by supporting the development of early warning systems, the monitoring of climate variables and observation facilities, and building the capacity of the stakeholders involved. It will also contribute to strengthen the capacity of relevant ministries and directorates dealing with disaster risk management in Chad, as well as the local communities in terms of how they react and respond to climatic risks through the implemention of a participatory policy at different levels of governance (from the national to the local levels).

66. The Project is linked with the current UNDP Country Programme 2012-2015, specifically the sub-programme 1 and related Component 2: “Support to inclusive finance” and Component 4: “Environment, climate changes and natural disaster risks management.” The project supports the UNDP Strategic Plan Outcome 3: Resilience-building. It will support the integration of disaster risk reduction with adaptation to climate change and address differentiated social and economic impacts, as well as preparedness for disaster management and recovery at the sub-national and national levels.

The proposed project is based on following NAPA priorities:

- Priority #3 “Improvement, Dissemination and Sustainability of agricultural Calendar for Small Farmers Vulnerable to Climate Change”
- Priority #10 “Climate Risk Management”

C. Describe The Budgeted M & E Plan:

GEF M&E requirements	Primary responsibility	Indicative costs to be charged to the Project Budget [1] (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	Staff time		Annually.
GEF Project Implementation Report (PIR)	Project Manager and UNDP Country Office and UNDP-GEF team	None	None	Annually.
NIM Audit as per UNDP audit policies	UNDP Country Office	Per year: US $ 3,000 *4= 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	None for time of Project Manager, an		

	BPPS as needed	d UNDP CO		
Project Board meetings	Project Board UNDP Country Office Project Manager			At minimum annually.
Supervision missions	UNDP Country Office	None[2]		Annually.
Oversight missions	UNDP-GEF team	None4		Troubleshooting as needed.
Knowledge management as outlined in Outcome 4	Project Manager	Staff time		Ongoing.
GEF Secretariat learning missions/site visits	UNDP Country Office and Project Manager and UNDP-GEF team	None		To be determined.
Midterm GEF Tracking Tool to be updated by (add name of national/regional institute if relevant)	Project Manager	Staff time		Before midterm review mission takes place.
Independent Midterm Review (MTR) and management response	UNDP Country Office and Project team and UNDP-GEF team	US$ 30,000		Between 2nd and 3rd PIR.
Terminal GEF Tracking Tool to be updated by (add name of national/regional institute if relevant)	Project Manager	Staff time		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.
Translation of MTR and TE reports into English	UNDP Country Office	US$ 5,000 –		

TOTAL indicative COST Excluding project team staff time, and UNDP staff and travel expenses	**US$ 98,000, 00**		

PART III: Certification by GEF partner agency(ies)

A. GEF Agency(ies) certification

GEF Agency Coordinator	Date	Project Contact Person	Telephone	Email
Adriana Dinu Director, Sustainable Development (Environment) a.i. Executive Coordinator, Global Environmental Finance United Nations Development Programme	8/31/2018	Benjamin Larroquette	2912503321	benjamin.larroquette@undp.org

ANNEX A: PROJECT RESULTS FRAMEWORK (either copy and paste here the framework from the Agency document, or provide reference to the page in the project document where the framework could be found). ℹ

This project willcontribute 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: By 2021, farms, fishing communities and small producers, notably youth and women, in targeted regions, use sustainable production systems that allow them to meet their needs, bring food to market and adopt a living environment that is more resilient to climate change and other environmental challenges.

This project will be linked to the following output of the UNDP Strategic Plan: Output 2.3.1: Data and risk-informed development policies, plans, systems and financing incorporate integrated and gender-responsive solutions to reduce disaster-risks, enable climate change adaptation and mitigation, and prevent risk of conflict (UNDP Strategic Plan 2018-2021)

	Objective and Outcome Indicators	Baseline	Mid-term Target	End of Project Target	Assumptions
Project Objective: The main objective of the project is to improve the capacities of the populations of the vulnerable communities to face the various climatic risks	Indicator 1: A model for mainstreaming climate risk management, with particular emphasis on the gender dimension.	*0*	*1*	*1*	*Existence of appropriate systems, mechanisms and tools for climate risk management at different levels of governance (National to local)*
	- Indicator 2: Number of direct project beneficiaries *Data disaggregated by sex (age and wealth) with targets for women*	*0*	*50% of farmers and pastoralists in the targeted areas taking out index-based insurance*	*80% of the farmers and pastoralists in the targeted areas taking out index-based insurance*	*Cooperation between the insurer, the farmers and the stakeholders in order to identify the micro insurance to be proposed, to win the producers' confidence.*
Component 1	Indicator 3: Number of people with	*0*	*50% of the project* b	*90% of the project*	

Outcome 1: Producing and disseminating relevant and timely climate information to enhance preparedness of national and local stakeholders and threatened communities to act appropriately and effectively in a timely manner in response to climate-related disaster risks	access to climate information and early warning messages *Data disaggregated by sex (age and education) with targets for women*		eneficiaries *in the targeted areas (including women)*	beneficiaries *in the targeted areas (including women)*	*Release of accurate and timely climate information and early warning messages*
	Indicator 4: Policies and plans addressing the risks of climate change identifying priority adaptation options in policies and plans	***Progression to be determined at the beginning of the project***	*Relevant policies and plans mainstreaming climate change with a particular focus on women*	*Approved policies and plans mainstreaming climate change with particular focus on women*	*Decision-makers understand the opportunities and benefits of integrating climate change into policies and plans*
Component 2 **Outcome 2: Promote financial risk transfer mechanisms (e.g. the combination of microfinance and microinsurance) to help rural households minimize losses and provide safety nets against climate shocks**	Indicator 5. Number of beneficieries capacited in index-based agricultural insurance *Data disaggregated by sex (age and education) with targets for women*	***0***	*Improved capacity of 1,833,000 project beneficieries*	*Improved capacity of 2,932,000 project beneficieries*	*Farmers and patoralists (men and women) understand the advantages and are willing to be trained in index-based insurance*
	Indicator 6: Average annual income of the target beneficiaries	***To be determined at the beginning of the project***	*Income levels of communities in target areas stabilized and improved at least by 5%*	*Income levels of communities in pilot areas improved at least by 10%*	*Communities in the targeted areas see their income not being affected and even increased after the impact of floods and droughts*

ANNEX B: RESPONSES TO PROJECT REVIEWS (from GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF). ℹ

STAP comment	Response
Component 1. STAP would appreciate fuller details on w hich climate change projections of the magnitude and p attern of extreme weather and climate events in coming decades will be used, including the time frame(s) of inte rest and why particular model(s) were chosen. It would be helpful to know who will choose the models and how the projections will be communicated to the stakeholder s. It also would be helpful to incorporate a range of pos sible future socioeconomic development pathways (e.g. Shared Socioeconomic Pathways) when considering ap proaches to structuring the financial risk transfer mecha nisms, to increase the likelihood of their resilience in a c hanging climate.	Climate change projection details and information on the models that were used are provided on page 6 and 7. The models will be chosen by the National Directorate of Mete orology and the projections will be communicated to the s takeholders through easily understandable climate inform ation selected based on the specific needs of beneficiarie s and traditional communication channels.
a. STAP would appreciate further details on the selection criteria for choosing the pilot sites, and how th e activities in those sites will be coordinated with other ongoing or planned adaptation projects.	Information on the pilot sites was included on page 9 with a map of the intervention areas. This initiative will develop synergies with on ongoing experiences in Chad as well as in other African countries in terms of the early warning sys tems and index agricultural microinsurance. In addition, fu rther partnerships will be promoted with national program s. Table 3 on page 24 provides information on the project names and the implementation time, the intervention zone s and the collaboration areas.
b. STAP also would appreciate consideration of how to develop the community-based early warning syst ems so they can be modified as the frequency and inten sity of extreme weather and climate events changes.	This consideration will be addressed under project Output 1.4 that will strengthen the technical capacities of (govern ment agencies and) communities to effectively run the CB -Early Warning system (Output 1.4 page 19). This will enab le them to understand the evolving needs for climate infor mation and plan for future warnings.
c. It would be helpful to consider the extent to	This project will enhance the preparedness capacities of n

which the community-based early warning systems should be similar across the country.	ational and local stakeholders for the production and dissemination of relevant and timely climate information and alerts on risks to allow communities threatened to be prepared and respond effectively in a timely manner. The involvement and training of national stakeholders will take into consideration other initiatives and past investments in CB-EWS to ensure their alignment. In addition, the project will be implemented in strong coordination with the LDCF NAP project, which has a component dedicated to climate information, and also aims at unifying the systems.
d. The overview of this component suggests a top-down structure, with national agencies providing information on climate risks and with communities then taking action. It could be helpful to consider how to collect feedback from communities to national agencies on where improvements in knowledge transfer, coordination, and other elements would enhance the effectiveness of the early warning systems.	Project Output 1.4 (page 19) will strengthen the capacities of vulnerable populations of data collection, management, observations and methodologies, sharing information, understanding climate, weather forecasts and identifying risks. During the implementation of the project, together with the various stakeholders (hydrologist, climatologist, NGOs, State Ministries, end-users and disaster risk managers), a feedback loop will be developed for monitoring the impacts of the information produced in an effort to evaluate the relevance of the system. In addition, there will also be an opportunity to provide feedback of the Early Warning Systems to national agencies through a cross community peer-review learning and sharing process. Mechanisms will be set out with the necessary tools to enable communities to monitor, review, learn and share the effectiveness and progress of the outputs and activities of the project and propose corrective measures where needed.
e. The full proposal should indicate which NGOs and other actors will be involved in the outputs.	The project provides a table (matrix of stakeholders) on page 27 with information about the stakeholders that will be involved, their function and role in the project.
f. It would be helpful to have a map of the communities involved in this component.	A map of the project intervention areas has been included in the text on page 10
g. Note that paragraph 14 states that there will be at least 2,500 target communities and individuals, and that 100,000 lives will be saved in each region (time frame not specified). Earlier statements don't support hundreds of thousands of lives lost to extreme weather an	This statement has been deleted.

hundreds of thousands of lives lost to extreme weather and climate events.	
h. Page 10 mentions at the end of A.5 that the proposed project might purchase additional hydro-meteorological equipment. STAP would appreciate more information in the full proposal, including the amount, type, where it will be installed, and the maintenance plan.	This equipment will follow the same standards as the equipment procured under the NAP LDCF project and will come as a complement to provide comprehensive information. Procurement and installation of meteorological equipment (4 stations, 5 rain gauges, 2 hydrological stations) ($ 288,825). The location and the maintenance plan will be decided during project implementation with the NAP LDCF project.
Component 2. STAP would appreciate further details on how this outcome will be accomplished. Examples include who will undertake the structural analysis of markets and institutions, who will decide which risk transfer mechanisms would be best suited to the needs of the communities, how the schemes and instruments will be chosen (and by whom), who will design and implement education and capacity building activities, what criteria will be used for evaluation of the risk transfer mechanisms, and how the cross-community sharing mechanisms will be designed, promoted, and evaluated.	The design of the project provides the elements on how Component 2 will be achieved and the output 2.1. (page 21) is fully dedicated to the structural analysis of markets and institutions
It would be helpful for the full proposal to include further details on how the activities within the components will be accomplished, who will undertake these activities, the methods that will be used, and the number of pilot sites that will be included.	Details are provided in the proposal regarding how the activities will be accomplished and the stakeholders responsible for their implementation as well as the methods that will be followed for the different activities. The number of sites and a map are provided on pages 9, 10 and 11.
With the interest in food and water security, the Ministry of Health and other health experts would bring valuable contributions to project design and evaluation, to help ensure choices made also promote human health and well-being.	The project will benefit communities on health and well-being by improving their capacity to interpret climate information, which is crucial for decision-making to (flood and drought) respond expeditiously to climate shocks and developing an agricultural microinsurance which will communities to benefit quickly from credit and coverage in case of loss of the crop. This will promote the human health and well-being of the local populations by addressing water and

	food security. Ministry of Public Health is a partner of this project and its contribution is described in component 1 and 2, the corresponding output and the stakeholders matrix (table 4) page 28.
STAP looks forward to more information in the full proposal on how best practices and lessons learned will be identified, including the criteria to be used and who will do the identification. STAP also looks forward to information on indicators for monitoring, evaluating, and learning from the activities that will be undertaken and for measuring the benefit of the interventions.	The project will identify, analyze 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. The best practices and lessons learnt from the implementation of this project will be replicated and up-scaled to other communities and regions of Chad in terms of EWS and the adoption of index-based agricultural insurance. This initiative will ensure a wide adoption and diffusion of best practices by developing cross-community peer review and learning and sharing mechanisms to support replication and up-scaling in other vulnerable communities. Furthermore, the proposed capacity building activities of this project will reinforce the ownership and institutionalization of tools, ensuring the long-term viability and sustainability of this project.
STAP encourages including an explicit activity to develop a plan for scaling-up, including estimating the human and financial resources required.	Output 2.5: Cross-community peer-review, learning and sharing mechanisms to support replication and up-scaling in other vulnerable communities are developed, was added to address this issue, and page 23 further elaborates on how the project plans to scale-up.
STAP appreciates the attention to include gender considerations in the proposed project and looks forward to further development of this aspect in the full proposal.	As part of the project design, a national gender expert was hired to do an analysis of the Chadian women in the context of national strategies and policies, which included field surveys that focused on early warning systems and management and transfer of financial risks. The results of this analysis have been included in the project to ensure the inclusion of gender considerations across the components and outputs. Further details are provided under “Gender equality and empowering women” on pages 29, 30 and 31.

In section A.4 (Risk), it was surprising that the identified risks did not include an extreme weather or climate eve nt occurring during the project, particularly with the des criptions of the vulnerability of the country to such event s. It would be helpful to consider what planning would b e helpful for reducing the consequences of an extreme event during project implementation.	The risk of an extreme weather and climate event taking p lace during the course of the implementation of the projec t has been included in the UNDP Risk log. It will also be an opportunity to test the approach of the project and make a ny necessary corrections.
Given the large number of on-going or planned adaptati on projects, STAP would appreciate a more comprehens ive explanation of how coordination and collaboration w ill be fostered across the projects	The project has identified the potential synergies with proj ects their implementation period, intervention zones and a reas of collaboration (Table 3: Potential synergies with cur rent projects in Chad)

ANNEX C: STATUS OF IMPLEMENTATION OF PROJECT PREPARATION ACTIVITIES AND THE USE OF FUNDS.

A. Provide detailed funding amount of the PPG activities financing status in the table below:

PPG Grant Approved at PIF: 150,000.00

Project Preparation Activities Implemented	*GETF/LDCF/SCCF/CBIT Amount ($)*		
	Budgeted Amount	*Amount Spent Toda te*	*Amount Committe d*
Technical assistance (design technical elements as well as all the required financial and administr ative components of the project)	86,950.00	76,885.52	10,064.48
Conducting missions to the project sites	36,050.00	6,228.70	29,821.30
Stakeholder consultation and validation worksho p	27,000.00	3,309.65	23,690.35
Total	150,000.00	86,423.87	63,576.13

ANNEX D: CALENDAR OF EXPECTED REFLOWS (if non-grant instrument is used)

Provide a calendar of expected reflows to the GEF/LDCF/SCCF/CBIT Trust Funds or to your Agency (and/or revolving fund that will be set up)

n/a

ANNEX E: GEF 7 Core Indicator Worksheet

Use this Worksheet to compute those indicator values as required in Part I, Table G to the extent applicable to your proposed project. Progress in programming against these targets for the program will be aggregated and reported at any time during the replenishment period. There is no need to complete this table for climate adaptation projects financed solely through LDCF and SCCF.

ANNEX: Project Taxonomy Worksheet

Use this Worksheet to list down the taxonomic information required under Part1 by ticking the most relevant keywords/topics//themes that best describes the project

United Nations Development Programme

Financed by the GEF/LDCF/SCCF Trust Funds

Project title: Community-based management of climate risks in Chad		
Country: Chad	**Implementing Partner:** Ministry of Agriculture	**Management Arrangements:** National Implementation Modality (NIM)
UNDAF/Country Programme Outcome*:* UNDAF outcome: By 2021, farms, fishing communities and small producers, notably youth and women, in targeted regions, use sustainable production systems that allow them to meet their needs, bring food to market and adopt a living environment that is more resilient to climate change and other environmental challenges.		
UNDP Strategic Plan (2018-2021) Output: Output 2.3.1. Data and risk-informed development policies, plans, systems and financing incorporate integrated and gender-responsive solutios to reduce disaster-risks, enable climate change adaptation and mitigation, and prevent risk of conflict		
UNDP Social and Environmental Screening Category: Low	**UNDP Gender Marker:** 2	
Atlas Award ID number: 00113793	**Atlas Project ID number:** 00112042	
UNDP-GEF PIMS ID number: 5430	**GEF ID number:** 8001	
Planned start date: June 2020	**Planned end date:** May 2024	
LPAC date: TBD		

Brief description

As climate change occurs, the variability of climate-related events is expected to increase in frequency and intensity. This reality requires key economic sectors to adapt to those climate change implications. Chad, as a Sahelian country, suffers the adverse effects of climate change on all areas of activity of the populations, particularly rural communities. In recent years, Chad suffered from a resurgence of extreme weather events, including floods, droughts, bush fires and land degradation. Agriculture, which employs the majority of the population, especially young people, has been hit particularly hard, which inevitably led to a reduction of people's purchasing power. Over 95% of Chad's agriculture relies on rainfall for irrigation, which explains the vulnerability of Chadians to climate change. In addition, very high poverty rates in rural areas prevents access to adaptation measures. As a result, the need for local populations to access financial markets and financial services is becoming critical. With dwindling income sources, people

find the purchase of seeds and agricultural inputs increasingly challenging. Coupled with weak climate risk management, smalls farmers are severely constrained when seeking loans for agricultural inputs (improved seeds, fertilizers, small-scale equipment) for their agriculture production. The vulnerability of agriculture is likely to worsen due to the steady decline in precipitation in Chad. Change of rainfall patterns to the south and the intra-seasonal rainfall variations cause impacts such as long dry spells and the degradation of natural resources (water, soil, forests) and agricultural infrastructure. The limited capacity of local populations to adapt to climate risks is also a well-known barrier. In this context, the project for the Community-Based Management of Climate Risks in Chad is proposing ways and means to strengthen the capacities of local communities to adapt to climate change, as well as to develop financial mechanisms for adaptation. This project will ultimately improve the management of major climate risks in the area.

FINANCING PLAN	
GEF Trust Fund *or LDCF or SCCF or other vertical fund*	USD 5,250,000
UNDP TRAC resources	USD 500,000
(1) Total Budget administered by UNDP	**USD 5,750,000**
PARALLEL CO-FINANCING (*all other co-financing that is not cash co-financing administered by UNDP)*	
Government	USD 8,000,000
PADLFIT (UNDP)	USD 4,000 000
(2) Total co-financing	**USD 12,000,000**
(3) Grand-Total Project Financing (1)+(2)	**USD 17,750,000**

SIGNATURES		
Signature: print name below	**Agreed by Government**	**Date/Month/Year:**
Signature: print name below	**Agreed by Implementing Partner**	**Date/Month/Year:**
Signature: print name below	**Agreed by UNDP**	**Date/Month/Year:**

I. TABLE OF CONTENTS

List of Acronyms and Abbreviations

ARC:	African Risk Capacity
CC:	Climate Change
CPD:	UNDP Country Development Programme
CDIG:	Documentation Centre and Geographic Information Services Department
DGRE:	Directorate General of Water Resources
DNM:	National Meteorological Service
GEF:	Global Environmental Facility
GIIF:	Global Index Insurance Facility
LDCF:	Least Developed Countries Fund
LUISW:	Liaison Unit for Information and Support for Women
LDP:	Local Development Plans
MAWP:	Multi-Annual Work Plan
MEDP:	Ministry of the Economy and Development Planning
MEWF:	Ministry of Environment, Water and Fisheries
MFI:	Microfinance Institution
MPWS:	Master Plan for Water and Sanitation
MFB:	Ministry of Finance and Budget
MWG:	Multidisciplinary Working Group
NDC:	Nationally Determined Contribution
NSCCC	National Strategy to Combat Climate Change
NMA:	National Meteorology Agency
NPD:	National Development Plan
OVI:	Objectively Verifiable Indicator
NAP	National Adaptation Plan
NAPA	National Adaptation Programme of Action
PB:	Project Board/Steering Committee
PARSAT:	Agricultural Susceptibility to Climate Change Project
PAP:	Priority Action Plan
PPG:	Project Preparation Grant
RDP:	Regional Development Plan
SDG:	Sustainable Development Goals
SIG:	Geographic Information System
SISAAP:	Food Security and Early Warning Information System
SNCCC:	Chad's Second National Communication on Climate Change
SSTrC	South-South and Triangular Cooperation
STC:	Scientific and Technical Committee
TFP:	Technical and Financial Partners
UNDAF:	United Nations Development Assistance Framework
UNDP:	United Nations Development Programme
UNFCCC:	United Nations Framework Convention on Climate Change
WRD:	Water Resources Directorate

II. DEVELOPMENT CHALLENGE

Background and Global Importance

1. Climate change is now considered one of the major impediments to sustainable development, with negative consequences for production systems, human and animal health, food security, the economy, natural resources, and infrastructure (IPCC, 2014). Climate change is manifesting itself in sub-Saharan Africa through extreme weather and climate events, spread of desertification and loss of biodiversity. Africa, where more than 95% of agricultural production depends on seasonal rains is likely to be hit hard (IPCC, 2007). Particularly in the Sudano-sahelian zone whose populations are mostly rural and dependent on agropastoralism which in turn are vulnerable to the variation and unreliability of rainfall. These problems are also exacerbated by environmental degradation and destruction, poverty and lack of financial and technical capacity of the general public, which increases their vulnerability. In West Africa, knowledge about climate change is still vague and contradictory.

2. Chad is a sub-Saharan landlocked country with more than half (63%) of its territory being arid (MEE, 2001). This country is increasingly threatened by the adverse effects of climate variability and change, especially in sensitive sectors such as agriculture, livestock and water resources. Over the past 40 years, drought stands out as the most frequent hazard affecting large numbers of people in rural areas and their different income-generating activities. Chief among the impacts of climate change in this country, is the gradual disappearance of Lake Chad as a result of persistent droughts and human activity. The surface area of this Lake has diminished from 25,000 km^2 to less than 3,000 km^2 today (LCBC, 2008).

3. Climate change is observed in Chad through the decrease and irregularity of rainfall during the rainy season, seasonal variability, as well as the shortening of the rainy season, with more or less long dry spells. These rainfall deficits exceeded 40% during the severe droughts of the 1970s and 1980s (Andigué et al, 2006). There is a great variability of precipitation in Chad with a downward trend in the order of 200 mm/year and a shift of precipitation from north to south between 1960 and 1990 (UNDP, 2018). The National Action Program to Combat Desertification (2003) indicates that between 1967 and 2003, the precipitation moved 180 km to the south. In the city of Bol, the rainfall fell from 300 mm/year to 200 mm/year between 1967 and 2003, and that of N'Djamena from 600 mm/year to 400 mm/year in the same period (UNDP, 2018). There is, however, a slight recovery in rainfall inflows from the 1990s, but with a very pronounced variability, and an increase in extreme weather and climate events such as rainfall intensity. Over the last two decades, Chad has witnessed fluctuations in the level of precipitation, characterized by increasingly sharp alternations between droughts and floods (NSCCC – République du Tchad, 2017).

4. Both the National Adaptation Programme of Action (2010) and the Second National Communications (2017) indicate an increase of 0.5°C to 1.7°C in the minimum temperatures and 0 to 1.34°C maximum, but do not specify the reference period (Republic of Chad, 2010; Republic of Chad, 2012). The National Strategy to Combat Climate Change (2017) shows a temperature increase of 0.5 to 0.8°C since the late 1970s in sub-Saharan Africa as well as an increase in N'Djamena since the mid-1990s (MEE, 2017). The rise in minimum and maximum temperatures in N'Djamena over the last two decades is considered the highest, with 1.5°C respectively.

5. The models used for the First National Communications of Chad (MEE, 2001) give variable results in terms of future climate trends. As such, for a scenario of average climate sensitivity using three General Circulation Models (CSIRO-TR, CSIRO2-EQ and ECHAM4), by 2023 the country will record a moderate increase in temperature in the range of 0.6°C to 0.8°C in the South, from 0.9°C to 1.2°C in the Center, and from 1.0°C to 1.3°C in the Northern part of the country. In terms of high climate sensitivity, projections were at 1.1°C for the South and 1.5°C for the North. Using the HADCM2 General Circulation Model, the same report projected an average climate sensitivity at 1.1°C for the South and 1.3°C for the North. The high climate sensitivity with this model was projected at 1.5°C in the South and 1.7°C in the North. According to the report, the climate scenarios indicate that rainfall will be unevenly distributed over time during the rainy season in the months of July, August, and September and that this period

will be less rainy than the months of April, May, June and the end of October and November (MEE, 2001). All models predict an increase in precipitation in the Northeast and North (MEE, 2001).

6. Chad's Second National Communication on Climate Change (SNLCCC) (MEE, 2012) presented results on precipitation and temperature projections for the 2030, 2050, and 2100 horizons based on 29 global models derived from the fifth phase of the Coupled Model Intercomparison Project (CMIP5) and using the MAGICC and SCENGEN softwares. The Communication predicted a temperature increase in all areas compared to the 1961-1990 period. In the Saharan zone, the increase was shown at 1.2 °C in 2030; 2.2 °C in 2050; 4.1 °C in 2100. The Sudanian zone results were almost identical to the Saharan zone. For the Sahelian zone, the increase was projected at 1.3 °C in 2030; 2.4 °C in 2050 and 4.5 °C in 2100. The report also predicted a significant temperature increase in June, July and August and a minor increase in March, April, and May (the hottest time currently) (MEE, 2012). The SNLCCC indicates that the average temperature in Chad would increase by an average of 1°C in 2030 compared to the period 1981-2010 under the optimistic scenario (RCP 4.5), particularly in the Northern part of the Sahel and the entire Saharan zone. Under the pessimistic scenario, RCP 8.5, this increase would be around 1.5°C by 2030 in the extreme North of the country (Republic of Chad, 2017).

7. The Intergovernmental Panel on Climate Change Fifth Assessment Report (IPCC AR5) mean annual precipitation projections indicate that under the RCP 8.5 scenario, there will be an increase in precipitation over Chad throughout the 21st Century. These model projections indicate that in southern Chad there will be an increase in the wet season rainfall from July to September. They also project an increase in heavy precipitation events in Southern Chad with a decrease in the Northern part of the country (Climate Change Knowledge Portal, 2018). According to the projection of all models, the number of hot days and nights will increase yearly and the projected fastest increase will be from July to September. The South of Chad will see the quickest increase in these events (Climate Change Knowledge Portal, 2018). Recent climate projections (Climate Change Knowledge Portal, 2018) using 14 Global Circulation Models from the IPCC AR5 indicate that by the 2060s, mean annual temperature is projected to increase from 1.0 to 3.4°C and by the 2090s to between 1.6 to 5.4°C.

8. According to a study by FAO (2002), the main threat to food security could come from both gradual changes in climate and from the expected increase in the frequency and magnitude of extreme weather events. Based on the work carried out during the "Community-based management of climate risks in Chad" project design phase on selected communities from the different geographical areas, the impacts of climatic hazards (drought and flood) result in difficult or late start to the wet and dry seasons, dry episodes after sowing or at the flowering stage, early end of rains, flooding of fields in lowland areas before tillering, flooding in the mature phase – harvests, and out of season rains.

9. In addition to the threat to food and water security, rural communities face resource conflicts and are often forced to migrate (IUCN, 2009). Rural women in developing countries are considered more vulnerable than men to climate change (MEE, 2009). Women in Chad represent about 51% (INSEED, 2009) of the population, and often live in precarious conditions attributable to land degradation and declining water resources, especially in rural areas where female-headed households are generally poorer (SNRP2, 2008).

Alignment with National Policies

10. This initiative is fully in line with the priorities of the Government of Chad pursued in its development programs and plans, particularly in terms of disaster and risk management programs. This project supports the 2030 vision, specifically the objectives of "Pillar 4: Improving the quality of life of the Chadian population". It is also in line with sub-pillar 4.1 of the National Development Plan (NDP) 2017-2021 "A healthy environment with preserved natural "resources", in particular result 4.1.3 "Good management of natural resources is ensured", which aims to: (i) implement the policy of combating climate change and preserving biodiversity; (ii) introduce resilient agricultural practices with respect to climate; and (iii) roll out a mechanism for prevention and management of risks and natural disasters.

11. This project will ensure that the gender issues are addressed equitably across all its components by being aligned with the National Policy on Gender for 2011-2020, which aims at the following: "By 2020, Chad is a

country free from all forms of gender inequalities and inequities, from all forms of violence, where men and women have equal opportunities to access and control resources and participate equitably in decision-making processes in the interests of achieving sustainable development." The proposed project is also based on the following National Adaptation Programme of Action priorities: Priority #3 “Improvement, Dissemination and Sustainability of agricultural Calendar for Small Farmers Vulnerable to Climate Change”; and Priority #10 “Climate Risk Management”.

12. The objective of this project is to strengthen the capacity of vulnerable populations to respond to climate change and to enable them to better cope with climate shocks by responding to early warning signals and introducing financial risk transfer mechanisms, such as index-based agricultural micro-insurance. This combined approach will provide a long-term response to the repeated effects of extreme weather and climate events. This initiative will strengthen the climate information system by supporting the development of early warning systems, the monitoring of climate variables and observation facilities, and building the capacity of the stakeholders involved. It will also contribute to strengthen the capacity of relevant ministries and directorates dealing with disaster risk management in Chad, as well as the local communities in terms of how they react and respond to climatic risks through the implemention of a participatory policy at different levels of governance (from the national to the local levels).

Specific barriers addressed by the project

1. **Poor access to climate projections and models for the adoption of adaptation measures**: Climate projections and models are not available as a result of missing data from the recording station or because of non-functional equipment caused by poor maintenance. This situation makes an optimal assessment of the vulnerabilities and impacts of climate change difficult at the community level. These problems are compounded by the weak capacity of the hydro-meteorological technical staff in climate analysis and projection.
2. **Poor translation of drought and flood forecasts into early warning for rapid public response and action at community level**. Chad currently does not have the technical capacity and reliable data to produce hydro-meteorological forecasts that are useful and suited to the specific needs of populations, end-users and the affected socio-economic sectors. In addition, there is no capacity to provide forecasts for each region and community, which is essential for local planning development.
3. **Limited community understanding of climate change issues and financial risk transfer mechanisms that facilitate climate change adaptation**. The technical, financial and educational background of communities makes it difficult for them to grasp the issues related climate change and understand the notion of risk. In this context, defining risk and translating this concept into local languages is challenging. This lack of understanding also affects the insurance sector, which is still in its infancy in sub-Saharan Africa and is not culturally accepted by communities, requiring specific training and outreach.
4. **Lack of experience in financial mechanisms for managing climate risks.** Chad does not have an agriculture insurance scheme, nor climate risk sharing and index-based risk transfer and insurance mechanisms. This lack of experience in risk financing mechanisms poses a major barrier to the development of products and initiatives and affects both state institutions and the private sector (microfinance institutions).
5. **Weak synergy between institutions and agencies in early warning systems.** The coordination between the Food Security and Early Warning Information System (SISAAP), climate data-related projects and government institutions is limited to influence the production and dissemination of alerts. This situation leads to a duplication of efforts during the production of alerts and a lack of sharing of information and experiences. The systems currently in use are not very efficient and do not allow the collection of reliable information in suitable periods of time.

III. STRATEGY

13. The objective of the Project is to strengthen the responsiveness capacity of vulnerable populations to better cope with climate shocks by reacting faster to warning signals and reducing their financial risk by using risk financing mechanisms. This will contribute to the development of the community-based climate risk management process in Chad. The project will also contribute to achieve the following Sustainable Development Goal (SDGs) - SDG5: Gender equality, SDG12: Responsible consumption and production, SDG13: Climate action and SDG15: Life on land.

14. This initiative will contribute to strengthening the resilience of communities in the face of climate change by addressing the above-mentioned vulnerabilities and underlying barriers through these two components:

Component 1: Community-based early warning system for preparedness against climate-related disaster risks. Expected outcome 1: Producing and disseminating relevant and timely climate information to enhance the preparedness of national and local stakeholders and threatened communities to respond appropriately and effectively in a timely manner to climate-related disaster risks. This component will strengthen Chad's operational capacity to produce and provide hydro-meteorological services for early warning and improving risk information for the agricultural sector. Emphasis is also placed on strengthening the capacity and enhancing cooperation with key sector ministries, departments and other stakeholders working on climate risk management at the grass-roots level. The project will establish early warning systems with relevant information for end-users or communities.

Component 2: Enhancing risks management capacities and introducing new finacial risk options. Expected outcome 2: Promote financial risk transfer mechanisms (e.g. the combination of micro-finance and micro-insurance) to help rural households minimize losses and provide safety nets against climate shocks. This component will develop financial mechanisms for climate risk management including index-based agricultural insurance.

Choice of intervention sites

15. This project intervention area will cover the plains of the Chari-Logone and the Mayo-Kebbi, in five departments of the country that are more affected by flooding and drought: the Logone occidental, the Logone oriental, the Tandjilé, the Mayo Kebi and N'Djamena. These departments are located in three of the Livelihood Zones (ZMEs)1 (Figure 1) in Central and Southern Chad that are part of the national livelihood mapping:

- ZME 1: Logones (Oriental and Occidental) + West Tandjilé + Mayo Kebbi West
- ZME 2: East Tandjilé + Tandjilé Center + Mayo Boneye
- ZME 5: Mayo Le'yé and N'Djamena

16. ZME 1 is subject to a Sudanese and Sudano-Sahelian climate. The main household activity in this area is diversified rainfed agriculture. The distinctive feature is the widespread practice of growing cotton and peanuts as a cash crop. Households also grow sorghum, millet and maize. This area is a transhumance corridor for animals going south and is sometimes the scene of deadly conflicts between herders and farmers.

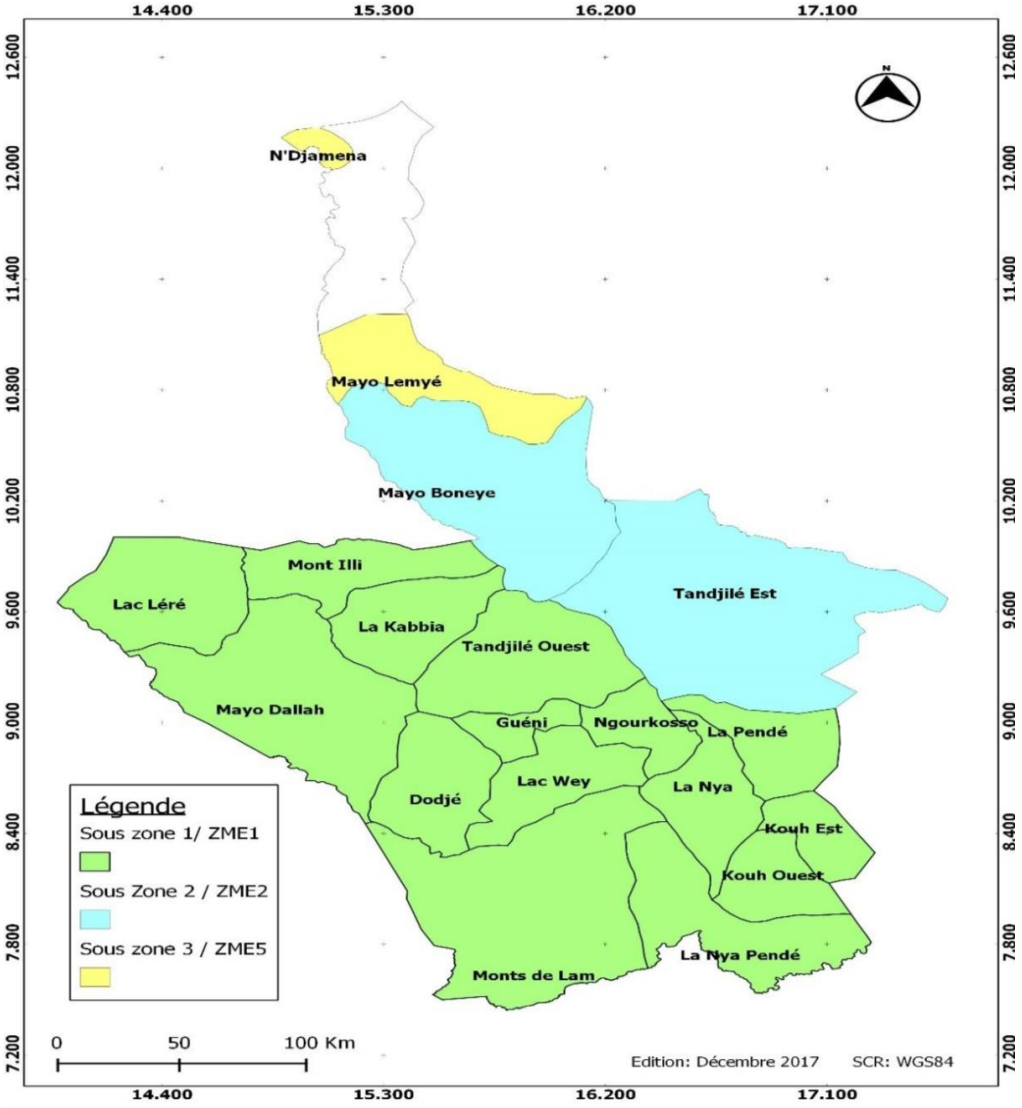
17. ZME 2 covers the departments of Mayo Boneye, Tandjiles (east and west) and is under a Sudanese to Sudano-Sahelian climate. The main activity in this area is rainfed rice cultivation in the floodplains. In this zone, rice is both a food crop (self-consumption) and a cash crop. Depending on the local potential, other crops are also grown. Groundnut is grown mainly in the south of the zone, sorghum is grown on small upland areas. In the

[1]Chad is divided in 9 geographic zones (Zone de Moyens d'Existence - ZME) where communities share the same livelihoods (Grillo & Holt, 2009).

north-west of the zone, the dominant crop is red sorghum cultivation, in the center around Kim, Eré and Djouman the preference is given to taro while around Laï, sweet potato is preferred.

18. ZME 5 is an agro-pastoral type and belongs to the great Sahelian biophysical zone where production systems are structured around water points. In this zone, there is a strong complementarity between agriculture and livestock farming. The animals value crop residues better because they can graze on the villages' soil throughout the year. The herds only come out of the village exceptionally, or at least come back every day to their owner's compound. Nevertheless, around the main cities, including N'Djamena, vegetable and fruit production are developing rapidly, thanks to the development of small irrigated areas.

Figure 1: Map of the project intervention areas



Source: Project consultant

19. Priority risks according to the livelihood zones:

- ZME 1 (Logones + Tandjilé West + Mayo Kebbi West)
  Shortening of the rainy season
  Decrease in annual rainfall totals
  Sporadic floods

- ZME 2 (East Tandjilé + Tandjilé Center + Mayo Boneye)
  Shortening of the rainy season
  Recurring floods
  Decrease in annual rainfall totals
- ZME 5 (Mayo Lémyé and N'Djamena).
  Shortening of the rainy season
  Temperature increase
  Seasonal drought

20. This initiative will support the national efforts to build resilience and climate risk management mechanisms in these pilot zones. The main target groups of the project are vulnerable populations in these areas, or more specifically the farmers and pastoralists.

Benefits at the national level

21. The National Adaptation Plan (NAP) project will strengthen part of the observation network, improve the access to information and will build capacity for national, regional and local stakeholders to collect, analyze and use climate information. The "Community-based management of climate risks in Chad" initiative will ensure full coordination, synergies and complementarity with the NAP.

22. In this context, the project will be implemented in the identified departments and will put an emphasis on the assessment of hydro-meteorological equipment and facilities. It will also strengthen the data infrastructure necessary for the development of the early warning system and the development of agricultural insurance products in these zones. This in turn will call for efforts to strengthen regional stakeholders' capacities in the management of equipment and infrastructure. The project will also support capacity-building for the National Meteorological Service (DNM) and Directorate General of Water Resources (DGRE) in the use of the collected data for monitoring and early warning purposes and in translating climate-related information into policy advice for the communities. These initiatives will improve the quality of the forecasts and the understanding of the specific needs of the populations in the project areas and will facilitate the integration of the project results into decision-making processes. Stakeholders will thus experience improvements in their capacity to interpret climate information and convey this information to communities. Improved stakeholder capacity is essential for the delivery of reliable climate prediction, warning and projection outputs that are essential at the national level to inform, guide and oversee the planning process in the country. In addition, this initiative will contribute to the development of the agricultural insurance market, particularly index-based insurance. By strengthening the response and planning mechanism at the regional level, the project will enable Chad to become more effective and efficient in allocating existing resources to climate risk management.

Benefits at the local level

23. The project will be an opportunity to promote a new form of climate risk management through index-based micro-insurance and access to information for decision-making. Local communities in the project areas will be a major beneficiary of those services, which will give them improved access to credit and will bring climate risks insurance options managed on the international insurance market to local levels. These efforts will serve to improve the living conditions of vulnerable groups and enhance their involvement in the national economic and social development process. The project will also be a tool for promoting social cohesion at the local community level through awareness-raising, training and information on adaptation and will limit the many conflicts, particularly between farmers and pastoralists, thanks to the adoption of the best adaptation techniques and technologies. Thus, communities will have regular access to climate information, which is crucial for decision-making in a climate crisis (flood and drought). They will also experience a noticeable increase in their capacity to respond expeditiously to climate shocks.

24. At the same time, this project will make it possible to mainstream the project community concerns by feeding into the NAP process in terms of national policies, plans and strategic documents. Through the multi-scale scheme (from the national and regional to the local level) that will be put in place, the specific needs of the populations will be easier to capture and the public authorities will be better able to meet the expectations of the local communities. In addition, the development of agricultural micro-insurance will enable vulnerable populations in communities to benefit quickly from credit and coverage in case of loss of the crop due to a climate shock.

The benefits involved in taking gender issues into account

25. In Chad, the involvement of women in the climate system is very low. The project will provide women in the project areas with regular access to information and credit for production. Since women play a vital role in community-based production systems, this initiative will involve women in the implementation of all the project deliverables, ranging from the access to information and its use, credit and micro-insurance. Thus, special emphasis will be placed on building women's capacities throughout the project. As such, the design of training modules on climate risk management will enable women to benefit from current knowledge on climate change adaptation and risk management.

Contributions to the strategic outcomes of the LDCF

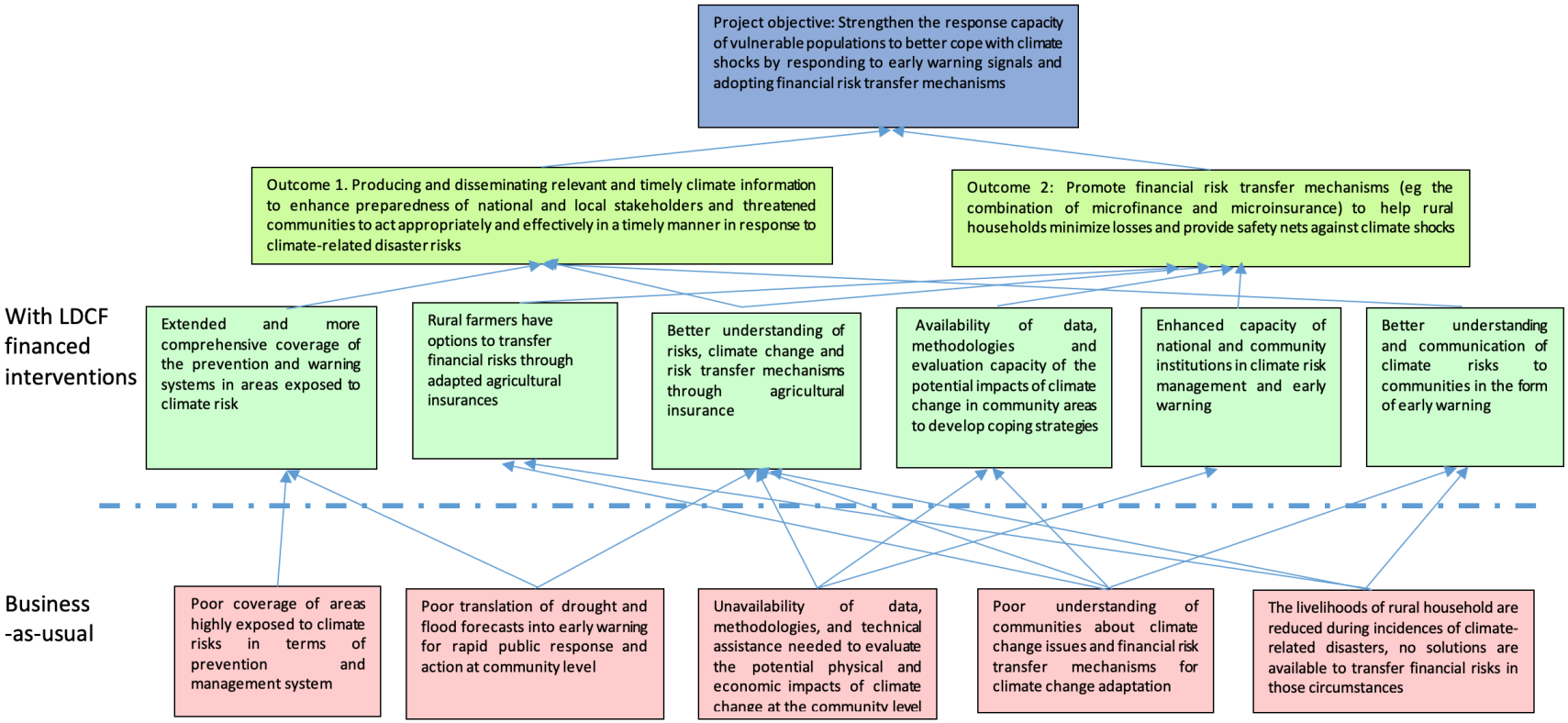
26. The project will contribute to the NAP process to create a strong foundation for decision-making related to climate change adaptation in Chad and upon which many other adaptation projects will be able to rely to mainstream adaptation in the country. The catalytic nature of those activities as well as the integration potential of this project make it particularly suited with the objective of the LDCF. The project also emphasizes capacity building and awareness raising as key activities that will enable favorable conditions for an effective response to climate-related disaster risks at both national, regional and local levels. Private sector engagement is a key pillar of the new LDCF programming strategy. With the introduction of new financial products to reduce the exposure of vulnerable populations to climate-related risks, this project aims to bring innovation to the insurance industry, which could lead to key partnerships with the private sector and give a boost to the insurance sector in Chad. Table 1, below, highlights the contribution of this project against the outcomes of the LDCF fund for 2018:

Table 1: Project alignment with LDCF Strategic Outcomes

Anticipated outcomes from the LCDF fund	Anticipated outcomes from the Chad project
Outcome 1.1: Technologies and innovative olutions piloted or deployed to reduce climate-related risks and/or enhance resilience (aligned with GCF and AF) **Outcome 3.1**: Climate-resilient planning enabled by stronger climate information decision-support services, and other relevant analysis (aligned with PPCR and GCF) **Outcome 3.2**: Institutional and human capacities strengthened to identify and implement adaptation measures (aligned with AF and PPCR)	**Outcome 1:** Producing and disseminating relevant and timely climate information to enhance preparedness of national and local stakeholders and threatened communities to act appropriately and effectively in a timely manner in response to climate-related disaster risks.

Output 1.2 Innovative financial instruments and investment models enabled or introduced to enhance climate resilience **Outcome 3.2**: Institutional and human capacities strengthened to identify and implement adaptation measures (aligned with AF and PPCR)	**Outcome 2:** Promote financial risk transfer mechanisms (e.g. the combination of microfinance and microinsurance) to help rural households minimize losses and provide safety nets against climate shocks.

Figure 1: Theory of Change



The theory of change for this initiative.

27. Communities across Chad are highly vulnerable to the impacts of climate variability and change (drought and flood) that affect their income generation activities, such as agriculture and livestock. In this context, the project identified barriers, such as the poor coverage of areas exposed to climate risks, poor translation of drought and flood forecasts into early warning for rapid. In addition, there is poor understanding of communities about climate change issues and on the financial risk transfer mechanisms for climate change adaptation.

28. These barriers will be addressed through LDCF-funded and co-financed interventions that will foster prevention, support warning systems able to cover all areas of climate risks, better the understanding of risks, climate change and risk transfer mechanisms through agricultural insurance, make data more available, methodologies and evaluation capacity of the potential impacts of climate change in community areas to develop coping strategies. It will also enhance the capacity of national and community institutions in climate risk management and early warning to better understanding of risks to communities through data. Ultimately, this will contribute to achieve the project main goal of combining early warning and financial risk transfer mechanisms approaches to make a difference in key sectors affected by climate change and ensure that communities and the Government of Chad are in a better position to tackle the adverse effects of climate change.

IV. RESULTS AND PARTNERSHIPS

Expected results:

29. The objective of the project is to strengthen the response capacity of vulnerable populations and enable them to cope more effectively with climate shocks through rapid responses to early warning and the introduction of financial mechanisms to address risks associated to climate variability and change. The project will build on the partnership to be established between the Ministry of Agriculture, the Ministry of Environment, Water and Fisheries, DNM, DGRE, UNDP and other grass-roots stakeholders, to better meet early warning and index-based microinsurance expectations.

Component 1: Community-based early warning system for preparedness against climate related disaster risks

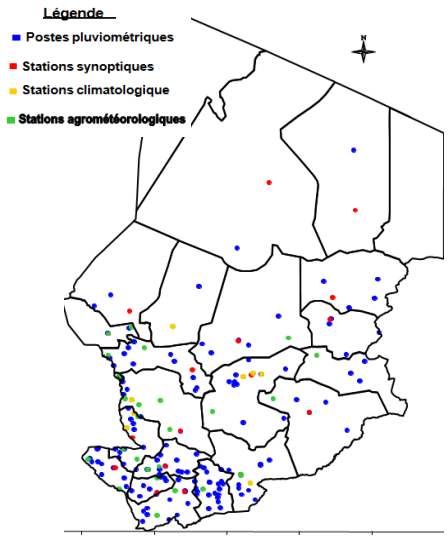
Outcome 1: Producing and disseminating relevant and timely climate information to enhance preparedness of national and local stakeholders and threatened communities to act appropriately and effectively in a timely manner in response to climate-related disaster risks.

Co-financing of Outcome 1: US $ 7,000,000
GEF Project Funding for Component 1: US $ 2,419,925

Without LDCF financing

30. Putting in place an early warning system to guard against the risks of drought and flood in Chad is an extremely urgent matter. However, the coordination between the observation network and hydro-climatic information measurements in the country is limited. This lack of coordination calls for the establishment of a proper early warning system that allows sharing of data and information across the interested parties.

Figure 2: Observation network of the National Directorate of Meteorology



31. In its primary mandate, the DNM is responsible for the development of climate information products, including daily, ten-day and seasonal weather forecasts, special seasonal forecasts bulletins, agro-hydro-

meteorological news bulletins, agro-meteorological advice, consulting services and provisional schedules for sowing. However, the current DNM observation network continues to suffer from capacity and coverage constraints, especially in the Central and Northern parts of the country (figure 2), which are critical for the development of an early warning system. Currently, Chad's National Directorate of Meteorology has a network of:

- 22 Synoptic Stations, 16 of which are operational;
- 28 Agro meteorological stations, 4 of which are operational;
- 8 Climatological Stations, of which only 1 is operational;
- 153 Pluviometric Posts, 87 of which are operational.

32. Most of the installed stations require equipment maintenance and improved network coordination in order to ensure better coverage for the various zones. A database for climate data management is currently being used but requires additional work to ensure data transfer from the various stations to the base and put in place adequate quality control processes. All of this will contribute to strengthening the monitoring of climate variables.

33. Some early warning systems are already in place, but with very limited technical and human capabilities to manage them, alerts cannot be triggered within an appropriate timeframe for a rapid response. Weather forecasts are produced by the National Directorate of Meteorology and broadcasted by various means, including radio and television. However, the system needs improvement especially for reaching rural communities who need access to this information, while making provision for monitoring and evaluation in order to adjust and upgrade the system in the future. There is also a need to build capacity on the various risk management services at national, regional and community levels. This reinforcement must include the analysis and interpretation of the information produced for early warning purposes.

34. At the regional level there are early warning systems, but these are mainly geared towards food security and organized into a multidisciplinary working group.

With LDCF financing

35. An early warning system targeting communities will be established in the project areas to collect and analyse information as a platform for climate-related disaster risk reduction and to improve adaptation to climate change. Resources from the LDCF will enhance the preparedness capacities of stakeholders in the project areas for the production, dissemination and monitoring of relevant and timely regional climate information and alerts on risks to allow threatened communities to be prepared and respond effectively in a timely manner.

36. The recently approved NAP project is providing targeted sites with new meteorological stations and refurbishing outdated stations to improve coverage and provide more reliable climate information. The NAP will also implement training programs on the operation and maintenance of the hydro-meteorological network equipment together with data processing and analysis and on the integration of adaptation on climate sensitive sectors. The NAP initiative will create a database that will provide climate products for early warnings.

37. The current project will build on the data collected by the NAP project and focus on improving the quality of climate services at the regional level in the project areas. This will include the development of customized climate products, training and capacity-building to improve the understanding and use of climate data for the formulation of climate products, formulation of thresholds to characterize climate risks, data management and observations and the design of a monitoring and evaluation mechanism tool. These resources taken together will lay the groundwork for the early warning system that will be put in place in the project areas.

38. In cooperation with the NAP, the project will strengthen institutional capacities and coordination by encouraging participation in various meetings at national, regional and local levels, enlisting the support of various sectors through cross-cutting mechanisms. It will establish a platform with other projects with similar objectives for coordination, information management and sharing and pursuing advocacy efforts.

39. This initiative will support the development of a climate risk model for managing agriculture insurance policies. This will be done in cooperation with microfinance institutions through market risk transfer instruments such as index-based insurance, which will provide rapid liquidity to the communites to reduce their financial and economic losses resulting from drought and flooding.

Output 1.1: A decentralized, reliable and functioning organizational system for managing climate risk and disasters, and for coordinating response is established

40. In the climate risk management framework, DNM and the DGRE stand out as central bodies, engaging in the collection, analysis and dissemination of hydro-climatic information. However, their observation networks are very poorly coordinated. The absence of state-of-the-art measuring instruments (rain gauges and automatic hydrological equipment) is not conducive to proper monitoring of data and therefore adversely affects the quality of alerts. Given their limited capacity, it is necessary within this project and the NAP to strengthen the capacities of both institutions, in management of climate observation systems, in database management backup, in meteorological, seasonal and intra-seasonal forecasting, as well as in regular monitoring of data. Under the NAP LDCF project, observation networks will be reinforced with equipment.

41. Based on the gap analysis of existing hydro-meteorological network supplementary equipment by the NAP LDCF initiative, this project will conduct an assessment of the existing system in the project zones. It will be the base for the establishment of an early warning system, as part of the climate risk management process that will address the needs for the project community-based climate risk management. This assessment will report on the strengths and weaknesses of the system in the project zones and will propose the most appropriate methods and arrangements. The assessment will include (i) a review of the current equipment and observation networks of DNM and the DGRE as well as their human and technical resources in the project areas, (ii) an evaluation of the database backup and management system (SGDB) of the DNM and the DGRE, (iii) a review of the specific hydro-climatic information needs of local communities and the most appropriate means of communication.

42. The results of this assessment will also enable the identification of the most appropriate location and model of the meteorological equipment and the design of an early warning system guide. The guide will cover the setting up of (i) a hydro-climatic data management system, (ii) a hydro-climatic information management and communication plan for both agencies, and (iii) flow of information among the various stakeholders at national, regional and local levels. This guide will be introduced to DNM and DGRE staff through 2-days trainings for each agency.

43. Based on the results of the assessment, this project will complement the NAP LDCF project by providing additional meteorological equipment to the areas where it will be implemented, which include 4 meteorological stations, 5 puviometric gauges and two hydrological stations for the rivers Logone and Chari. This equipment will enable the production of key data for the development and dissemination of EWS, including for the Flood Alerts produced under “Flood Finder Alert System”, supported by UNITAR and UNOSAT. In addition, this initiative will also provide technical assistance towards public policies on Early Warning Systems, enabling decision-makers to make use of produced early warnings.

Activity 1.1.1. Conduct the assessment of the hydro-climatic observation network in the project zones

Activity 1.1.2. Procurement and installation of meteorological equipment in the project zones

Activity 1.1.3. Design a guide to improve the hydroclimatic data management and communication

Activity 1.1.4. Technical assistance to strengthen public policies on EWS

Activity 1.1.5. Coordination of early warning activities with other projects, UN agencies, and government institutions

Output 1.2: A communication and dissemination system to reach all end users is established

44. The various institutions and users must be able to receive the information or alert in a predefined and agreed format and channel. The information will be automatically distributed to the end users through local public service anouncements, media and short message services (Table 2) prompting appropriate responses and actions by the individuals following a well-defined scale. The production of an early warning system entails action to define alert thresholds, the transmission format for the alert and the mechanisms with the results to be achieved on the basis of a gender sensitive consensus among all stakeholders, including the end users in local communities. This initiative will support the design of products and services and decision-making mechanisms to facilitate effective responses to alerts. Standard operating procedures (SOPs) will be designed to ensure that actions at various administrative levels (from regional to local levels) are clear and easy to undertake by each responsible agency.

45. To achieve this output, a feasibility study will be conducted on the implementation of the early warning system and define the critical thresholds necessary to trigger an alert on the project areas. This will include the development of (i) a map identifying areas at risk from floods and drought, indices for monitoring variability and climate change, (ii) a template with warning messages for rural communities in local languages that are appropriate for the chosen broadcasting medium. This activity will be developed during the initial phase of the project. It will then serve to identify and confirm the major project areas at risk of flooding, the areas heavily affected by recurring droughts and thus enable participants to observe flood and drought patterns changes over the years. This stage will also provide an opportunity to establish vulnerability maps for flood zones and identify warning thresholds. This process will be carried out in close collaboration with the DNM, the DRWR and the Directorate General of Civil Protection (DGPC).

46. As part of the development of an efficient early warning system, a set of factors must be taken into account such as rainfall upstream and downstream river levels for the development of monitoring indicators. Understanding trends and forecasts will be based on examining each of these factors and how they interact.

47. Based on the data collected through the indicators, a climate shock response plan will be designed to provide responses for identified climate risks at different levels of governance, ranging from regional to local. This is reflected in the example table below:

Table 2: Examples of the appropriate technologies by EWS component and level

EWS components	**Local level, for communities or hazards**	**National**	**Regional (sub-region)**
Risk awareness	Hazard map prepared with community members (through the community risk assessment process)	SIG map of risks showing hazards and vulnerabilities in the project area	Satellite imagery of the last 30 years that can be added to the observational data in order to carry out an accurate mapping of the risks while showing hazards and vulnerabilities
Surveillance	Manual gauges for rainfall and river levels and panels to describe the river levels	Automated gauge system with an information system that centralizes data in N'Djamena	Real-time satellite monitoring for surveillance of regional conditions and forecasts based on global climate models.
Response capacity	Evacuation routes identified on panels built by the	The responses will be described in the communication tools for the alert.	

	communities and shelters prepared at community level.		
Communication of the alert	Local communication tools: word of mouth, town crier, drums, flags, community radio, bells, telephone, television, mosque loudspeakers, churches.	Radio, telephone, television, bulletin.	Seasonal forecasts by email/internet, radio, television.

Source: PPG studies

48. The identification of indicators and the formulation of a climate shock response plan in the project pilot areas will help determine the level of risk and the need for communication to the vulnerable populations. The partnership with community radios, the national television of Chad, the media and mobile telephone companies will facilitate the dissemination of the information, in French, in Arabic and in the different local languages.

Activity 1.2.1. Conduct a feasibility study for a multi hazard early warning system in the project areas

Activity 1.2.2. Implement monitoring indicators for identified risks

Activity 1.2.3. Design a climate shock response plan in the each of the five departments

Activity 1.2.4. Develop a communication strategy on climate-related disaster risk reduction to inform a platform for information management and sharing for media and channels

Output 1.3: Reliable agromet advisory and Early Warnings by DREM and the NDM to target population are generated and disseminated

49. To achieve this output, activities will focus on capacity building for personnel of the SISAAP, CDIG, DGRE and the DNM on the collection, analysis and dissemination of hydro-climatic information and the issuance of alerts through appropriate channels. These agencies will also see its capacity strengthened in the preparation of short-term intra-seasonal forecasts, but also in the use of global model outputs (UK Met Office, Météo France, among others) for analysis and correlations. This activity will be done in cooperation with NAP and through south-south cooperation, between the National Directorate of Meteorology of the sub-region that already has capabilities in the field and potentially in partnership with the National Agency of Civil Aviation and Meteorology of the Senegal (ANACIM). Capacity building in satellite data collection and analysis will strengthen the capacity of DNM to generate more reliable and accurate local forecasts. It is also necessary to strengthen the capacities of the DGRE and the DNM in the communication and sharing of information and forecasts produced.

50. During the implementation of the project and together with the various stakeholders (hydrologists, climatologists, NGOs, State Ministries, end-users and disaster risk managers), a feedback loop will be developed for monitoring the impacts of the information produced in an effort to evaluate the relevance of the system. In this activity, the extension workers from the two agencies will be trained in Regional Centers (African Centre of Metereological Application for Development and Aghrymet in Niamey).

Activity 1.3.1 Organize trainings for SISAAP, CDIG, DGRE and DNM staff on the collection, analysis and dissemination of hydro-climatic information and the issuance of alerts through appropriate channels

Activity 1.3.2. Organize trainings for SISAAP, CDIG, DGRE and DNM staff on the use and application of forecasting models

Activity 1.3.3. Strengthen the scientific knowledge of SISAAP, CDIG, DRWR and DNM through training workshops and seminars on the impacts and risks of Climate Change

Output 1.4: Personnel from the NDM and DGRE, ministries and communities are trained to run the Community Based-Early Warning system

51. Climate services are a relatively new field of development in Chad. It is necessary to strengthen the capacities, in terms of data collection, management, observations and methodologies, sharing information, understanding climate, weather forecasts and identifying risks, of institutions such as the Ministry of Agriculture, the Ministry of Environment, Water and Fisheries, the specialized directorates and vulnerable populations. Doing so will ensure the sustainability of the project on community-based management of climate risks in Chad. The results of the project will be incorporated into the different plans and strategies of the concerned institutions.

52. This output aims to ensure the correct and sustainable operation of the system that will be designed and implemented under output 1.1. To this end a technical training program for managers and employees of DNM and DGRE will be developed in conjunction with these two structures. The implementation of the training program will provide the two institutions with the tools and skills necessary to maintain the system in place covering issues such as Disaster Risk Reduction and EWS, Monitoring and Evaluation in EWS, Tools and equipment and SOPs. The two institutions will then be responsible for building the capacity of the various ministries and communities.

53. Overall specific activities include:

Activity 1.4.1: Development of a training program on early warning systems for the project zones

Activity 1.4.2: Organization of training workshops on early warning systems for DNM, SISAAP, CDIG, DGRE, local authorities and communities

Component 2: Enhancing risks management capacities

Outcome 2: Promote financial risk transfer mechanisms (e.g. combination of microfinance and micro-assurance) to help rural households minimize losses and provide safety nets against climate-related shocks

Co-financing for Component 2: US $ 5,500,000
GEF Project Funding for Component 2: US $ 2,830,075

Without the support of the GEF grant

54. Today, due to climate change, subsistence farmers in Chad suffer from rainfall variability and extreme weather events that affect their livelihoods. Chad suffers from unreliable weather conditions and few national programs include financial mechanisms for climate risk transfer to the international insurance market as a response to climate change.

55. The insurance law in Chad is regulated through the 1992 Inter-African Conference on Insurance Markets (CIMA) treaty, which contains only one article on agriculture insurance (Article 55). In 2012, CIMA adopted its Book VII which approved micro-insurance and index-based agriculture development and regulation.

56. In this context, there are regional and sub-regional levels initiatives such as the African Risk Capacity (ARC) initiative and the World Bank Group's Global Index Insurance Facility (GIIF). Program experiences also exist in countries of the subregion, notably in Senegal, Burkina Faso, Mali and Benin. Several Microfinance Institutions (MFI) operate in Chad, such as Finadev (the first accredited MFI institution in the country) that has national coverage, and the *network of savings and credit unions and community associations (baobab)*.

57. The access of local populations to micro-insurance and microfinance products is very limited. The purchase of seeds and agricultural inputs has become a challenge for people that have seen their income shrinking with the increased unreliability of climatic conditions. Also, the low control of climate risks severely

limits the access of small farmers to micro-credit for the supply of agricultural inputs (improved seeds, fertilizers and small equipment) and other production goods. This vulnerability of the agriculture sector is likely to worsen due to the increased variability of rainfall in Chad, with a shift of precipitations towards the South of the country and with intra-seasonal variations in rainfall at times causing dry spells. Not to mention the degradation of natural eco-systems (water, soil, forests) and agricultural infrastructure. The low capacity of local populations to adapt to climate risks in the long term and adopt sustainable strategies is also a well-known barrier.

With LDCF support

58. With LDCF funding, the project will pilot a program for micro-insurance coupled with micro-credit schemes. The program will target subsistence farmers and pastoralists and aim to provide a financial safety net, protecting them against climate risks and crop losses. Based on the CIMA regulatory framework on micro-insurance and index-based agriculture, this project will support policy and institutional capacity development of Goverment institutions, financial institutions and communities to better understand index-based agriculture and access to micro-insurance and develop a market for it. This is particularly relevant in Chad, where there is no experience in agriculture insurance. This project will undertake a market and institutions analysis (output 2.1), the design of appropriate schemes and insurance products (output 2.2), the strengthening of capacities and education (output 2.3), the testing and evaluation of financial risk instruments (2.4) and cross-community peer review mechanisms.

59. This project will focus on the development of micro-insurance and micro-finance in close collaboration with MFIs at the community level albeit in conjunction with the initiatives implemented at the national level, including the program currently being implemented with ARC (African Risk Capacity)[2] The development of micro-insurance will require the involvement of the public sector, through regulations and incentives, to foster the investment of the private sector in micro-finance for smallholder farmers. Indeed, micro-finance institutions perceive the investment in micro-finance for vulnerable populations as a highly risky transaction and increased financial incentives are expected to improve investment conditions. The development of those insurance products appears today as a national priority to help small producers secure investments and adapt to climate change. This project supports the Government of Chad in its efforts to build resilience and climate risk management mechanisms in the pilot areas of the Central and Southern parts of the country.

60. The main target groups of the project are the vulnerable farmers and pastoralists populations in the pilot communities associated with the project. The project will particularly target young people and women who play an important role in the development of activities in the community areas, in particular, resilient and sustainable agriculture, household food and nutrition security. The main objective of this component is to contribute to strengthening the resilience of communities in the face of climate change, and to facilitate access to credit through the development of the agricultural insurance market. The component will contribute to risk prevention and management while modifying the behavior of populations (farmers and pastoralists) in the direction of more sustainable investments and the use of financial services for climate risk management. Inspired by ongoing initiatives in other countries, this program marks a change in Chad's climate risk management.

Output 2.1: Structural analysis of market and institutions to determine demand for micro-insurance and related risk-transfer mechanisms is conducted

61. Agricultural insurance (and more specifically, index-based insurance) is still in its infancy in sub-Saharan Africa, but it has grown rapidly in recent years. Nowadays, many programs focus on the main applications of

[2] A specialized agency of the African Union (AU), the entity known as Mutuelle ARC aims to strengthen the capacity of Member States to manage the risks associated with natural disasters, adapt to climate change and assist populations at risk of food insecurity.

insurance policies based on a climate index. Among others, the projects of GIIF and ARC are worth mentioning. A structural analysis of the market and institutions will be done to determine the demand for micro-insurance and associated risk transfer mechanisms of local farmers and households, as well as the market's ability to support and offer these financial tools.

62. Under this output, the market and the institutions will be assessed to have a comprehensive understanding of the potential for micro-insurance, in particular index-based insurance, including regulations. The assessment will also examine the potential risks and opportunities for the government, private sector, institutions and organizations. This assessment will be completed by a gender analysis in terms of access to micro-finance and climate information and the definition of a clear gender action plan that will promote the empowerment of women and girls. In addition, to determine the demand for micro-insurance of agricultural producers in the project area, an economic analysis will be made to assess the incomes of rural households as well as their ability to pay premiums for those insurance policies.

63. This assessment will be completed with a detailed report on the needed incentives for the private sector to engage in microfinance for vulnerable rural households. This will include guidelines for the Ministry of Finance and Budget to integrate new or revise existing regulations that will encourage the investment of MFIs, through subventions or decreased taxes associated to such investments. This report will be prepared following extensive consultations with the private sector, the Ministry of Finance and Budget, rural households and other public entities as relevant and validated during a national workshop and a workshop in each of the targeted communes gathering all the relevant stakeholders. These workshops will also provide an opportunity to sensitize the different stakeholders and ensure a better understanding of the challenges and benefits of this approach.

Activity 2.1.1. Structural analysis of the market and institutions to determine the demand for microinsurance and associated risk transfer mechanisms

Activity 2.1.2. Assessment of the supply and demand for micro-insurance and related risk-transfer mechanisms

Activity 2.1.3. Conduct a gender analysis for the access to micro-finance and climate information and develop a gender action plan

Activity 2.1.4. Prepare guidelines for the provision of public financial incentives for the engagement of microfinance institutions

Output 2.2: Appropriate schemes and instruments for climate insurance are designed and implemented

64. This output will promote the design and implementation of market-based risk transfer instruments for climate variability and change. As such, the project will support micro-finance and micro-insurance initiatives, such as index-based weather insurances whose premium is calculated on the basis of the predefined index and triggered only by rainfall for agricultural risk benefits. The project will work with MFIs present in the targeted zones to facilitate access to credit and will facilitate the development of an insurance tool. There are plans to make access to credit conditional on the taking-out of an agricultural insurance policy. The project will support dialogue between micro-finance institutions, producers and insurers for the establishment of a social price for contributions and the establishment of subsidized interest rates when farmer and producer organizations are insured and insurance products for micro-finance institutions. The project will establish partnerships with the GIIF, which has developed many programs and insurance products in other African countries (Senegal, Benin, Cote d'Ivoire and others). An analysis of existing micro-finance institutions will be done by the project to assess their sustainability. The project will work closely with micro-finance/micro-credit institutions, community groups, the Ministry of Agriculture, Finance and Environment, Water and Fisheries, as well as DNM, and will promote micro-insurance bundled with loans to support investments in measures that reduce vulnerability to extreme weather and climate events. This output will also provide policy support to promote the development of agricultural insurance systems that will help farmers coping with climate risks.

Activity 2.2.1. Develop indices based on rainfall data for the insurance of the main crops identified by the

communities

Activity 2.2.2. Introduce for each index-based situation a technical premium based on the consideration of risks

Activity 2.2.3. Analysis study of the existing micro-finance institutions

Activity 2.2.4. Introduce a model for managing insurance policies in collaboration with micro-finance institutions

Activity 2.2.5. Consultation with the various stakeholders at national level (public and private) to develop a framework document for the adoption of agricultural insurance at the national level

Activity 2.2.6. Technical assistance to strengthen public policy on agriculture insurance

Output 2.3: Target communities were trained on financial services, index-based agricultural microinsurance and climate risk management

65. Under this output, the capacities of MFIs and benefiting communities will be strengthened. This process will adopt a participatory approach, taking into account the needs of local populations, as well as the requirements for financial services for climate risk management. The modules will focus on the main sectors of activity of the populations, in particular agriculture.

66. The need for capacity building is borne out by the fact that index-based agricultural insurance is a new tool in Chad and no program is currently putting it into practice. Training and awareness on financial literacy and micro-insurance is therefore necessary to develop an understanding and appropriation of the tool by the populations. The training modules will incorporate adaptation strategies for climate change, measures developed by local populations and those developed in the countries of the sub-region. Agricultural insurance could then later serve as the tool used by people to secure access to credit.

67. Through this project, the capacities of all pilot communities will be strengthened, working sessions will be organized in each community with a target of thirty trained individuals and two MFIs per community. The thirty people will span all levels of the community, including women and young people. Three community radio services and five NGOs working with communities and women's associations will be trained on the subject of agricultural insurance, including communication on index-based agricultural insurances.

68. Through this output, the project will also improve people's capacities in the areas of local finance, financial education, training on the use of climate information, savings and credit. Given that index-based agricultural insurance is a new field, the training programs tailored for this project will need to be refined and improved throughout implementation. The following activities will be needed to achieve output 2.3.

Activity 2.3.1. Develop three training guides on index-based agricultural microinsurance and financial education, and on community-based management of climate risks

Activity 2.3.2. Develop training programs and modules on community-based management of climate risks, and practical guides on climate change adaptation

Activity 2.3.3. Promote exchange visits and knowledge experience sharing in capacity building for institutions and communities

Output 2.4: Financial risk mechanisms are tested and evaluated

69. This initiative will promote financial risk transfer mechanisms (e.g. the combination of micro-finance and index-based agricultural micro-insurance) to help rural households minimize losses and provide safety nets against climate shocks. The agricultural insurance will transfer climate risk to the international insurance market, so climate risk is no longer managed solely at the community level. Based on the analysis of the market and institutions and on the study of the supply and demand of micro-insurance and risk transfer instruments, it will introduce and test financial schemes and instruments better fitted to reduce the vulnerability of rural populations.

Activity 2.4.1. Selection of schemes and instruments to reduce the vulnerability of rural households in the long term and promote their resilience to future climate shocks

Activity 2.4.2. Testing and evaluation of financial risk mechanisms in the selected pilot areas

Output 2.5: Cross-community peer-review, learning and sharing mechanisms to support replication and up-scaling in other vulnerable communities are developed

70. This output will support cross-community peer review, learning and sharing mechanisms that will promote the adoption, replication and up-scaling of best practices in terms of EWS and index-based agricultural insurance to vulnerable communities and regions across Chad. In this context, the project will seek to learn from experiences and best practices from the region and elsewhere in EWS and Index-based insurance (e.g. the Philippines).

71.A Knowledge Management (KM) strategy will be put in place and will develop a mechanism with the appropriate tools and methods that will support in identifying, sharing, eavaluating, storing and managing the knowledge produced at different stages by the activities of this initiative. This output will contribute to the knowledge management strategy of the project. This will be done by ensuring that new knowledge and innovative ideas and concepts are captured and that knowledge and experiences will be shared with individuals, institutions, organizations and this is documented and stored for retrieval and use. As such, it will be shared to relevant actors in the country and internationally to promote the replication of good practices. In particular, the project will support the sharing of the projects results and lessons learned during regional and international events (i.e. COP).

72.Knowledge and information pertaining to the project will be extracted, codified and disseminated in terms of best practices and lessons learned through publications, networks, presentations, websites, among others. The KM will be integrated in the project Monitoring & Evaluation and it will build synergies with the UNDP LCDF NAP initiative. In support of the KM, a communication strategy will be developed to ensure the dissemination of information to the project stakeholders and ways for their participation and feedback for the capture and capitalization of accumulated knowledge.

73.This output will also set out cross-community peer-review, learning and sharing mechanisms that will enable communities to monitor, review, learn and share the effectiveness and progress of the outputs and activities of the project and propose corrective measures where needed. It will be achieved with the development of a communication strategy for the capture and capitalization of accumulated knowledge.

74. This output will also coordinate with other CCA initiatives in Chad to develop a centralized data base for CCA lessons learned. This will support the development and dissemination of efficient practices at the national level and avoid the recurrence of failures. In the long-term, this is expected to inform national decision-makers for the introduction of climate change adaptation into planning.

75. Activity 2.5.1. Develop a knowledge management strategy

Activity 2.5.2. Develop a communication strategy

Activity 2.5.3. Participation in regional and international meetings and events to share the results and lessons learned of the project

Activity 2.5.4. In partnership with other on-going adaptation projects, develop an on-line platform for the sharing of lessons learned on climate change adaptation in Chad

Partnerships:

76. The project will build on ongoing experiences with climate change adaptation and other experiences in other African countries in terms of index agricultural microinsurance. Partnerships and synergies will be promoted with national programs. The table below shows the identified initiatives:

Table 3: Potential synergies with current projects in Chad

Project name and implementation period	Intervention zones and areas	Areas of collaboration
World Bank: Hydromet Project - Scheduled to start in 2018, for a period of 5 years, the project will provide hydrological and piezometric monitoring (groundwater, with the level of groundwater). The Ministry of Environment, Water and Fisheries is in charge of the project.	Zones: perennial watercourses Monitoring the behavior of surface water will be an area for collaboration with the project through the hydrological network that the NAP project envisages.	The project will benefit from the strengthened coordination of the hydrological network that will be achieved through the Hydromet project, which will support (Outputs 1.1 and 1.3) the project on the early warning system.
IFAD: "Improving Agricultural Resilience to Climate Change". The project is aimed at reducing the impacts of climate change on natural resources and ecosystems supporting agricultural production and food security. Duration 2014-2021	Zones and Areas: Guéra, Batha and Hadier-Lamis regions (Sudano-Sahelian zone) The area of cooperation will focus on the promotion of agro-pastoral production systems resilient to climate change: cereals (millet, sorghum), complementary crops (groundnut, sesame, cowpea), market gardening and small livestock.	The project will capitalize on the adaptation practices, techniques and technologies developed by the IFAD initiative, in particular, the intensification of CC-resilient agro-pastoral production systems in the Sudano-Sahelian zone. This will strengthen component 2 of the project in terms of resilient and sustainable agriculture, climate risk management systems and agricultural insurance products.
European Union: "Climate Change Adaptation and Renewable Energy Development" - Global Climate Change Aliance (GCCA), under the supervision of the Ministry of Environment, Water and Fisheries with the Directorate for Combating Climate Change as delegated project coordinator. Launched in December 2013 for a period of 7 years.	Zones: national level Component 1: Strengthen governance of climate change through integration of climate change into development policies and strategies Component 2: Implementation of field activities that promote adaptation to climate change in the agricultural and livestock sector.	This project will build on the results achieved in regard to climate change adaptation strategies. This will strengthen component 1 of the project on community-based management of climate risks, especially in the climate information part.
UNITAR-UNOSAT: Early Warning System for floods in the Chari-Logone Basin. It will be implemented for a period of 32 months from 2018 to the end of 2020.	Zones: Chari-Logone basin The objective of this project is to increase Chad's resilience to natural disasters and the adaptive capacity of the Chadian populations in the Lake Chad Basin, through the establishment of a sustainable early warning system in Chad.	This project will cooperate with the UNITAR-UNOSAT initiative in terms of Early Warning Flood System to ensure complementarity, synergies and coordination between both initiatives, in particular Component 1 community-based early warning system for preparedness against climate related disaster risks.

Project name and implementation period	Intervention zones and areas	Areas of collaboration
WMO/GFSC: Green Climate Fund - Regional Programme: Linking Climate Knowledge to Action for Resilience in the Sahel - Chad Component. It will be implemented from 2018 to 2022.	Zones: National The collaboration will focus on the WMO/GFSC Program outcomes that address hydro-meteorological information, weather and climate information services and early warning systems and index-based insurance.	To ensure complementarity, this project will establish technical cooperation and coordination with the WMO/GFSC regional programme in the areas focusing on hydro-meteorological information, products, services and tools, early warning, use of climate services and index-based insurance.
Ministry of Agriculture: Information System for Food Security in Chad (SISSAP)	Zones: National The collaboration will focus on food security risk assessment, detection, monitoring and prediction.	This project will establish cooperation and coordination with the SISA/SAP framework as basis for the community-based early warning system, and even be extended to address specific climate change issues.

Linkages with GEF projects in Chad

77. In addition to the abovementioned partnerships, this project will also cooperate, explore synergies, lessons learned and share data with the following GEF projects being implemented in Chad.

The UNDP LDCF NAP Project, the NAP project has an overall budget of US$ 5,775,000 for implementation from 2018 to 2021. This project will thus allow support and support for the project. installation of hydro-climatic equipment for the monitoring of hydrological and climatic events, but also the setting up of a database for hydro-climatic information.

The World Bank's Emergency Agricultural Production Support Project, for a period of five years, aims to provide support to communities and producer organizations to increase: i) the production of certain plant and animal species; Mandoul, Moyen Chari, Salamat, Dar Sila, and Guera regions; and ii) the use of sustainable soil and water management practices in ecosystems vulnerable to climate shocks. The project focuses on high-potential areas where significant increases in productivity and production are possible or where food security and poverty problems are serious. The project budget is USD 34.25 million, including an International Development Association (IDA) grant of USD 25 million, a grant from the Global Environment Facility (GEF) in the amount of USD 4.62 million, and a grant from the Least Developed Countries Fund in the amount of USDD 4.62 million.

The Agricultural Susceptibility to Climate Change Project (PARSAT) is being implemented with funding from IFAD-GEF for a budget of USD 36.20 million for a a period of seven years. This project is intended to reduce the impacts of climate change on natural resources and ecosystems supporting agricultural production and food security. Approved on 31 October 2014 over a period of seven years structured in two phases, the overall objective of PARSAT is to contribute to the sustainable improvement of the food security and income of rural households in the Project area. The project's development objective is to improve the resilience of farming systems and the economy of rural households in relation to climate change and external shocks. PARSAT intervenes in the 4 departments of the Guéra region, the Fitri department in the Batha region and the Dababa

department in the Hadjer-Lamis region. The PARSAT target group is made up of vulnerable farming households whose livelihoods are mainly provided by food production (60% of which is cereals) over an average area of 2-3 ha, small livestock and various other activities (including in the off-season, with market gardening in particular, which is a resilience activity highly sought after by rural populations). This target group includes two sub-groups constituting particularly at-risk households: (i) female heads of household including widows, with many young dependent children; (ii) newlyweds who have just moved. The project will make sure to address both women and men, without forgetting to integrate young people for all the actions initiated.

The Climate Network Mesh Project. With the financing of the National Metereology Agency (NMA) budget, the project concerns the establishment of 28 agro-meteorological stations, 22 synoptic stations, 153 rain stations, 8 climatic stations, 9 automatic stations. The project also acquired 4 High Resolution Radars for a total amount of US$ 6 million from Government funds in support of NMA. The radars must however be installed, and 6 synoptic stations rehabilitated among the 22 existing ones. The intervention of the UNDP-GEF project through the LDCF funds will rehabilitate and reinforce some of those devices with a focus on the Sahelian and Sudanian zones. LDCF funds will also be used to train climate network staff in the operation and maintenance of equipment for sustainability. With regards to the hydro-monitoring network, 20 limnometer stations exist, though it is estimated that the whole country would need 60. The Government's contribution covers a total of USD 16 million over the four-year period of project implementation, the salaries of NMA staff, the Hydrology Directorate and the 85 observers, as well as the contributions from the Ministry in charge of the Environment and from the members of the Steering Committee and the Scientific and Technical Committee of the project.

UNDP's actions through the new cycle of cooperation with the Government of Chad under the UNDP Country Programme Document (2017-2021) include reducing vulnerability, building resilience and promoting inclusive adaptation. Based on inclusive access to renewable energies in rural areas and on building productive capacities of land through agricultural, pastoral and fisheries production systems, water resources management and natural resource management, the pilot actions will be focused on improving ecosystem services and productivity of production systems especially in the sites of Sila, Lake Chad, Kanem, Chari-Baguirmi, Borkou Ennedi Tibesti, Mandoul and the Middle Chari.

Stakeholders' engagement:

78. The various key stakeholders in the project formulation and implementation process with their roles and contributions are as follows:

Table 4: Matrix of stakeholders

Stakeholders	Pertinent function and role in the project
Ministry of Agriculture	As the lead entity for the project, the Ministry of Agriculture is the structure in charge of the implementation of project activities. The Ministry's efforts will focus on project coordination and management. The project components are oriented toward the main themes of the ministry. The resulting outputs will then be integrated into ministry plans and policies and will influence the debate on climate risk management in Chad. The Ministry of Agriculture is the body overseeing the project.
Ministry of Environment, Water and Fisheries.	This is the Governmental Cooperation Agency. It ensures the implementation of the environmental policy including fisheries. It is responsible for sustainable development, a multisectoral and integrated issue encompassing the primary and secondary sectors. It ensures the technical supervision of the project, as well as the supervision of the Scientific and Technical Committee.

Stakeholders	Pertinent function and role in the project
	It is also in charge of the management of surface water and groundwater, as well as the entire system for setting up and operating the hydrological data bank. The Ministry is a member of the Steering Committee (CP) and the Scientific and Technical Committee of the Project (CST). Its activities in the project will focus on the outputs related to improving the hydrological observation network on capacity building for network sustainability. This Ministry is in charge of hydrological data and database management in collaboration with DNM. Its involvement will also include technical training modules on integrating adaptation into vulnerable sectors, assessing vulnerability and incorporating adaptation issues into the revision of existing policies and plans.
Ministry of Civil Aviation and National Meteorology	This ministry provides technical supervision over the DNM, which is the structure responsible for the collection, analysis and supply of climate information. The DNM will be in charge of the management of the information system, including the climate and socioeconomic database. It ensures the implementation of conventions and protocols on climate change with the Ministry in charge of the Environment. The DNM is a member of the project steering committee and a member of the Scientific and Technical Committee of the Project.
Ministry of Finance and Budget	This Ministry is responsible for the implementation of the CIMA framework through its National Insurance Directorate and is also the focal point for the ARC. In this context, it will provide guidance and regulatory oversight to the project to ensure that the index-based agricultural insurance complies with the legal framework for insurance.
Ministry of Public Health	This Ministry will provide guidance to the project in terms of water and food security, contributing to the good health of the beneficieries of this initiative.
Directorate for the Fight against Climate Change	This Directorate is under the direct technical supervision of the Ministry in charge of the Environment. 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. This directorate will play a key role in the project activities but specifically in the production of climate information produced through component 1, the integration of risk management into sectors vulnerable to climate change.
Center for Documentation and Geographic Information	This documentation center is an independent scientific and technological public institution that is part of the Ministry of Environment, Water and Fisheries.This project will collaborate with the center's Early Warning System Department to ensure complementarity with the Center's ongoing work in terms of Early Warning System, hydrological risk, weather data and mapping of flood areas.
Microfinance institutions	As private sector institutions, MFIs will participate actively in project activities by providing credit and insurance coverage to people. This will facilitate community access to credit for production. Under the project, MFIs will be more involved in Component 2.
NGOs and Civil Society	Their role is to provide the interface between the ministerial stakeholders and the communities. The role of NGOs and civil society will be fundamental throughout the project, particularly in training and awareness-raising, and in the emerging partnership between the public and the private sector. They will also play a key role in the dissemination of climate products and services, including

Stakeholders	Pertinent function and role in the project
	alerts, thereby mainstreaming gender equity and sharing project experiences. The Information Liaison and Support Unit for Women (CELIAF), in particular, will disseminate information on climate risks to women. The project will also identify community organizations from the regions where the project will be implemented. Partnerships will also be established with - Humanitarian Initiative for Local Development (IHDL) : It is a national NGO working on community socio-economic and environmental capacity building (training, monitoring, implementation of IGAs, agricultural production, processing, value chain, etc.); - Humanitarian Organization for Development (OHD): it works on rural development, village water supply, community capacity building and advisory support; - OXFAM: an international NGO working on community resilience and adaptation to climate change; - Office of Studies, Liaison and Support for Charities for Development (BELACD): National Catholic Organization responsible for promoting integrated rural development and adaptation to climate change
Community grassroots organizations and agricultural associations	They are the main beneficiaries of the project services since the project is about community-based management of climate risks. Grassroots community organizations will be the cornerstone of the production of the services and products of the whole project.

Gender equality and empowering women:

79. Chad's Community Climate Risk Management Project will encompass gender considerations so as to ensure equal participation of women and men in climate risk management and access to microinsurance agricultural index. It is also important to ensure that these activities do not contribute to exacerbating gender inequalities. The mainstreaming of gender aspects into the project process will lead to communities that are more resilient and better equipped to deal with climate shocks. For more information on gender issues of this project, please refer to Annex E. Gender Analysis and Action Plan.

80. As much as possible, gender considerations will be integrated in the project activities, including:

- Ensure the participation of the most vulnerable groups, including women, in the project activities. This includes integrating women's perspectives and building on unique knowledge of risk management;
- Adjust and implement project activities based on an effective understanding of gender dynamics;
- Connect the potential of women as agents of change related to their communities and invest in this potential as an integral part of the process of climate risk management in Chad;
- Undertake outreach to ensure that different stakeholders understand how climate risk management can impact gender inequalities;
- Include gender considerations in the evaluation of activities and make improvements where needed;
- Strengthen women's capacities with their implications for the generation of climate and socio-economic information and in particular in vulnerability diagnostics and vulnerability mapping exercises;
- Strengthen the role of women in processes of integrating risk management strategies into national, regional and local policies, plans and budgets and into sectoral decision-making processes in the most vulnerable sectors;

- Focus efforts and resources on gender issues in particular in the program of awareness, training, information and communication on risk management;
- Emphasize the participation of women in the Steering Committee (CP), the Scientific and Technical Committee (CST) and in the project management mechanism
- Organize community monitoring discussions with corrective measures to improve the project's performance in managing and adapting production systems;
- Share project achievements of women's participation in terms of early warning systems, climate information and microinsurance at the national, regional, local and international levels.

81. Overall, for each component of the project, the plan for mainstreaming gender equity across the various project outputs, the situation is as follows:

Table 5: Mainstreaming gender equity in project implementation

Outcomes/Outputs	**Responsible party**	**Gender actions in the project**
Outcome 1: Producing and disseminating relevant and timely climate information to enhance preparedness of national and local stakeholders and threatened communities to act appropriately and effectively in a timely manner in response to climate-related disaster risks		
Output 1.1. A decentralized, reliable and functioning organizational system for managing climate risk and disasters, and for coordinating response is established	Ministry in charge of the Meteorological Service	Promote the involvement of women in climatic and socio-economic observation stations through the meteorological/ hydrological network
Output 1.2: A communication and dissemination system to reach all end users is established	Ministries in charge of: Weather Agriculture, Civil Protection, and Humanitarian NGOs	Encourage the participation of women in the expression of needs and in the early warning system
Output 1.3: Reliable agromet advisory and Early Warnings by DREM and the NDM to target population are generated and disseminated	Technical Partners and Multilateral Cooperation; Ministries in charge of: Weather and Hydrology	Consideration of the gender approach when recruiting people for training and skills development
Output 1.4: Personnel from the NDM and DGRE, ministries and communities are trained to run the Community Based-Early Warning system	Technical Partners and Multilateral Cooperation; Ministries in charge of: Weather and Hydrology and Humanitarian NGOs	Consideration of the gender approach when recruiting people for training and skills development
Outcome 2: Promote financial risk transfer mechanisms (e.g. the combination of microfinance and microinsurance) to help rural households minimize losses and provide safety nets against climate shocks		

Outcomes/Outputs	Responsible party	Gender actions in the project
Output 2.1: Structural analysis of market and institutions to determine demand for micro-insurance and related risk-transfer mechanisms is conducted	Ministries in charge of Agriculture and Ministry of Environment, Water and Fisheries	Promote meaningful participation of women in capacity building programs in agricultural microinsurance and credit, and adaptation to climate change
Output 2.2: Appropriate schemes and instruments for climate insurance are designed and implemented	Specialist consulting firm	Take into account the gender dimension in the benchmarking of the indices and relating to production
Output 2.3: Target communities were trained on financial services, index-based agricultural microinsurance and climate risk management	Technical Partners and Multilateral Cooperation; Ministries in charge of: Weather and Hydrology and Humanitarian NGOs	Focus efforts and resources on gender issues in particular in the program of awareness, training, information and communication on risk management
Output 2.4: Financial risks mechanisms are tested and evaluated	Specialist consulting firm	Promote meaningful participation of women in capacity building programs in agricultural microinsurance and credit, and adaptation to climate change
Output 2.5: Cross-community peer-review, learning and sharing mechanisms to support replication and up-scaling in other vulnerable communities are developed	Technical Partners and Multilateral Cooperation; Ministries in charge of: Weather and Hydrology and Humanitarian NGOs	Share project achievements of women participation in terms of early warning systems, climate information and microinsurance at the national, regional, local and international levels.

South-South and Triangular Cooperation (SSTrC):

82. The Community-based Management of Climate Risks Project in Chad will be a powerful tool for promoting cooperation with neighboring countries, other African countries with experience in the area of index-based agricultural microinsurance and other relevant credit and insurance projects. In particular, it will be useful to benefit from the experiences of index-based agricultural microinsurance, especially:

Table 6: Some transferable experiences of Agricultural Insurance projects in the sub-region

Project name	Intervention zones and areas	Areas of collaboration
GIIF and R4 initiatives: development of index-based agricultural microinsurance, support through Global Insurance index facility trust by IFC of the World Bank Group	Senegal, Burkina Faso, Mali, Benin, with feasibility studies in Cameroon, Côte d'Ivoire	Experience in index-based micro insurance, product distribution and policies, training and capacity building at component 2 of the project
R4 Resilience initiatives by the World Food Programme (WFP): development of index agricultural micro-insurance.	Senegal, Koussanar and Tambacounda zones, index-based agricultural microinsurance based on	Sharing of experience in index-based insurance and financial management mechanisms for climate risks in a Community zone

Project name	Intervention zones and areas	Areas of collaboration
	satellite data and covering a large area.	
GIIF and R4 initiatives: development of index-based agricultural microinsurance-support through Global Insurance index facility trust by IFC of the World Bank Group	Senegal	Sharing of experience in public and private partnership development. CNAAS to support Chad in setting up its national agricultural insurance company.
HARITA R4 initiative (Horn for Africa Initiative)**:** WFP and OXFAM America partnership in rural risk reduction through resource management, crop insurance, microcredit and savings	Ethiopia	Sharing of experiences and lessons learned in public and private sector development with rural risk management in support of poor farmers.

83. The project will encourage exchange visits and sharing of experiences in capacity building for institutions and communities, especially for component 2 of the project, which concerns financial mechanisms for climate risk management, and more specifically index-based agricultural insurance.

Innovation, sustainability and potential for scalability:

Innovation

84. The project's goal is to develop a people-centred Early Warning System that is capable of involving and reaching communities, positioning them in relation to national-level decision-making, and also closing the gap between climate change adaptation measure and DRR interventions. With regards to microfinance, the project will innovate in terms of product (micro-insurance), process (holistic approach involving needs and market analyses, identification of suitable instruments, capacity building of client, and testing/evaluating the products), and organization (coordinating a range of stakeholders from central to local levels and the private sector). This combined early warning and micro-insurance approach will help make a difference in key sectors to become more effective in terms of climate resilient development that will impact vulnerable communities in terms of improving their prevention and response capacities. It will provide planners, policymakers and development agency leaders with tools and expertise to ensure that climate change is embedded in the country's planning policies and documents. It is a way of ensuring that the government of Chad is in a position to tackle the adverse effects of the changing climate not only today but also for the future. This is an innovative approach to value for money, capacity building, knowledge sharing and partnership with the various organizations already on the ground, building on existing work and successes. Innovative partnerships will be established because the planning process embraces not only government agencies and ministries, but also communities, local municipalities, NGOs and other relevant stakeholders.

85. In this country the concept of access to credit through the development of index-based agricultural insurance products is a new and innovative concept for farming communities, which will help them to reduce their vulnerabilities to extreme weather and climate events. The agricultural micro-insurance and availability of micro-credits with low interest rates will allow farmers to make investments and use crop and risk management measures that will help them stabilise their income. The advantage of the index-based insurance is that it reduces transaction costs. It favors early payment in the event of a claim, and there is generally little dispute over the valuation of losses as it is defined at the outset. In addition, because of the low level of savings of targeted farms, it plays a role in guaranteeing a return on investment for financial institutions.

Sustainability and scaling-up

86. This project will adopt sustainability strategies that will include a thorough analysis of both governmental and non-governmental institutions involved in project implementation, baseline assessments of household livelihood security and resilience, appropriate risk analysis, and formulation of exit strategies. Empowering all local-level stakeholders, including the dissemination of timely and meaningful climate and warning information through a whole range of capacity building activities tailored to their specific needs and defining and implementing an efficient knowledge management and sharing system to efficiently capitalize lessons learned will also contribute to institutional sustainability. A strong focus on building on local knowledge, capacities and incentives, as well as strong project focus on ensuring gender equity in all operational matters are expected to lead to social sustainability. These measures will ensure the project long term viability and sustainability.

87. More specifically, the project will support the DNM and DGRE to strengthen their engagement in the collection, analysis and dissemination of hydro-climatic information. This will be achieved through technical assistance to strengthen public policies on EWS, series of trainings on (i) the collection, analysis and dissemination of hydro-climatic information and the issuance of alerts through appropriate channels, (ii) the use and application of forecasting models, (iii) the impacts and risks of Climate Change, and (iv) EWS. In addition, a guide will be designed to improve the hydroclimatic data management and communication in the long-term. SOPs will also be designed to ensure the coordination between the different levels (regional to local) to provide an efficient response to alerts. The increased understanding of these systems and their need, combined with an improved coordination between the different key actors will ensure the sustainability of the efficient dissemination of useful hydro-climatic information.

88. In addition, it is worth noting that the sustainability of the meteorological equipment will also be supported by the LDCF-funded project “Chad National Adaptation Plan”, that will support ANAM and DRE staff on the use and maintenance of the hydro-meteorological network and the processing and analysis of data.

89. ,Sustainability of the investments for financial risks transfers mechanisms will be ensured following the results of a thorough structural analysis of the market and institutions to determine the demand for microinsurance and associated risk transfer mechanisms. This analysis will identify the main gaps for vulnerable communities to access index-based agriculture micro-insurance and micro-finance, and measure the required level of awareness, engagement and sensitization. In particular, the project will develop (i) three training guides on index-based agricultural microinsurance and financial education, and on community-based management of climate risks, and (ii) training programs and modules on community-based management of climate risks, and practical guides on climate change adaptation. This will be coupled with the testing and evaluation of the financial risk mechanisms to measure the efficiency of index-based micro-insurance and adapt or revise the mechanisms based on the results, in particular for the development of nuanced tailoring of the rainfall index for the selected crop growth cycle.

90. In terms of scaling-up, Chad will use the LDCF resources to develop and test tools for community-based climate risk management. Tools and technologies can be used to integrate management issues into sectors and regions not targeted by this project. The capacity building activities envisaged in the project will strengthen the ownership and institutionalization of tools, thereby ensuring the long-term viability and sustainability of not only this project but also other adaptation projects implemented in Chad.

91. The best practices and lessons learnt from the implementation of this project will be replicated and up-scaled to other communities and regions of Chad in terms of EWS and the adoption of index-based agricultural insurance. This initiative will ensure a wide adoption and diffusion of best practices by developing cross-community peer review and learning and sharing mechanisms to support replication and up-scaling in other vulnerable communities.

92. In addition, scaling up at the political level will be facilitated by integrating climate change concerns into the political agenda by encouraging government commitment. At the same time, participatory processes and other collaborative planning approaches will enable multiple stakeholders to share knowledge, develop awareness and improve learning and replication. Strengthening the expertise of the Ministries' staff and

at the decentralized level on vulnerability and climate risk management will facilitate the scaling up and dissemination of the tools for integrating adaptation into the development process. An increase in the access to credit through the development of the agricultural insurance market would scale up the effects of this initiative. The project will also conduct cross-community peer-review, learning and sharing mechanisms to support replication and up-scaling in other vulnerable communities, as well as exchange visits and knowledge experience sharing for the capacity building activities.

V. PROJECT MANAGEMENT

V.1 Cost efficiency and effectiveness:

93. The proposed project has been designed to take into consideration lessons learned and best practices from previous and existing early warning systems and financial management mechanisms for climate risks experiences in Africa, such as the ARC, GIIF, R4 Resilience initiatives and CIMA on index-based agricultural microinsurance as well as related literature, to ensure its effectiveness and efficiency.

94. As index-based agricultural insurance is a new field in Chad, an extensive consultation process was adopted during the project design with national, regional and local institutions, climate scientists and vulnerable populations in the project areas to ensure the understanding and ownership by key stakeholders.

95. The activities of the proposed project will include training and capacity-building activities that will improve the comprehension and use of climate data, index-based agricultural microinsurance, financial education, and community-based management of climate risks. The approach of the project was designed to ensure that the interventions targeted climate sensitive sectors and contributing to integrate adaptation at national, regional and local level and in support of community income.

96. The project cost efficiency and effectiveness are supported by the full alignment with the priorities of the Government of Chad in terms of disaster and risk management programs. As such, the project activities will contribute to the implementation of the Ministry of Agriculture national program. This ministry will use its regional delegations to monitor the implementation of project activities. This approach will be cost efficient as it will avoid creating new structures and will reduce the costs of implementation.

Component 1: Community-based early warning system for preparedness against climate related disaster risks.

97. The activities of this component were designed to be cost effective, which will be partly achieved through an alignment and coordination with the NAP LDCF and national initiatives, as well as South-South cooperation to combine efforts and resources in the project target areas. Particularly, with the purchasing of complementary equipment, training programs and capacity-building to improve the understanding and use of climate data for the production of climate risk information products and services as well as the operation and maintenance of the hydro-meteorological network equipment and data processing. This initiative will assess the existing hydro-meteorological network in the project zones by reviewing the current equipment and observation networks of DNM and the DGRE, their technical resources and the database backup and management system and establish specific hydro-climatic information needs of local communities. As a result, the most appropriate location and the necessary meteorological equipment will be identifyed and procured in order to provide key data for the development and dissemination of EWS. By building the capacity of SISAAP, CDIG, DGRE and the DNM in cooperation with the NAP and South-South cooperation, resources will be spent wisely and effectively on the collection, analysis and dissemination of hydro-climatic information, the project will improve their technical capacity to produce hydro-meteorological forecasts and reliable data for timely alerts to the local populations that will reduce risks of losses and damages to their produce and physical assets..

98. The following alternative to project Component 1 approach was analyzed:

Post-disaster mechanism. In this context, the actions that are put in place are reactive and take place after the disaster occurs and have the objective to support communities to bounce back to where they were before the disaster happened by contributing to improve the lives of the affected communities. It encompases levels like emergency response and recovery. This is a less cost-effective instrument given the amount of resources that will be necessary to spend to address the impact of the disaster. The Early Warning approach is a preventive action and it will be more cost effective for the communities and the state in terms of reducing vulnerabilities to the impacts of climate change.

Component 2: Enhancing risks management capacities

99. The activities of this component will promote financial risk transfer mechanisms such as the index-based agricultural insurance, which is innovative in Chad. The development of micro-insurance and micro-finance as well as the training programs will be developed in collaboration with the MFIs and ARC to ensure complementarity and cost savings. The project will target subsistence farmers and pastoralists by providing a financial safety net that will protect them against climate risks and crop losses. The index-based insurance will reduce the transaction costs because it approves an early payment in the event of a claim, and generally there is little dispute over the valuation of losses as it is defined at the outset. In addition, because of the low level of savings of targeted farms, it plays a role in guaranteeing a return on investment for financial institutions. Index-based insurance is the most cost-efficient option and responds better to the realities of the farms in the Chadian context. This approach seems more transparent, since the amount of compensation can be known in advance by the insured. Index-based insurance could also facilitate access to credit and thus encourage investments in order to have regular and adequate income.

100. In the context of Component 2, other alternatives to the project approach were taken into consideration:

Multi-peril crop insurance. This type of insurance addresses different hazards, has a high premium of 10% to 12%, makes payments based on damage and is slow due to the individual farm assement. It leads to moral hazard, has a limited growth, and high administrative costs. In addition, the multi-peril crop insurance is annual, which is a constraint given that you can predict drought months in advance. This option is least cost-effective given not only the high premiums paid, the time that it takes to do the payments and the fact that it is not multi-year.

Area-yeld index insurance. the compensation of this particular insurance is based on the average harvested yield area. When the average area yield is smaller comparative to the yield that is insured, the insurance is paid. The disadvantage of this insurance is that it needs historical data of the yield in order to determine the average and the insured yield. This could be problematic as this type of information is often not available, especially in Chad.

101. The advantage of this insurance is that it reduces transaction costs and the risk of moral and adverse selection hazard. It favors early payment in the event of a claim, and there is generally little dispute over the valuation of losses as it is defined at the outset. In addition, because of the low level of savings of targeted farms, it plays a role in guaranteeing a return on investment for financial institutions.

102. Index-based agricultural insurance allows for early management of climate impacts and, under the right circumstances, can be more effective than traditional crop insurance mechanisms. It results ultimately in

a positive impact on economic development and the fight against poverty by providing producers with protection against lower yields for their crops.

V.2 Project Management

Risks and Assumptions:

103. Project risks include environmental, regulatory, operational, strategic and political risks as presented in the risk log (Annex **Error! Reference source not found.**). Nevertheless, countermeasures/management measures to all risks have been developed through project design consultations. Social and Environmental project risks identified in the SESP (Annex F) relate mainly to the vulnerability of potential impacts of climate change and are categorized as low and moderate.

104. In accordance with UNDP requirements and standards, the project coordinator will provide quarterly risk monitoring and report on the state of risk to the UNDP country office. The UNDP country office will record the progress made in UNDP's ATLAS registry of risks. Risks will be considered critical when the impact and likelihood are high (ie when the impact is rated 5 or 4 and the probability is 3 or more). Management responses to critical risks will also be reported to the GEF in the annual PIR.

105. The project is based on the assumption that involved national, sub national, community and private stakeholders are willing to and able to contribute to the suggested project outputs to build resilience to climate change. This assumption is based on extensive stakeholder consultations during project identification and design phases at national, sub-national and community-levels, which confirmed the strong interest and need for assistance.

Social and Environmental Safeguards:

106. Overall, the project is likely to reduce vulnerability, enhance inclusive resilience and promote adaptation. For that reason, the risks that the project may harm certain groups are almost non-existent. However, as the implementation evolves, the project will monitor the process to ensure that exclusionary practices have no place in the project and that the fair and equitable sharing of the benefits of adaptation is of paramount concern. To this end, gender equity, despite persistent prejudices in the country, will be closely scrutinized, as will efforts to ensure the inclusion of groups deemed to be the most vulnerable (refugees, returnees). The grievances of some groups will be monitored and addressed throughout the duration of the project and even beyond through climate adaptation networks both at national and local levels with the communities. Annex F provides a more detailed analysis of the risks associated with social and environmental safeguards.

V.3 Agreement on intellectual property rights and use of logo on the project's deliverables and disclosure of information:

107. In order 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[3] and the GEF policy on public involvement[4].

[3] See http://www.undp.org/content/undp/en/home/operations/transparency/information_disclosurepolicy/

[4] See https://www.thegef.org/gef/policies_guidelines

VI. PROJECT RESULTS FRAMEWORK

This project willcontribute 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: By 2021, farms, fishing communities and small producers, notably youth and women, in targeted regions, use sustainable production systems that allow them to meet their needs, bring food to market and adopt a living environment that is more resilient to climate change and other environmental challenges.

This project will be linked to the following output of the UNDP Strategic Plan: Output 2.3.1: Data and risk-informed development policies, plans, systems and financing incorporate integrated and gender-responsive solutions to reduce disaster-risks, enable climate change adaptation and mitigation, and prevent risk of conflict (UNDP Strategic Plan 2018-2021)

	Objective and Outcome Indicators	Baseline	Mid-term Target	End of Project Target	Assumptions
Project Objective: The main objective of the project is to improve the capacities of the populations of the vulnerable communities to face the various climatic risks	Indicator 1: A model for mainstreaming climate risk management, with particular emphasis on the gender dimension.	***0***	*1*	***1***	*Existence of appropriate systems, mechanisms and tools for climate risk management at different levels of governance (National to local)*
	Indicator 2: Number of direct project beneficiaries *Data disaggregated by sex (age and wealth) with targets for women*	***0***	*1,458,470 (40% of the total population in targeted areas) of direct beneficiaries*	*2,187,706 (60% of the total population in targeted areas) of direct beneficiaries*	*Cooperation between the insurer, the farmers and the stakeholders in order to identify the micro insurance to be proposed, to win the producers' confidence*
Component 1 **Outcome 1: Producing and disseminating relevant and timely climate information to enhance preparedness of national and local stakeholders and threatened communities to act appropriately and effectively in a timely manner in response to climate-related disaster risks**	Indicator 3: Number of people with access to climate information and early warning messages *Data disaggregated by sex (age and education) with targets for women*		*1,458,470 (40%) of the project* beneficiaries *in the targeted areas (including 30% women)*	*2,187,706 (60%) of the project* beneficiaries *in the targeted areas including 30% women*	*Release of accurate and timely climate information and early warning messages*
	Indicator 4: Policies and plans integrating priority climate change adaptation options	***0***	*5 climate shock response plans are formulated, one in each targeted department*	*5 climate shock response plans are adopted, one in each targeted department*	*Decision-makers understand the opportunities and benefits of integrating climate change into policies and plans*
Component 2 **Outcome 2: Promote financial risk transfer mechanisms (e.g. the combination of microfinance and microinsurance) to help rural**	Indicator 5. Number of beneficieries that joined (capacited) agricultural insurance *Data disaggregated by sex (age and education) with targets for women*	***0***	*1,000 project beneficieries that joined agricultural insurance*	*2,000 project beneficieries that joined agricultural insurance*	*Farmers and patoralists (men and women) understand the advantages and are willing to be trained in index-based insurance*

	Objective and Outcome Indicators	Baseline	Mid-term Target	End of Project Target	Assumptions
households minimize losses and provide safety nets against climate shocks					

VII. MONITORING AND EVALUATION (M&E) PLAN

108. The project results, corresponding indicators and mid-term and end-of-project targets in the project results framework will be monitored annually and evaluated periodically during project implementation. If baseline data for some of the results indicators is not yet available, it will be collected during the first year of project implementation. The Monitoring Plan included in Annex details the roles, responsibilities, and frequency of monitoring project results.

109. Project-level monitoring and evaluation will be undertaken in compliance with UNDP requirements as outlined in the UNDP POPP and UNDP Evaluation Policy. The UNDP Country Office is responsible for ensuring full compliance with all UNDP project monitoring, quality assurance, risk management, and evaluation requirements.

110. Additional mandatory GEF-specific M&E requirements will be undertaken in accordance with the GEF Monitoring Policy and the GEF Evaluation Policy and other relevant GEF policies[2]. The costed M&E plan included below, and the Monitoring plan in Annex, will guide the GEF-specific M&E activities to be undertaken by this project.

111. 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.

Additional GEF monitoring and reporting requirements:

112. Inception Workshop and Report: A project inception workshop will be held within 60 days of project CEO endorsement, with the aim to:

a. Familiarize key stakeholders with the detailed project strategy and discuss any changes that may have taken place in the overall context since the project idea was initially conceptualized that may influence its strategy and implementation.
b. Discuss the roles and responsibilities of the project team, including reporting lines, stakeholder engagement strategies and conflict resolution mechanisms.
c. Review the results framework 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 and other stakeholders in project-level M&E.
e. Update and review responsibilities for monitoring project strategies, including the risk log; SESP report, Social and Environmental Management Framework and other safeguard requirements; project grievance mechanisms; gender strategy; knowledge management strategy, and other relevant management strategies.
f. Review financial reporting procedures and budget monitoring and other mandatory requirements and agree on the arrangements for the annual audit.
g. Plan and schedule Project Board meetings and finalize the first-year annual work plan.
h. Formally launch the Project.

[2] See https://www.thegef.org/gef/policies_guidelines

113. GEF Project Implementation Report (PIR): The annual GEF PIR covering the reporting period July (previous year) to June (current year) will be completed for each year of project implementation. Any environmental and social risks and related management plans will be monitored regularly, and progress will be reported in the PIR. The PIR submitted to the GEF will be shared with the Project Board. The quality rating of the previous year's PIR will be used to inform the preparation of the subsequent PIR.

GEF and/or LDCF/SCCF Core Indicators:

114. The GEF and/or LDCF/SCCF Core indicators included as Annex will be used to monitor global environmental benefits and will be updated for reporting to the GEF prior to MTR and TE. Note that the project team is responsible for updating the indicator status. The updated monitoring data should be shared with MTR/TE consultants prior to required evaluation missions, so these can be used for subsequent groundtruthing. The methodologies to be used in data collection have been defined by the GEF and are available on the GEF website. If relevant to the project: The required Protected Area Management Effectiveness Tracking Tool (METTs) have been prepared and the scores included in the GEF Core Indicators.

115. *Independent Mid-term Review (MTR):* The terms of reference, the review process and the final MTR report will follow the standard templates and guidance for GEF-financed projects available on the UNDP Evaluation Resource Center (ERC).

116. The evaluation will be 'independent, impartial and rigorous'. The evaluators 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. Equally, the evaluators should not be in a position where there may be the possibility of future contracts regarding the project under review.

117. The GEF Operational Focal Point and other stakeholders will be actively involved and consulted during the evaluation process. Additional quality assurance support is available from the BPPS/GEF Directorate.

118. The final MTR report and MTR TOR will be publicly available in English and will be posted on the UNDP ERC by July 2022. A management response to MTR recommendations will be posted in the ERC within six weeks of the MTR report's completion.

119. Terminal Evaluation (TE):

An independent terminal evaluation (TE) will take place upon completion of all major project outputs and activities. The terms of reference, the evaluation process and the final TE report will follow the standard templates and guidance for GEF-financed projects available on the UNDP Evaluation Resource Center.

120. The evaluation will be 'independent, impartial and rigorous'. The evaluators 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. Equally, the evaluators should not be in a position where there may be the possibility of future contracts regarding the project being evaluated.

121. The GEF Operational Focal Point and other stakeholders will be actively involved and consulted during the terminal evaluation process. Additional quality assurance support is available from the BPPS/GEF Directorate.

122. The final TE report and TE TOR will be publicly available in English and posted on the UNDP ERC by *(add date included on cover page of this project document)*. A management response to the TE recommendations will be posted to the ERC within six weeks of the TE report's completion.

123. Final Report:

The project's terminal GEF 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.

124. Agreement on intellectual property rights and use of logo on the project's deliverables and disclosure of information**:** 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[3] and the GEF policy on public involvement[4].

Table 8: Mandatory GEF M&E Requirements and M&E Budget

Monitoring and Evaluation Plan and Budget:			
GEF M&E requirements	**Responsible Parties**	**Indicative costs (US$)**	**Time frame**
Inception Workshop	Implementing Partner PM/Coordinator/ CTA	11,000	Within 60 days of CEO endorsement of this project.
Inception Report	PM/Coordinator/ CTA	None	Within 90 days of CEO endorsement of this project.
Monitoring of indicators in project results framework	Project M&E Officer	*8,000*	Annually prior to GEF PIR. This will include GEF core indicators.
GEF Project Implementation Report (PIR)	Project M&E Officer	*5,000*	Annually typically between June-August
Monitoring all risks (UNDP risk register)	Project M&E Officer	*8,000*	On-going.
Monitoring of stakeholder engagement plan	*Project M&E Officer*	*8,000*	On-going.
Monitoring of gender action plan	Project M&E Officer	*3,000*	On-going.
Supervision missions	UNDP Country Office	None[5]	Annually
Oversight missions	RTA and BPPS/GEF	None	Troubleshooting as needed
Mid-term LDCF Core indicators	Project M&E Officer	*8,000*	*Before mid-term review mission takes place.*

[3] See http://www.undp.org/content/undp/en/home/operations/transparency/information_disclosurepolicy/

[4] See https://www.thegef.org/gef/policies_guidelines

[5] The costs of UNDP CO and UNDP-GEF Unit's participation and time are charged to the GEF Agency Fee.

Monitoring and Evaluation Plan and Budget:			
GEF M&E requirements	**Responsible Parties**	**Indicative costs (US$)**	**Time frame**
Independent Mid-term Review (MTR) 56	Independent evaluators	*20,000*	*By September 2022*
Terminal *LDCF* Core indicators	Project M&E Officer	*8,000*	Before terminal evaluation mission takes place
Independent Terminal Evaluation (TE)	Independent evaluators	*40,000*	*By March 2024*
TOTAL indicative COST		*119,000*	

VIII. GOVERNANCE AND MANAGEMENT ARRANGEMENTS

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 Chad, and the Country Programme.

This project will be implemented over the course of four years starting from late 2018. The project will be nationally executed under UNDP National Implementation Guidelines. The project's lead Implementing Partner will be the Ministry in charge of Agriculture of the Government of Chad. The ministry shall be responsible for the implementation of the project and will also house the Project Management Unit Office.

UNDP will serve as the GEF Agency for the Project and be responsible for the provision of project cycle management services (i.e. General Management support) via the Country Office and specialized technical and oversight support from the UNDP-GEF unit. The Ministry in charge of Agriculture and UNDP will jointly monitor and evaluate all project activities. The project will be governed in accordance with UNDP's Results Based Management Guideline (RBM), LDCF rules and procedures and the Government of Chad's operational principles within the governance structure.

Implementing Partner: The Implementing Partner for this project is the Ministry of Agriculture.

The Implementing Partner is the entity to which the UNDP Administrator has entrusted the implementation of UNDP assistance specified in this signed project document along with the assumption of full responsibility and accountability for the effective use of UNDP resources and the delivery of outputs, as set forth in this document.

The Implementing Partner is responsible for executing this project. Specific tasks include:

- Project planning, coordination, management, monitoring, evaluation and reporting. This includes providing all required information and data necessary for timely, comprehensive and evidence-based project reporting, including results and financial data, as necessary. The Implementing Partner will strive to ensure project-level M&E is undertaken by national institutes and is aligned with national systems so that the data used and generated by the project supports national systems.
- Risk management as outlined in this Project Document;
- Procurement of goods and services, including human resources;

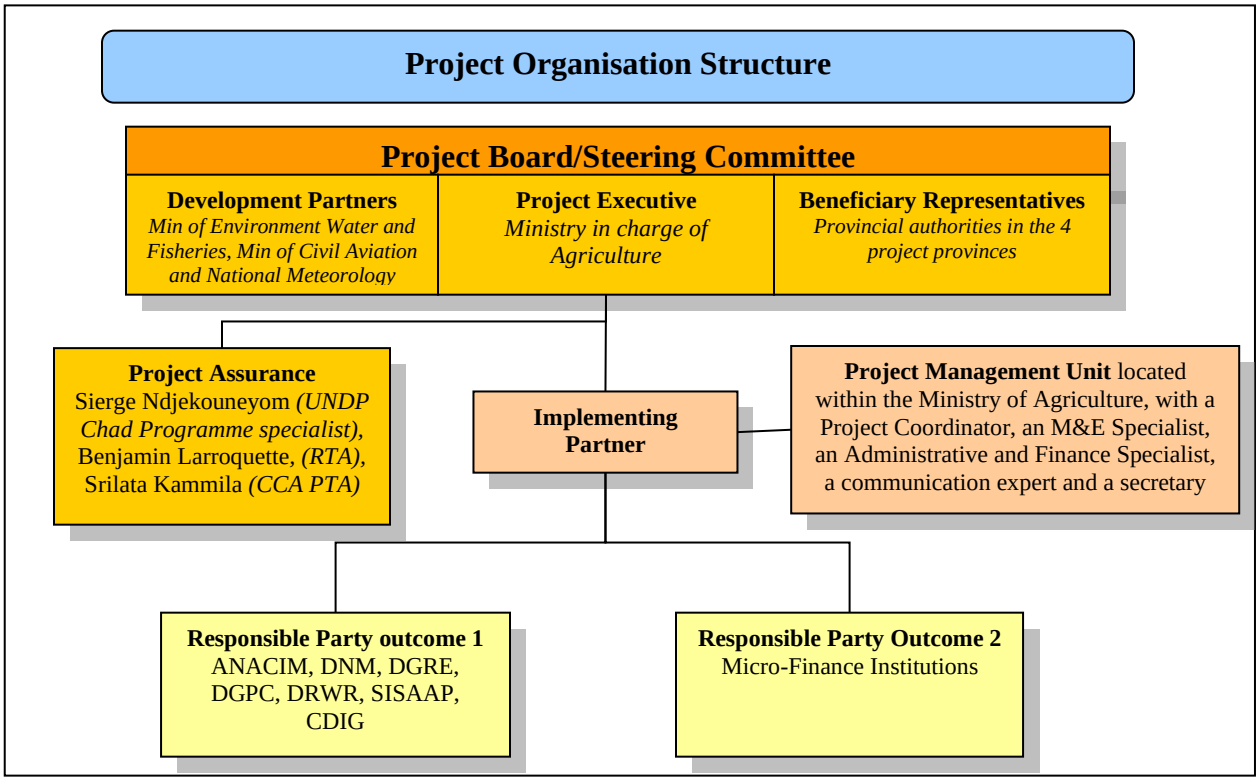
- Financial management, including overseeing financial expenditures against project budgets;
- Approving and signing the multiyear workplan;
- Approving and signing the combined delivery report at the end of the year; and,
- Signing the financial report or the funding authorization and certificate of expenditures.

Responsible Parties: 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.

Project stakeholders and target groups: project stakeholders at the local, regional and national level will be regularly consulted on the project and the activities and will be represented in the project steering committee. Targeted local communities will be given the opportunities to raise their concerns and suggestions for improvement through the UNVs present in the provinces, who will follow-up on the daily implementation. Field visits of the project team, government stakeholders, UNDP country office, UNDP regional office and as part of the MTR and TE will also provide a platform for the target groups to be consulted and included in the decision making process.

UNDP: UNDP is accountable to the GEF for the implementation of this project. This includes oversight of project execution to ensure that the project is being carried out in accordance with agreed standards and provisions. UNDP is responsible for delivering GEF project cycle management services comprising project approval and start-up, project supervision and oversight, and project completion and evaluation. UNDP is also responsible for the Project Assurance role of the Project Board/Steering Committee.

The project organisation structure:



Project Board: The Project Board (also called Project Steering Committee) is responsible for taking corrective action as needed to ensure the project achieves the desired results. 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 consensus cannot be reached within the Board, the UNDP Resident Representative (or their designate) will mediate to find consensus and, if this cannot be found, will take the final decision to ensure project implementation is not unduly delayed.

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 mitigation and management actions to address specific risks;
- Agree on project manager's tolerances as required, within the parameters set by UNDP-GEF, and provide direction and advice for exceptional situations when the project manager's tolerances are exceeded;
- Advise on major and minor amendments to the project within the parameters set by UNDP-GEF;
- Ensure coordination between various donor and government-funded projects and programmes;
- Ensure coordination with various government agencies and their participation in project activities;
- Track and monitor co-financing for this project;
- Review the project progress, assess performance, and appraise the Annual Work Plan for the following year;
- Appraise the annual project implementation report, including the quality assessment rating report;
- Ensure commitment of human resources to support project implementation, arbitrating any issues within the project;
- Review combined delivery reports prior to certification by the implementing partner;
- Provide direction and recommendations to ensure that the agreed deliverables are produced satisfactorily according to plans;
- Address project-level grievances;
- Approve the project Inception Report, Mid-term Review and Terminal Evaluation reports and corresponding management responses;
- Review the final project report package during an end-of-project review meeting to discuss lesson learned and opportunities for scaling up.

The composition of the Project Board must include the following roles:

a. Project Executive: Is an individual who represents ownership of the project and chairs the Project Board. The Executive is normally the national counterpart for nationally implemented projects. The Project Executive is: *The Ministry of Agriculture*

b. Beneficiary Representatives: Individuals or groups representing the interests of those who will ultimately benefit from the project. Their primary function within the board is to ensure the realization of project results from the perspective of project beneficiaries. Often civil society representative(s) can fulfil this role. The Beneficiary representatives are: provincial authorities in the 4 provinces of the project, reprensenting the interests of the local communities

c. Development Partners: Individuals or groups representing the interests of the parties concerned that provide funding and/or technical expertise to the project. The Development Partners are: the Ministry of Water and Fisheries and the Ministry of Civil Aviation and National Meteorology
d. Project Assurance: UNDP performs the quality assurance role and 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. UNDP provides a three – tier oversight services involving the UNDP Country Offices and UNDP at regional and headquarters levels. Project assurance is totally independent of the Project Management function.

Project extensions: The UNDP-GEF Executive Coordinator must approve all project extension requests. Note that all extensions incur costs and the GEF project budget cannot be increased. A single extension may be granted on an exceptional basis and only if the following conditions are met: one extension only for a project for a maximum of six months; the project management costs during the extension period must remain within the originally approved amount, and any increase in PMC costs will be covered by non-GEF resources; the UNDP Country Office oversight costs during the extension period must be covered by non-GEF resoruces.

IX. FINANCIAL PLANNING AND MANAGEMENT

125. The total cost of the project is USD 17,750,000. This is financed through the LDCF grant of USD 5,250,000, USD 500,000 in cash co-financing to be administered by UNDP and USD 12,000,000 in parallel co-financing. Parallel Cofinancing is expected from the Government of Chad for an amount of USD 8,000,000 and UNDP PADLIFT project for USD 4,500,000. 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.

126. Parallel co-financing: The actual realization of project co-financing 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-financing type**	**Co-financing amount**	**Planned Activities/Outputs**
Government of Chad	*In-Kind*	*8,000,000*	*In-kind co-financing by the Government covers all two components of the project, including the existing stations of the existing climate network and its equipment (Outputs 1.1, 1.2) and the technical staff (Output 1.3, 1.4). The Government's contribution also pertains to Component 2 with the establishment of institutions and existing staff and their empowerment after project (Output 2.1, 2.3, 2.4 and 2.5).*

Co-financing source	Co-financing type	Co-financing amount	Planned Activities/Outputs
UNDP: Programme d'Appui Local au Developpement et à la Finance Inclusive au Tchad (PADLFIT)	In-Kind	4,500,000	Promotes financial mechanisms for risk transfers. This will directly support the achievement of the Outcome 2.
		12,500,000	

Table 9: Parallel co-financing

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 coordinator 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 following deviations occur, the Project coordinator and UNDP Country Office will seek the approval of the UNDP-GEF team to ensure accurate reporting to 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.
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).

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

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.

Operational completion: The project will be operationally completed when the last UNDP-financed 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.

Transfer or disposal of assets: 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[6].

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).

127. 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.

X. TOTAL BUDGET AND WORK PLAN

Atlas Proposal or Award ID:	00113793	**Atlas Primary Output Project ID:**	00112042
Atlas Proposal or Award Title:	Community-based management of climate risk in Chad		
Atlas Business Unit	TCD10		
Atlas Primary Output Project Title:	Community-based management of climate risk in Chad		
UNDP-GEF PIMS No.	5430		
Implementing Partner	Ministry of Agriculture		

GEF Component/Atlas Activity	Responsible Party/	Fund ID	Donor Name	Atlas Budgetary Account Code	ATLAS Budget Description	Amount Year 1 (USD)	Amount Year 2 (USD)	Amount Year 3 (USD)	Amount Year 4 (USD)	Total (USD)	See Budget Note:
Component 1: Community-based early warning system for preparedness against climate related disaster risk	**Ministry of Agriculture**	**62160**	**GEF LDCF**	71200	International consultant	219,000	36,000	36,000	18,000	**309,000**	L1
				71800	Contractual Services - Individuel	34,800	34,800	34,800	34,800	**139,200**	L2
				71300	Local Consultants	68,000	7,000	7,000		**82,000**	L3
				75700	Training, Workshops and Conferences	240,000	210,500	194,000	175,200	**819,700**	L4
				72100	Contractual Services - Companies	77,500	-	-	-	**77,500**	L5
				71600	Travel	81,150	81,150	81,150	61,150	**304,600**	L6
				72200	Equipment and Furniture	734,125	2,000	2,000	2,000	**740,125**	L7
				73400	Maintenance and other equipment	30,000	23,000	22,000	21,100	**96,100**	L8
				72300	Materials and Goods	27,050	27,050	27,050	27,050	**108,200**	L9
				74200	Communication	12,500	12,500	12,500	12,500	**50,000**	L10
				74200	Audio Visual and Print Production Costs	1,000	1,000	500	-	**2,500**	L11
					Sub-total GEF LDCF	**1,525,125**	**435,000**	**417,000**	**351,800**	**2,728,925**	
		4000	**UNDP**	74200	Audio Visual and Print Production Costs	6,000	5,000	3,000	3,000	**17,000**	L12
				74200	Communication	2,500	75,000	24,500	-	**102,000**	L13

					Sub-total UNDP	**8,500**	**80,000**	**27,500**	**3,000**	**119,000**	
					Total Outcome 1	**1,533,625**	**515,000**	**444,500**	**354,800**	**2,847,925**	
Component 2: Enhancing climate risk management capacities	**Ministry of Agriculture**	**62160**	**GEF LDCF**	71200	International consultant	24,000	128,400	75,000	21,000	**248,400**	L14
				71800	Contractual Services - Individuel	34,800	34,800	34,800	34,800	**139,200**	L15
				71300	Local Consultants	8,000	38,000	9,000	15,000	**70,000**	L16
				74200	Audio Visual and Print Production Costs	0	4,500	4,500	4,700	**13,700**	L17
				75700	Training, Workshops and Conferences	30,000	184,000	206,000	170,000	**590,000**	L18
				72100	Contractual Services - Companies	0	110,000	190,000	150,000	**450,000**	L19
				71600	Travel	9,675	161,500	173,300	92,300	**436,775**	L20
				72200	Equipment and Furniture	0	0	60,000	0	**60,000**	L21
				71500	UNVs	72,000	72,000	0	0	**144,000**	L22
		Sub-total GEF LDCF				**178,475**	**733,200**	**752,600**	**487,800**	**2,152,075**	
		4000	**UNDP**	72200	Equipment and Furniture	120,000	0	0	0	**120,000**	L23
				74200	Communication	-	2,000	5,000	5,000	**12,000**	L24
					Sub-total UNDP	**120,000**	**2,000**	**5,000**	**5,000**	**132,000**	
					Total Outcome 2	**298,475**	**735,200**	**757,600**	**492,800**	**2,284,075**	
COMPONENT 3: KM and M&E	**Ministry of Agriculture**	**62160**	**GEF LDCF**	75700	Training, Workshops and Conferences	7,500				7,500	L25
				71200	International consultant		15,000		21,000	36,000	L26
				71300	Local Consultants		5,000		19,000	24,000	L27
				71800	Contractual Services - Individuel	12,000	12,000	12,000	12,000	48,000	L28
				71600	Travel	3,500				3,500	L29
						23,000	**32,000**	**12,000**	**52,000**	**119,000**	
Project Management Costs	**Ministry of Agriculture**	**62160**	**GEF LDCF**	71600	Travel	875	875	875	875	**3,500**	L30
				72500	Supplies	3,750	3,750	3,750	3,750	**15,000**	L31
				74100	Professional services	3,000	3,000	3,000	3,000	**12,000**	L32
				73400	Maintenance and other equipment	1,500	1,500	1,500	1,500	**6,000**	L33
				71400	Contractual Services - Individuel	49,800	49,800	49,800	49,800	**199,200**	L34

				74500	Miscellaneous	0	2,500	0	2,500	**5,000**	L35
				74200	Audio Visual and Print Production Costs	0	0	0	9,300	**9,300**	L36
	Sub-total GEF LDCF					**58,925**	**61,425**	**58,925**	**70,725**	**250,000**	
	UNDP	**4000**	**UNDP**	74596	Direct Project Cost	14,868	30,543	43,543	45,546	134,500	L37
				72500	Supplies	2,500	2,500	2,500	2,500	10,000	L38
				72200	Equipment and Furniture	28,000				28,000	L39
				71400	Contractual Services - Individuel	13,800	13,800	13,800	13,800	55,200	L40
				71600	Travel	1,825	1,825	1,825	1,825	7,300	L41
				73400	Maintenance and other equipment	3,500	3,500	3,500	3,500	14,000	L42
				Sub-total UNDP		**64,493**	**52,168**	**65,168**	**67,171**	**249,000**	
				Total Project Management		**123,418**	**113,593**	**124,093**	**137,896**	**499,000**	
				Total GEF LDCF		**1,785,525**	**1,261,625**	**1,240,525**	**962,325**	**5,250,000**	
				Total UNDP		**192,993**	**134,168**	**97,668**	**75,171**	**500,000**	
				Total Project Cost		**1,978,518**	**1,395,793**	**1,338,193**	**1,037,496**	**5,750,000**	

Component 1: Community- based early warning system for preparedness against climate related disaster risk **OUTCOME 1: Producing and disseminating relevant and timely climate information to enhance preparedness of national and local stakeholders and threatened communities to act appropriately and effectively in a timely manner in response to climate-related disaster risks**	
Outcome 1 – LDCF Resources	
L1	**International consultant** • 1 IC to conduct the evaluation of the hydro-climatic observation network (40 days) year 1 • 1 IC specialist in DRR and EWS to Conduct a feasibility study for a multi-scale and multi-risk early warning system (35 days) year 1 • 1 IC to implement monitoring system for identified risks (60 days in first year and 90 days for years 2,3,4) • 1 IC specialist in DRR and EWS to design a climate shock response plan (40 days) year 1 • 2 IC specialist in EWS and Communication to develop a communication strategy on climate-related disaster risk reduction as a platform for information management and sharing for media and channels (40 days) first year • 1 IC to implement application of forecasting models and ensure training for DNM, SISAAP, CDIG staff (40 days) first year • 1 IC to develop and conduct a training program on early warning systems (30 days), year 1

L2	**Contractual Services – Individual** • EWS Expert ($ 2,000 per month) • 1 driver ($ 500 per month) • Pro-rata of the communication Officer (25%) ($ 1,600 per month)
L3	**Local Consultants** • 4 LC to support IC to conduct the evaluation of the hydro-climatic observation network ($32,000) year 1 • 1 LC to design a guide to improve the hydroclimatic data management and communication (5,000) year 1 • 1 LC specialist in SIG to support IC to conduct a feasibility study for a multi-scale and multi-risk early warning system ($6,000) Year 1 • 1 LC to support the IC to implement monitoring system for identified risks, (year 1,2 and 3) ($21,000) Y1,2,3 • 3LC to support IC to develop forecasting models and to organize trainings for DNM, SISAAP, CDIG ($ 18,000), year 1 •
L4	**Training, Workshops and Conferences** • 1day workshop on the evaluation of the hydro-climatic observation network ($ 5,000), year 1 • 5 workshops in each site to help the design of guide to improve the hydroclimatic data management ($ 25,000), year 1 • Monthly meeting on early warning activities with other to ensure complementarity between projects, initiatives, UN agencies, and governmental institutions (40 meeting in 4 years, $ 15,000) • 3 days meeting and training in each project area with medias for a multi-scale and multi-risk early warning system (12 trainings, $ 180,000) • 2 trainings workshop on early warning monitoring system ($ 15,000) • Monthly shock response plan and DRR interagency meeting led by UNDP (48 meeting, $ 29,200) • Meeting and workshop of platform for information management and sharing for media and channels (10 meetings and 2 workshops by year) ($ 60,000) • Trainings for DGRE and DNM staff on the collection, the analysis and dissemination of hydro-climatic information, and the issuance of alerts through appropriate channels (15 days) ($ 100,500). • Trainings for DNM on the use and application of forecasting models ($ 150,000) • Training workshops and seminars on the impacts and risks of Climate Change (12 days), ($ 90,000). • Training workshops on early warning systems for DNM, DGRE, local authorities and communities (20 days), ($ 150,000)
L5	**Contractual Services – Companies** • Production of a guide to improve the hydroclimatic data management and communication ($ 32,500) • Develop a communication strategy on climate-related disaster risk reduction as a platform for information management and sharing for media and channels ($ 45,000)
L6	**Travel** • Travel costs for international and national consultants' field missions ($ 104,600), Year 1,2,3,4 ✓ To conduct the evaluation of the hydro-climatic observation network ✓ To design a guide to improve the hydroclimatic data management and communication ✓ To conduct a feasibility study for a multi-scale and multi-risk early warning system ✓ To implement monitoring indicators for identified risks ✓ To organize trainings and workshops ✓ To design a climate shock response plan ✓ To develop a communication strategy on climate-related disaster risk reduction • DSA of field missions ✓ Design a guide to improve the hydroclimatic data management and communication (4 persons in 5 project areas) ($ 25,000)

	✓ DSA Field mission for implementation of monitoring system ($ 60,000) Year 1,2,3 ✓ DSA of project unit for workshops in the field ($ 15,000) • DSA of exchange visits and knowledge experience of member of project unit ($ 100,000)
L7	**Equipment and Furniture** • Purchase and set up of software (SIG, Climate Database, hydrometeorological simulation) DNM, SISAAP and CDIG ($ 45,000), Year 1 • Rehabilitation of office and computer equipment and facilities to support decentralized, reliable and functioning organizational system for managing climate risk and disasters, and for coordinating response is established ($ 200,400), Year 1 • Purchase and use of satellite and geomorphological images to support CDIG, SISAAP and DNM ($ 24,900), Year 1 • Software, Computer and Service and Maintenance Supply (DEPS, CDIG, DNM, SISAAP) ($ 41,000) • Procurement and installation of meteorological equipment (4 stations, 5 rain gauges, 2 hydrological stations) ($ 428,825)
L8	**Maintenance and other equipment** • Support the maintenance of equipment of national EWS (SISAAP, DNM, CDIG) and of DEPS (Directory of the project) ($ 79,100), Year 1,2,3,4 • Maintenance and hydrometeorological equipment's ($ 17,000), year 1,2,3,4
L9	**Materials & Goods** • Support national early warning institutions (DEPS, SISSAP, CDIG, DNM) with supplies and consumables ($ 104,800), Year 1,2,3,4 • Support to local early warning organization like CRA, CLA and CDA with supplies and consumables ($3,400) Year 1,2,3,4
L10	**Communication** • Support local media on communication and dissemination system to reach all end users ($ 50,000) Year 1,2,3,4
L11	**Audio Visual and Print Production Costs** • Print and production cost of designing of a guide to improve the hydroclimatic data management and communication ($ 2,500)
Component 1 – UNDP TRAC Resources	
L12	**Audio Visual and Print Production Costs** • Print and production cost of designing a climate shock response plan and Monitoring system ($ 14,000), year 1,2,3,4 • Print and production cost for different trainings and workshops ($ 3,000) year 1,2,3,4
L13	**Communication** • Support communication activities around the project ($ 5,000) Year 1 • Support to national early warning institutions (SISSAP, CDIG, DNM) in the production, processing, dissemination of hydrometeorological information (BD, Simulation of climatic events) and the implementation of public information protocol ($ 97,500)
COMPONENT 2: Enhancing climate risk management capacities **OUTCOME 2: Promote financial risk transfer mechanisms (eg the combination of microfinance and microinsurance) to help rural households minimize losses and provide safety nets against climate shocks**	
Outcome 2 – LDCF Resources	
L14	**International consultant** ($600/day) • 1 IC to assess the supply and demand for micro-insurance and related risk-transfer mechanisms (40 days), year 1 • 1 IC to prepare guidelines for the provision of public financial incentives for the engagement of micro finance institutions (30 days), year 2

	• 2 IC in climatology and in agricultural insurance to develop indices based on rainfall data for the insurance of the main crops identified by the communities, (30 days), year 2 • 1 IC to introduce for each index-based situation a technical premium based on the consideration of risks and ensure dialogue with different institutions (80 days), years 2,3,4. • 1 IC to introduce a model for managing insurance policies in collaboration with microfinance institutions and ensure dialogue with them (50 days), years 2,3,4 • 1 IC to develop three training guides on index-based agricultural microinsurance and financial education, and on community-based management of climate risks (34 days), year 2 • 1 IC to develop training programs and modules on community-based management of climate risks, and practical guides on climate change adaptation (40 days), year 2 • 1 IC to carry out structural analysis of the market and institutions to determine the demand for microinsurance and associated risk transfer mechanisms, (60 days), year 4 • 1 IC to select the schemes and instruments to reduce the vulnerability of rural households in the long term and promote their resilience to future climate shocks (20 days)
L15	**Contractual Services – Individual** • Insurance Expert ($ 2,000 per month) • 1 Driver ($500 per month) • Pro-rata of the Communication Officer (25%) ($ 1,600 per month) •
L16	**Local Consultants** • 2 LC to support the IC to assess the supply and demand for micro-insurance and related risk-transfer mechanisms ($16,000) (year 1 and 2) • 1 LC to support the IC to prepare guidelines for the provision of public financial incentives ($12,000) Y2&4 • 2 LC in climatology and in agricultural insurance to develop indices based on rainfall ($6,000) Y2 • 1LC to support the IC to develop three training guides on index-based agricultural microinsurance in the second year and 5 other to organize training in each project area in the year 3 and 4. ($12,000) Y2 • 1 LC to conduct a gender analysis for the access to micro-finance and climate information and develop a gender action plan ($24,000), year 2 and 4
L17	**Audio Visual and Print Production Costs** • Print and production material to support dialogue with Microfinance institutions ($ 4,000), Y 2, 3 & 4 • Training guides on index-based agricultural microinsurance and financial education, and on community-based management of climate risks ($ 9,700), Y 2, 3 & 4
L18	**Training, Workshops and Conferences** • 5 Concertation workshops and 1 for the validation of the assessment of the supply and demand for micro-insurance and related risk-transfer mechanisms ($ 30,000), year 1 • Validation workshop on the guidelines for the provision of public financial incentives for the engagement of micro finance institutions ($ 14,000) year 2 • 6 Workshop to adjust indices based on rainfall data for the insurance ($ 36,000), Year 2,3,4 • 12 workshops for index-based situation (based on the consideration of risks), ($ 48,000) • 12 workshops on model for managing insurance policies, ($ 36,000) • Consultation with the various stakeholders at national level (public and private) to develop a framework document (2 days by area), ($ 90,000) • Training on community-based management of climate risks (30 persons in each of the four area), ($ 300,000) • Validation workshop of the structural analysis of the market and institutions to determine the demand for microinsurance (2 days) ($ 12,000) • Validation workshop of schemes and instruments to reduce the vulnerability of rural households in the long term and promote their resilience to future climate shocks (4 days), ($ 24,000)
L19	**Contractual Services – Companies** • Production of guidelines for the provision of public financial incentives for the engagement of micro finance institutions ($ 10,000) Year 2 • Support NGOs to sensitize communities to climate risks and practices on climate change adaptation (training, workshop, travel, communication) ($ 240,000) Year 2,3,4 • Testing and evaluation of financial risk mechanisms in the selected pilot areas ($ 100,000), Year 3 and 4 • Development of an on-line platform on climate change adaptation through 10 workshops in 5 project areas ($ 100,000), Year 2 and 4

L20	**Travel** • Travel costs for international and national consultants' field missions ($ 58,600), Year 1,2,3,4 ✓ To prepare guidelines for the provision of public financial incentives for the engagement of micro finance institutions ✓ To develop indices based on rainfall data for the insurance of the main crops identified by the communities ✓ To introduce index-based situation a technical premium based on the consideration of risks ✓ To introduce a model for managing insurance policies in collaboration with microfinance institutions, ✓ To develop training programs and modules on community-based management of climate risks, and practical guides on climate change adaptation ✓ To analysis the market and institutions to determine the demand for microinsurance and associated risk transfer mechanisms • Organize experience-sharing visits in community capacity building ($ 112,500) for 10 people for the year 2,3,4 • Organize visits sharing of experiences on institutional capacity building for 7 persons ($ 22,500) Year 3 • DSA for Consultants in assessment of the supply and demand for micro-insurance ($ 8,275) Year 1 • DSA for consultants, Project unit in different assessment, studies, and workshop in the field • DSA of project unit for consultation with the various stakeholders at national level (public and private) to develop a framework document, ($ 14,400) Year 2,3,4 • DSA for IC for structural analysis of the market and institutions to determine the demand for microinsurance ($ 9,000), Year 3 Develop indices based on rainfall data for the insurance of the main crops identified by the communities ($ 60,000), Year 2,3,4 Prepare guidelines for the provision of public financial incentives for the engagement of micro finance institutions ($ 6,000) • Exchange visits and knowledge experience sharing in capacity building for institutions • DSA for introduction of a model for managing insurance policies, (for project unit) ($ 24,000), Year 2 • DSA for exchange visits and knowledge experience sharing in capacity building for institutions (Persons from local communities), ($ 31,500) • DES for exchange visits and knowledge experience sharing in capacity building for communities ($ 90,000) Year 2,3,
L21	**Equipment and Furniture** • Support community radios and telephone companies to promote climate risk management and early warning ($ 60,000)
L22	**UNVs** • 4 UNVs located in each province to support the project implementation during the first two years of the project. These UNVs will support the activities until the local committees are set up and able to support communities. ($18,000/year/UNV)
Outcome 2 – UNDP TRAC Resources	
L23	**Equipment and Furniture** • Acquisition of 2 vehicles ($ 120,000), first year. Two (2) vehicles are required for the operations of this project in order to ensure the project implementation team is able to access very remote project locations. The access roads to these project sites are in very bad conditions. Other options to provide transport have been considered including renting and leasing vehicles. These options have costs that become more expensive over the life of the project than purchasing a new vehicle. The final option of using public transport has proved inadequate because public transport does not reach these remote communities. The operation and maintenance of the vehicles will be covered by the Govt as part of their regular fleet operation.
L24	**Communication** • Support communication activities around the project ($ 12,000) Year 2,3,4
Outcome 3 – KM and M&E	
Outcome 3 – LDCF Resources	
L25	**Training Workshops and Conferences** • Costs for inception workshop ($ 7,500), year 1
L26	**International Consultant**

	• 1 IC for the Mid-term review ($ 15,000) • 1 IC for the Terminal Evaluation ($ 21,000)
L27	**Local Consultant** • 1 LC for the MTR (25 days), year 2 ($5,000) • 2 LC for the TE (45 days each), year 4 ($19,000)
L28	**Contractual Services - Individual** • Pro-rata of the M & E officer (50%) ($ 2,000 per month)
L29	**Travel** • DSA and travel costs associated with the inception workshop ($3,500)
Project Management Costs (PMC)	
PMC – LCDF Resources	
L30	**Travel** • Fuel and lubricants required for the consultants' missions, the implementation of all outputs and the supervision missions, ($ 3,500) Year 1,2,3,4
L31	**Supplies and consumables** • Acquisition of ink cartridges for printing and photocopying, reams of paper for training documents and for the management and supervision of the project ($15,000)
L32	**Professional services** • Annual Audit ($ 12,000) Year 1,2,3,4
L33	**Maintenance and other equipment** • Operation and maintenance required for the implementation of the activities under outcome 1 and 2 ($ 6,000). This includes maintenance costs for the vehicles (car and motorcycles) and other equipment (in particular office equipment), Year 1,2,3,4
L34	**Contractual Services - Individual** • Project coordinator Salary ($ 2,500 per month), • Pro-rata of the Communication Officer (25%) ($ 1,600 per month) • Pro-rata of the M & E officer (50%) ($ 2,000 per month)Pro-rata of the salary of admin finance assistant (25%) ($1,000/month)
L35	**Miscellaneous** Translation costs, utilities, internet, bank and insurance, security and adverts ($ 5,000)
L36	**Audio Visual and Print Production Costs** • Project results promoting materials ($ 9,300)
PMC – UNDP TRAC Resources	
L37	**Direct Project Cost** (134,500)
L38	**Supplies and consummables** • Acquisition of ink cartridges for printing and photocopying, reams of paper for training documents ($ 10,000)
L39	**Equipment and Furniture** • 4 motorcycles for UNVs in the field to access communities ($7,000 per motorcycle)
L40	**Contractual Services – Individual** • Pro-rata of the salary of admin finance assistant (75%) ($1,000/month), 12 months *4 year • Pro-rata of the salary of the Communication Officer (25%) ($ 1,600 per month)
L41	**Travel**

	• Fuel and lubricants required for the consultants' missions, the implementation of all outputs and the supervision missions, ($ 7,300) Year 1,2,3,4
L42	**Maintenance and other equipment** • Operation and maintenance required for the implementation of the activities under outcome 1 and 2 ($ 14,000), Year 1,2,3,4

Summary of Funds

	Amount Year 1	Amount Year 2	Amount Year 3	Amount Year 4	**Total**
GEF	1,844,950	1,246,650	1,231,050	927,350	**5,250,000**
Gouvernement	2,000,000	2,000,000	2,000,000	2,000,000	**8,000,000**
UNDP (PADLFIT)	1,000,000	1,000,000	1,000,000	1,000,000	**4,000,000**
UNDP (TRAC)	143,368	162,043	99,043	95,546	**500,000**
Total	**4,988,318**	**4,408,693**	**4,330,093**	**4,022,896**	**17,750,000**

XI. LEGAL CONTEXT

The country has signed the Standard Basic Assistance Agreement (SBAA) (Annex I.)

128. This project document shall be the instrument referred to as such in Article 1 of the Standard Basic Assistance Agreement between the Government of (country) and UNDP, signed on (date). All references in the SBAA to "Executing Agency" shall be deemed to refer to "Implementing Partner."

129. This project will be implemented by [name of entity] ("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.

130. 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.

XII. RISK MANAGEMENT

Government Entity (NIM)

131. Consistent with the Article III of the SBAA *[or the 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.

132. 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.

133. The Implementing Partner agrees to undertake all reasonable efforts to ensure that no 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/aq_sanctions_list.shtml.

134. The Implementing Partner acknowledges and agrees that UNDP will not tolerate sexual harassment and sexual exploitation and abuse of anyone by the Implementing Partner, and each of its responsible parties, their respective sub-recipients and other entities involved in Project implementation, either as contractors or subcontractors and their personnel, and any individuals performing services for them under the Project Document.

(a) In the implementation of the activities under this Project Document, the Implementing Partner, and each of its sub-parties referred to above, shall comply with the standards of conduct set forth in the Secretary General's Bulletin ST/SGB/2003/13 of 9 October 2003, concerning "Special measures for protection from sexual exploitation and sexual abuse" ("SEA").

(b) Moreover, and without limitation to the application of other regulations, rules, policies and procedures bearing upon the performance of the activities under this Project Document, in the implementation of activities, the Implementing Partner, and each of its sub-parties referred to above, shall not engage in any form of sexual harassment ("SH"). SH is defined as any unwelcome conduct of a sexual nature that might reasonably be expected or be perceived to cause offense or humiliation, when such conduct interferes with work, is made a condition of employment or creates an intimidating, hostile or offensive work environment.

135. a) In the performance of the activities under this Project Document, the Implementing Partner shall (with respect to its own activities), and shall require from its sub-parties referred to in paragraph 4 (with respect to their activities) that they, have minimum standards and procedures in place, or a plan to develop and/or improve such standards and procedures in order to be able to take effective preventive and investigative action. These should include: policies on sexual harassment and sexual exploitation and abuse; policies on whistleblowing/protection against retaliation; and complaints,

disciplinary and investigative mechanisms. In line with this, the Implementing Partner will and will require that such sub-parties will take all appropriate measures to:

i. Prevent its employees, agents or any other persons engaged to perform any services under this Project Document, from engaging in SH or SEA;

ii. Offer employees and associated personnel training on prevention and response to SH and SEA, where the Implementing Partner and its sub-parties referred to in paragraph 4 have not put in place its own training regarding the prevention of SH and SEA, the Implementing Partner and its sub-parties may use the training material available at UNDP;

iii. Report and monitor allegations of SH and SEA of which the Implementing Partner and its sub-parties referred to in paragraph 4 have been informed or have otherwise become aware, and status thereof;

iv. Refer victims/survivors of SH and SEA to safe and confidential victim assistance; and

v. Promptly and confidentially record and investigate any allegations credible enough to warrant an investigation of SH or SEA. The Implementing Partner shall advise UNDP of any such allegations received and investigations being conducted by itself or any of its sub-parties referred to in paragraph 4 with respect to their activities under the Project Document, and shall keep UNDP informed during the investigation by it or any of such sub-parties, to the extent that such notification (i) does not jeopardize the conduct of the investigation, including but not limited to the safety or security of persons, and/or (ii) is not in contravention of any laws applicable to it. Following the investigation, the Implementing Partner shall advise UNDP of any actions taken by it or any of the other entities further to the investigation.

b) The Implementing Partner shall establish that it has complied with the foregoing, to the satisfaction of UNDP, when requested by UNDP or any party acting on its behalf to provide such confirmation. Failure of the Implementing Partner, and each of its sub-parties referred to in paragraph 4, to comply of the foregoing, as determined by UNDP, shall be considered grounds for suspension or termination of the Project.

136. 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).

137. 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.

138. 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.

139. 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.

140. 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.

141. In the event that an investigation is required, UNDP has the obligation to conduct investigations relating to any aspect of UNDP projects and programmes in accordance with UNDP's regulations, rules, policies and procedures. 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.

142. 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.

143. 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.

144. 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. Recovery of such amount by UNDP shall not diminish or curtail the Implementing Partner's obligations under this Project Document.

145. 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.

146. Note: 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.

147. 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.

148. 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.

149. 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.

XIII. MANDATORY ANNEXES

A. Multi-year Workplan
B. Core indicators
C. Terms of Reference for Project Board, Project coordinator, Chief Technical Advisor and other positions as appropriate
D. UNDP Social and Environmental Screening Template (SESP)
E. Gender Analysis and Action Plan
F. UNDP Risk Log
G. UNDP Project Quality Assurance Report
H. Letters of Cofinacing
I. Standard Basic Assistance Agreement

Annex A: Multi Year Work Plan

Task	2018		2019				2020				2021				2022				2023	
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Activity 1.1.1 Conduct the evaluation of the hydro-climatic observation network																				
Activity 1.1.2 Design a guide to improve the hydroclimatic data management and communication							Governance													
Activity 1.2.1 Conduct a feasibility study for a multi-scale and multi-risk early warning system																				
Activity 1.2.2 Implement monitoring indicators for identified risks																				
Activity 1.2.3 Design a climate shock response plan in the each of the five departments																				

Activity 1.2.4 Develop communication media and channels, including the development of a platform for information management and sharing.																				
Activity 1.3.1 Organize trainings for DGRE and DNM staff on the collection, the analysis and dissemination of hydro-climatic information, and the issuance of alerts through appropriate channels.																				
Activity 1.3.2 Organize trainings for DNM, SISAAP and CDIG staff on the use and application of forecasting models																				
Activity 1.3.3 Organize scientific workshops,																				

symposia, and seminars on climate																				
Activity 1.4.1 Development of a training program on early warning systems																				
Activity 1.4.2. Organization of training workshops on early warning systems for DNM, DGRE, local authorities and communities																				
Activity 2.1.1. Assessment of the supply and demand challenges for micro-insurance and related risk-transfer mechanisms																				
Activity 2.2.1 Develop indices based on rainfall data for the insurance of the main crops identified by the communities																				
Activity 2.2.2 Introduce for each																				

index-based situation a technical premium based on the consideration of risks																				
Activity 2.2.3 Introduce a model for managing insurance policies in collaboration with microfinance institutions, micro-credit																				
Activity 2.2.4 Consultation with the various stakeholders at national level (public and private) to develop a framework document for the adoption of agricultural insurance at the national level																				
Activity 2.3.1 Develop three training guides on index-based agricultural microinsurance and																				

financial education, and on community-based management of climate risks																				
Activity 2.3.2 Development of training programs and modules on community-based management of climate risks, and practical guides on climate change adaptation the national level																				
Activity 2.3.3 Promote exchange visits and knowledge experience sharing in capacity building for institutions and communities																				
Activity 2.4.1 Structural analysis of the market and institutions to determine the demand for microinsurance and associated risk transfer mechanisms																				

Activity 2.4.2 Selection of schemes and instruments to reduce the vulnerability of rural households in the long term and promote their resilience to future climate shocks																				
Activity 2.4.3 Testing and evaluation of financial risk mechanisms in the selected pilot areas																				
Activity 2.5.1 Foster cross-community peer-review and learning and sharing mechanisms from the pilot areas of the project																				

Annex B: Core indicators (attached in another document)

Annex C: Terms of Reference for Project Board, Project coordinator, Chief Technical Advisor and other positions

Terms of Reference for the Project Board

The Project Board (PB) will serve as the project's decision-making body. It will meet according to necessity, at least twice each year, to review project progress, approve project work plans and approve major project deliverables. The PB is responsible for providing the strategic guidance and oversight to project implementation to ensure that it meets the requirements of the approved Project Document and achieves the stated outcomes. The PB's role will include:

- Provide strategic guidance to project implementation;
- Ensure coordination between various donor funded and government funded projects and programmes;
- Ensure coordination with various government agencies and their participation in project activities;
- Approve annual project work plans and budgets, at the proposal of the Project coordinator;
- Approve any major changes in project plans or programmes;
- Oversee monitoring, evaluation and reporting in line with GEF requirements;
- Ensure commitment of human resources to support project implementation, arbitrating any issues within the project;
- Negotiate solutions between the project and any parties beyond the scope of the project;
- Ensure that UNDP Social and Environmental Safeguards Policy is applied throughout project implementation; and, address related grievances as necessary.

These terms of reference will be finalized during the Project Inception Workshop.

Terms of Reference for Key Project Staff

Project Director

Background
The Project Director (PD) will be accountable to the MoA and UNDP for the achievement of objectives and results in the assigned Project. The PD will be part of the Project Steering Committee and answer to it.

Duties and Responsibilities
- Serve as a member of the Project Board.
- Supervise compliance with objectives, activities, results, and all fundamental aspects of project execution as specified in the project document.
- Supervise compliance of project implementation with MoA policies, procedures and ensure consistency with national plans and strategies.
- Facilitate coordination with other organizations and institutions that will conduct related activities
- Participate in project evaluation, testing, and monitoring missions.
- Coordinate with national governmental representatives on legal and financial aspects of project activities.
- Coordinate and supervise government staff inputs to project implementation.
- Coordinate, oversee and report on government cofinancing inputs to project implementation.

Project coordinator

Background

The Project coordinator (PM), will be locally recruited following UNDP procedure, with input to the selection process from the Project partners. The position will be appointed by the project implementing agencies and funded entirely from the Project. The PM will be responsible for the overall management of the Project, including the mobilisation of all project inputs, supervision over project staff, consultants and sub-contractors. The PM will report to the PD in close consultation with the assigned UNDP Programme Manager for all of the Project's substantive and administrative issues. From the strategic point of view of the Project, the PM will report on a periodic basis to the Project Board, based on the PD's instruction. Generally, the PM will support the PD who will be responsible for meeting government obligations under the Project, under the NIM execution modality. The PM will perform a liaison role with the government, UNDP and other UN agencies, CSOs and project partners, and maintain close collaboration with other donor agencies providing co-financing. The PM will work closely with the Project Implementation Unit Coordinators.

Duties and Responsibilities

- Plan the activities of the project and monitor progress against the approved work-plan.
- Supervise and coordinate the production of project outputs, as per the project document in a timely and high quality fashion.
- Coordinate all project inputs and ensure that they are adhere to UNDP procedures for nationally executed projects.
- Supervise and coordinate the work of all project staff, consultants and sub-contractors ensuring timing and quality of outputs, including by providing technical advise for the design of activities, for example by providing guidance on the selection of financial risk transfer schemes to be tested through the project.
- Coordinate the recruitment and selection of project personnel, consultants and sub-contracts, including drafting terms of reference and work specifications and overseeing all contractors' work.
- Manage requests for the provision of financial resources by UNDP, through advance of funds, direct payments, or reimbursement using the UNDP provided format.
- Prepare, revise and submit project work and financial plans, as required by Project Board and UNDP.
- Monitor financial resources and accounting to ensure accuracy and reliability of financial reports, submitted 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.
- Liaise with UNDP, Project Board, relevant government agencies, and all project partners, including donor organisations and CSOs for effective coordination of all project activities.
- Facilitate administrative support to subcontractors and training activities supported by the Project, including by providing technical inputs during trainings conducted under outcome 2.
- Oversee and ensure timely submission of the Inception Report, Project Implementation Report, Technical reports, quarterly financial reports, and other reports as may be required by UNDP, GEF and other oversight agencies.
- Disseminate project reports and respond to queries from concerned stakeholders.
- Report progress of project to the steering committees, and ensure the fulfilment of PSC directives.
- Oversee the exchange and sharing of experiences and lessons learned with relevant community based integrated conservation and development projects nationally and internationally. In particular, the project manager will assist the coordination of early warning activities with other projects (activity 1.1.5), he will also technically support the trainings conducted under output 1.3 and 1.4 and will engage with the beneficiaries to ensure the knowledge is retained and applied, in particular within the targeted agencies (NDM, DGRE and ministries).

- Assist community groups, municipalities, CSOs, staff, students and others with development of essential skills through training workshops and on the job training thereby increasing their institutional capabilities.
- Encourage staff, partners and consultants such that strategic, intentional and demonstrable efforts are made to actively include women in the project, including activity design and planning, budgeting, staff and consultant hiring, subcontracting, purchasing, formal community governance and advocacy, outreach to social organizations, training, participation in meetings; and access to program benefits.
- Assists and advises the Project Implementation Units responsible for activity implementation in the target sites.
- Carry regular, announced and unannounced inspections of all sites and the activities of the Project Implementation Units.

Required skills and expertise

- A university degree (MSc or PhD) in a subject related to climate change, agriculture insurance and resilience
- At least 10 years of experience in agriculture insurance
- At least 5 years of demonstrable project/programme management experience.
- At least 5 years of experience working with ministries, national or provincial institutions that are concerned with agriculture and/ or insurance.

Competencies

- Strong leadership, managerial and coordination skills, with a demonstrated ability to effectively coordinate the implementation of large multi-stakeholder projects, including financial and technical aspects.
- Ability to effectively manage technical and administrative teams, work with a wide range of stakeholders across various sectors and at all levels, to develop durable partnerships with collaborating agencies.
- Ability to administer budgets, train and work effectively with counterpart staff at all levels and with all groups involved in the project.
- Ability to coordinate and supervise multiple Project Implementation Units in their implementation of technical activities in partnership with a variety of subnational stakeholder groups, including community and government.
- Knowledge and working experience of mainstreaming gender in international projects;
- Strong drafting, presentation and reporting skills.
- Strong communication skills, especially in timely and accurate responses to emails.
- Strong computer skills, in particular mastery of all applications of the MS Office package and internet search.
- Strong knowledge about insurance policies in the CIMA region.
- Excellent command of French and English. Knowledge of one or more local languages would be an asset.

Project assistant and accountant

Under the guidance and supervision of the Project coordinator, the Project Assistant and accountant will carry out the following tasks:

- Keep records of project funds and expenditures, and ensure all project-related financial documentation are well maintained and readily available when required by the Project coordinator;
- Review project expenditures and ensure that project funds are used in compliance with the Project Document and GoC financial rules and procedures;
- Validate and certify FACE forms before submission to UNDP;
- Provide necessary financial information as and when required for project management decisions;
- Provide necessary financial information during project audit(s);

- Review annual budgets and project expenditure reports, and notify the Project coordinator if there are any discrepancies or issues;
- Consolidate financial progress reports submitted by the responsible parties for implementation of project activities;
- Liaise and follow up with the responsible parties for implementation of project activities in matters related to project funds and financial progress reports.
- Assist the Project coordinator in day-to-day management and oversight of project activities;
- Assist the M&E officer in matters related to M&E and knowledge resources management;
- Assist in the preparation of progress reports;
- Ensure all project documentation (progress reports, consulting and other technical reports and minutes of meetings) are properly maintained in hard and electronic copies in an efficient and readily accessible filing system, for when required by PB, TAC, UNDP, project consultants and other PMU staff;
- Provide PMU-related administrative and logistical assistance.

The Project Assistant will be recruited based on the following qualifications:
- A Bachelors degree or an advanced diploma in accounting/ financial management;
- At least five years of relevant work experience preferably in a project management setting involving multi-lateral/ international funding agency. Previous experience with UN project will be a definite asset;
- Very good inter-personal skills;
- Proficiency in the use of computer software applications especially MS Word and MS Excel.
- Excellent language skills in French and English (writing, speaking and reading) and in local languages

Duties:

As extension officers for the project on the ground, they will:
- Strengthen information, coordination and communication flows, among all actors, top down and bottom up
- Perform community awareness activities and trainings, inter allia:
  - Assess capacities of local public and private actors
  - Carry out the Training/ Capacity Building of local public and private actors
- Perform all tasks seen as useful by the project coordinator in order to make the project progress on the ground
- Contribute to M&E of the project
- Ensure alignment of project activities with beneficiaries needs and expectations

Qualifications:

The Technical Support Officers will be recruited based on the following qualifications:
- A Bachelors degree, preferably in the field of community development or agriculture
- Knowledge of index-based insurance for agriculture;
- At least five years of relevant work experience of project implementation and capacity building, ideally involving international donors. Previous experience with UN projects will be a definite asset;
- Knowledge and working experience of mainstreaming gender in projects;
- Knowledge and working experience of M&E;
- Very good inter-personal skills
- Knowledge of local languages and culture
- Good language skills in French and English (writing, speaking and reading)

Project Communications Officer

Under the overall supervision and guidance of the Project coordinator, the Communications Officer will have the responsibility for leading knowledge management outputs in Component 1 and 2 and developing the project communications strategy at the project outset and coordinating its implementation across all project components. The Communications Officer will work closely with the M&E Officer on knowledge management aspects of the project. Specific responsibilities will include:

- Develop a project communications strategy / plan, incorporate it with the annual work plans and update it annually in consultation with project stakeholders;
- Coordinate the implementation of knowledge management outputs of the project. This knowledge management will (i) strengthen the ownership, (ii) increase the understanding of climate change and the project for project beneficiaries and other stakeholders and (iii) enable the upscaling;
- Coordinate and oversee the implementation of public awareness activities across all project components;
- Facilitate the design and maintenance of the project website/webpages and ensure it is up-to-date and dynamic;
- Facilitate learning and sharing of knowledge and experiences relevant to the project;

The Project Communications Officer will be recruited based on the following qualifications:

- A Bachelors degree, preferably in the field of community development or natural resource / environmental management;
- Knowledge of index-based insurance for agriculture;
- Knowledge and working experience of mainstreaming gender in international projects;
- A communications qualification (diploma, Bachelors degree) ;
- At least three years of relevant work experience of communications for project or programme implementation, ideally involving international donors. Previous experience with UN projects will be a definite asset;
- Previous experience in developing and implementing communications strategies for organizations or projects
- Strong professional working capacity to use information and communications technology, specifically including website design and desk top publishing software
- Very good inter-personal skills
- Excellent language skills in French and English (writing, speaking and reading)

Annex D. Social and Environmental Risk Screening Checklist

Checklist Potential Social and Environmental Risks		
Principle 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?	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? [7]	No
3.	Could the Project potentially restrict availability, quality of and access to resources or basic services, in particular to marginalized individuals or groups?	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?	No
5.	Is there a risk that duty-bearers do not have the capacity to meet their obligations in the Project?	No
6.	Is there a risk that rights-holders do not 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?	No
8.	Is there a risk that the Project would exacerbate conflicts among and/or the risk of violence to project-affected communities and individuals?	No
Principle 2: Gender Equality and Women's Empowerment		
1.	Is there a likelihood that the proposed Project would have adverse impacts on gender equality and/or the situation of women and girls?	No
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?	No
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
4.	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
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*	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	No

[7] 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.

	recognized as such by authoritative sources and/or indigenous peoples or local communities?	
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)	No
1.4	Would Project activities pose risks to endangered species?	No
1.5	Would the Project pose a risk of introducing invasive alien species?	No
1.6	Does the Project involve harvesting of natural forests, plantation development, or reforestation?	No
1.7	Does the Project involve the production and/or harvesting of fish populations or other aquatic species?	No
1.8	Does the Project involve significant extraction, diversion or containment of surface or ground water? *For example, construction of dams, reservoirs, river basin developments, groundwater extraction*	No
1.9	Does the Project involve utilization of genetic resources? (e.g. collection and/or harvesting, commercial development)	No
1.10	Would the Project generate potential adverse transboundary or global environmental concerns?	No
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.*	No
Standard 2: Climate Change Mitigation and Adaptation		
2.1	Will the proposed Project result in significant[8] greenhouse gas emissions or may exacerbate climate change?	No
2.2	Would the potential outcomes of the Project be sensitive or vulnerable to potential impacts of climate change?	Yes
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)? *For example, changes to land use planning may encourage further development of floodplains, potentially increasing the population's vulnerability to climate change, specifically flooding*	No
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?	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)?	No
3.3	Does the Project involve large-scale infrastructure development (e.g. dams, roads, buildings)?	No
3.4	Would failure of structural elements of the Project pose risks to communities? (e.g. collapse of buildings or infrastructure)	No
3.5	Would the proposed Project be susceptible to or lead to increased vulnerability to earthquakes, subsidence, landslides, erosion, flooding or extreme climatic conditions?	No
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)?	No
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

[8] 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.]

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)?	No
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
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)	No
4.2	Does the Project propose utilizing tangible and/or intangible forms of cultural heritage for commercial or other purposes?	No
Standard 5: Displacement and Resettlement		
5.1	Would the Project potentially involve temporary or permanent and full or partial physical displacement?	No
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
5.3	Is there a risk that the Project would lead to forced evictions?[9]	No
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?	No
Standard 6: Indigenous Peoples		
6.1	Are indigenous peoples present in the Project area (including Project area of influence)?	No
6.2	Is it likely that the Project or portions of the Project will be located on lands and territories claimed by indigenous peoples?	No
6.3	Would the proposed Project potentially affect the human rights, lands, natural resources, territories, and traditional livelihoods of indigenous peoples (regardless of whether indigenous peoples possess the legal titles to such areas, whether the Project is located within or outside of the lands and territories inhabited by the affected peoples, or whether the indigenous peoples are recognized as indigenous peoples by the country in question)? *If the answer to the screening question 6.3 is "yes" the potential risk impacts are considered potentially severe and/or critical and the Project would be categorized as either Moderate or High Risk.*	No
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
6.5	Does the proposed Project involve the utilization and/or commercial development of natural resources on lands and territories claimed by indigenous peoples?	No
6.6	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
6.7	Would the Project adversely affect the development priorities of indigenous peoples as defined by them?	No
6.8	Would the Project potentially affect the physical and cultural survival of indigenous peoples?	No
6.9	Would the Project potentially affect the Cultural Heritage of indigenous peoples, including through the commercialization or use of their traditional knowledge and practices?	No
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-	No

[9] 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.

	routine circumstances with the potential for adverse local, regional, and/or transboundary impacts?	
7.2	Would the proposed Project potentially result in the generation of waste (both hazardous and non-hazardous)?	No
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? *For example, DDT, PCBs and other chemicals listed in international conventions such as the Stockholm Conventions on Persistent Organic Pollutants or the Montreal Protocol*	No
7.4	Will the proposed Project involve the application of pesticides that may have a negative effect on the environment or human health?	No
7.5	Does the Project include activities that require significant consumption of raw materials, energy, and/or water?	No

Annex E. Gender Analysis and Action Plan

As part of the project design, a gender analysis report was elaborated focusing on the planned interventions. This report produced recommendations that were included in the logic of this intiative to take into account gender considerations in the context of adaptation to climate risks.

According to the National Gender Policy Document, with the exception of N'Djamena, the proportion of the population aged 18 and over is much higher among women than men in all regions of the country. In the agricultural or rural sector, the active population represents more than 78% of the general population, 53% of whom are women, and lives mainly agro-silvo-pastoral productions. In spite of Chad's economic potential, poverty affects 56.9% of the Chadian population and is particularly characterized by increased vulnerability and endemic women, increasingly marginalized because of their status. With over 80% of the rural population deriving its livelihoods from climate-sensitive sectors such as agriculture, livestock, or fisheries, climate change increases the vulnerability of rural communities and reduces consequently their adaptation capacity. The impacts are thus numerous and characterized by the accentuation of heat stress situations for people, livestock and plants, the reduction of agricultural yields, the continuous change of crops and animal species, pressures on water resources and the rise in the price of agri-food products.

In this predominantly agro-pastoral economy dominated by traditional farming practices, women play a very important role in family and socio-economic activities. However, their social status leaves something to be desired due to the socio-cultural pressures and prejudices of all kinds that privilege and emphasize its role, especially procreation. While access to factors of production can positively transform the livelihoods of millions of families in rural areas, women, including young people, have very little access to the essential inputs of land, materials and equipment, new technologies, not to mention the extension services.

Regarding the operating modes and trends of climatic factors, women and men relate mainly to the effects of climate risks experienced daily. Every year, in July and August, floods prevent rice growing in Bébédjia, regularly, Moundou knows upheavals in the cultural calendar, regularly, Déli knows upheavals in the cultural calendar and the drying up of wells of water, Bere knows, in all cases, a decline in yield, Bongor, sometimes a drop in productivity in the arboriculture sector.

Regarding the knowledge of maps and data related to climate risks, women recognize that floods occur almost everywhere in Bébédjia, the enemies of culture, according to the women, are rife in several localities in Moundou, Déli, according to women and men, has no knowledge about maps and data related to climate risks, floods, according to women and men, are experienced in West Bere while the east undergoes droughts, according to women and men, problems are also perceived in the plains as in the open areas.

The triggering of accurate and timely alerts, relative to the triggering of accurate and timely warnings, the points of view are divergent. For women of Bébédjia, it is only possible to trigger alerts given the regularity, for example, rain, wind, heat, or cold. The women of Moundou, however, say that information delivered, as the case may be, have assisted women's organizations in their activities. Significant alerts to those at risk, are not accessible to producers. Thus, if the alerts arrive in the same manner to women and men in Moundou, Déli and Bongor through the channels of local or community radio stations, this is not the case in Béré who accuses a difficult access and to Bébédjia who calls for the involvement of women in alerting devices.

Regarding the preferences marked for information channels, the vast majority of people met (women and men) opt for the dissemination of information by local or community radio (Moundou, Déli, Bongor), followed by mobile telephony (Moundou, Béré) and extension agents (Bébédjia, Déli). With regard to access and exploitation even to climatic information, only the women of Moundou say that they are guaranteed to everyone, without distinction of any kind. Unanimously, Bongor's men and women always find them confused,

often misleading. For this reason, they require, for example, that accurate information on the beginning and end of seasons be released every five (5) days.

In terms of management and transfer of financial risks and whether women are involved in the management of household finances, favorable conditions for their involvement in the management and transfer of financial risks, the women and men interviewed replied in the affirmative. While women in other localities claim that they sometimes take care of the education and health of their children, Bongor says they and men do almost the same work in the fields

Even if the most important sources of income are distinguished from one locality to another, in the five (5) localities visited, we can classify, in order of importance, rice, sesame, peanut, millet (millet / sorghum / millet), sorghum, oilseeds, fruits and vegetables. And while the most important sources of income for both women and men are rice, sesame and groundnuts, women are generally and easily doing well with millet, maize, oilseeds, fruits and vegetables.

According to the information collected in the field, women and men do not use the products of their activities differently: those produced within the associative framework are much more for sale (90%) and those produced by small family farms by households. From the responses obtained, 100% of the people interviewed are in favor of setting up a risk management and transfer mechanism if the price to be paid is not exorbitant and it is possible to have the costs covered potential risks in kind.

In this context, it was recommended that gender should be taken into account when collecting information and also establish a gender sensitive communication and climate information dissemination system. The capacity of stakeholders should be strengthened to prepare and disseminate climate information, taking into account gender considerations and operationalize information and communication channels accessible to all segments of the population, including the most vulnerable segments. Another recommendation was to develop a cartography of risks and climatic hazards and integrate the perspectives related to gender.

The project should also promote the participation of women in the development of the early warning system, which should identify specific priority needs of women and men. Develop a national early warning strategy integrating the gender dimension and regional plans for preparing and responding to climate-related climate emergencies and guarantee an equitable access of women and men to emergency relief. The project should also capitalize on the available knowledge, tools and community-based early warning systems sensitive to gender to better address climate risks and should also strengthen the capacities of actresses and local actors on climate forecasts.

In terms of financial risk management and transfer the project should conduct campaigns to raise the awareness of women and men about the importance and the merits of setting up a mechanism for managing and transferring financial risks. At the same time promote policies and strategies to improve the conditions of access to productive resources, particularly for women and young people, by developing legislative reforms that will guarantee them the right of access to these resources and by involving community leaders in implementation of these reforms. Another import action is to develop and implement measures that will strengthen the financial capacity of women and young people through legal and institutional reform measures, in order to reduce the constraints of all kinds that characterize their lives in rural areas. The project will organize, facilitate and guarantee relationships between financial institutions and producers in the context of financial risk management and transfer. One of the recommendations was to promote the increase in demand for agropastoral products through the improvement of quality and quantity as well as the establishment and organization of an efficient distribution network and at the same time support the creation of a gender-sensitive distribution network at national, regional and international levels.

Annex F: UNDP Risk Log

Description	Type	Impact & Probability	Mitigation Measures	Owner
Risk of land dispute for the implementation of measuring instruments, eg automatic rain gauges.	Regulatory	Probability: 2 Impact: 2	Sensitization and community involvement in the choice of equipment installation sites, involvement of local decision-makers and state decentralized bodies. This will ensure that the identified land is not subject to conflict.	PMU
The risk that the definition and development of early warning systems and financial and insurance mechanisms will not focus on vulnerable groups such as women and youth.	Operational	P = 3 I = 1	Employ different consultation methods, not only limited to meetings and workshops in major centers and at the national level, but also community level interviews and field surveys with directly affected groups.	PMU
The basic risk in insurance, that the product does not accurately reflect the reality of the ground	Strategic	P = 1 I = 3	Work with a firm specialized in index agricultural insurance and with extensive experience in climate risk transfer mechanisms and climate and financial risk modeling capabilities.	PMU
Risk of an extreme weather and climate event taking place during the implementation of the project	Environmental	P = 3 I = 3	The project approach to implement early warning systems and adopting financial risk transfer mechanisms will provide a response to the repeated effects of extreme weather and climate events	PMU
Low political will to adjust the "governance frameworks" (policies, plans, strategies, programs)	Political	P = 3 I = 2	Awareness and involvement of key decision-makers at the highest level of government to ensure understanding of the opportunities and benefits of integrating climate change into policies	PMU

Annex G: UNDP Project Quality Assurance Report

PROJECT QA ASSESSMENT: DESIGN AND APPRAISAL

OVERALL PROJECT

EXEMPLARY (5) ◎◎◎◎◎	HIGHLY SATISFACTORY (4) ◎◎◎◎○	SATISFACTORY (3) ◎◎◎○○	NEEDS IMPROVEMENT (2) ◎◎○○○	INADEQUATE (1) ◎○○○○
At least four criteria are rated Exemplary, and all criteria are rated High or Exemplary.	All criteria are rated Satisfactory or higher, and at least four criteria are rated High or Exemplary.	At least six criteria are rated Satisfactory or higher, and only one may be rated Needs Improvement. The SES criterion must be rated Satisfactory or above.	At least three criteria are rated Satisfactory or higher, and only four criteria may be rated Needs Improvement.	One or more criteria are rated Inadequate, or five or more criteria are rated Needs Improvement.

DECISION

- **APPROVE** – the project is of sufficient quality to continue as planned**.** Any management actions must be addressed in a timely manner.
- **APPROVE WITH QUALIFICATIONS** – the project has issues that must be addressed before the project document can be approved. Any management actions must be addressed in a timely manner.
- **DISAPPROVE** – the project has significant issues that should prevent the project from being approved as drafted.

RATING CRITERIA

STRATEGIC

1. Does the project's Theory of Change specify how it will contribute to higher level change? (Select the option from 1-3 that best reflects the project): • **3:** The project has a theory of change with explicit assumptions and clear change pathway describing how the project will contribute to outcome level change as specified in the programme/CPD, backed by credible evidence of what works effectively in this context. The project document clearly describes why the project's strategy is the best approach at this point in time. • **2:** The project has a theory of change. It has an explicit change pathway that explains how the project intends to contribute to outcome-level change and why the project strategy is the best approach at this point in time, but is backed by limited evidence. • **1:** The project does not have a theory of change, but the project document may describe in generic terms how the project will contribute to development results, without specifying the key assumptions. It does not make an explicit link to the programme/CPD's theory of change. *Note: Management Action or strong management justification must be given for a score of 1	**3** 2 1 **Evidence** *A specific section and a theory of change was designed in the project document. The barriers and pathways for change were clearly defined.*
2. Is the project aligned with the thematic focus of the UNDP Strategic Plan? (select the option from 1-3 that best reflects the project): • **3:** The project responds to one of the three areas of development work[10] as specified in the Strategic Plan; it addresses at least one of the proposed new and emerging areas[11]; an issues-based analysis has been incorporated into the project design; and the project's RRF includes all the relevant SP output indicators. *(all must be true to select this option)* • **2:** The project responds to one of the three areas of development work[1] as specified in the Strategic Plan. The project's RRF includes at least one SP output indicator, if relevant. *(both must be true to select this option)* • **1:** While the project may respond to one of the three areas of development work[1] as specified in the Strategic Plan, it is based on a sectoral approach without addressing the complexity of the development issue. None of the relevant SP indicators are included in the RRF. This answer is also	**3** 2 1 **Evidence** *In the activity 2.3.1 , data and risk-informed development policies, plans, systems and financing incorporate integrated and gender-responsive solutions to reduce disaster-risks, enable climate change adaptation and mitigation, and prevent risk of conflict*

[10] 1. Sustainable development pathways; 2. Inclusive and effective democratic governance; 3. Resilience building
[11] sustainable production technologies, access to modern energy services and energy efficiency, natural resources management, extractive industries, urbanization, citizen security, social protection, and risk management for resilience

selected if the project does not respond to any of the three areas of development work in the Strategic Plan.	

RELEVANT

3. Does the project have strategies to effectively identify, engage and ensure the meaningful participation of targeted groups/geographic areas with a priority focus on the excluded and marginalized? (select the option from 1-3 that best reflects this project): • **3:** The target groups/geographic areas are appropriately specified, prioritising the excluded and/or marginalised. Beneficiaries will be identified through a rigorous process based on evidence (if applicable). The project has an explicit strategy to identify, engage and ensure the meaningful participation of specified target groups/geographic areas throughout the project, including through monitoring and decision-making (such as representation on the project board) *(all must be true to select this option)* • **2:** The target groups/geographic areas are appropriately specified, prioritising the excluded and/or marginalised. The project document states how beneficiaries will be identified, engaged and how meaningful participation will be ensured throughout the project. *(both must be true to select this option)* • **1:** The target groups/geographic areas are not specified, or do not prioritize excluded and/or marginalised populations. The project does not have a written strategy to identify or engage or ensure the meaningful participation of the target groups/geographic areas throughout the project. *Note: Management Action must be taken for a score of 1, or select not applicable.	**3** 2 1 **Evidence** *The consultants conducted missions in the 5 areas of project intervention. This supported the engagement and participation of targeted local communities. The most vulnerable populations will be targeted.*
4. Have knowledge, good practices, and past lessons learned of UNDP and others informed the project design? (select the option from 1-3 that best reflects this project): • **3:** Knowledge and lessons learned (gained e.g. through peer assist sessions) backed by credible evidence from evaluation, corporate policies/strategies, and monitoring have been explicitly used, with appropriate referencing, to develop the project's theory of change and justify the approach used by the project over alternatives. • **2:** The project design mentions knowledge and lessons learned backed by evidence/sources, which inform the project's theory of change but have not been used/are not sufficient to justify the approach selected over alternatives. • **1:** There is only scant or no mention of knowledge and lessons learned informing the project design. Any references that are made are not backed by evidence. *Note: Management Action or strong management justification must be given for a score of 1	**3** 2 1 **Evidence** *The project is based on the analysis of previous project and programme, in particular the PANA.* *Workshops with all the institutions and stakeholders enabled the integration of lessons learned.*
5. Does the project use gender analysis in the project design and does the project respond to this gender analysis with concrete measures to address gender inequities and empower women? (select the option from 1-3 that best reflects this project): • **3:** A participatory gender analysis on the project has been conducted. This analysis reflects on the different needs, roles and access to/control over resources of women and men, and it is fully integrated into the project document. The project establishes concrete priorities to address gender inequalities in its strategy. The results framework includes outputs and activities that specifically respond to this gender analysis, with indicators that measure and monitor results contributing to gender equality. *(all must be true to select this option)* • **2:** A gender analysis on the project has been conducted. This analysis reflects on the different needs, roles and access to/control over resources of women and men. Gender concerns are integrated in the development challenge and strategy sections of the project document. The results framework includes outputs and activities that specifically respond to this gender analysis, with indicators that measure and monitor results contributing to gender equality. *(all must be true to select this option)* • **1:** The project design may or may not mention information and/or data on the differential impact of the project's development situation on gender relations, women and men, but the constraints have not been clearly identified and interventions have not been considered. *Note: Management Action or strong management justification must be given for a score of 1	**3** 2 1 **Evidence** *Gender was taken into account in the formulation of the project (a gender specialist was recruited as part of the PPG). Specific activities to promote gender will be implemented. The UNDP Gender Marker is 2.*

6. Does UNDP have a clear advantage to engage in the role envisioned by the project vis-à-vis national partners, other development partners, and other actors? (select from options 1-3 that best reflects this project): • **3:** An analysis has been conducted on the role of other partners in the area where the project intends to work, and credible evidence supports the proposed engagement of UNDP and partners through the project. It is clear how results achieved by relevant partners will contribute to outcome level change complementing the project's intended results. If relevant, options for south-south and triangular cooperation have been considered, as appropriate. *(all must be true to select this option)* • **2:** Some analysis has been conducted on the role of other partners where the project intends to work, and relatively limited evidence supports the proposed engagement of and division of labour between UNDP and partners through the project. Options for south-south and triangular cooperation may not have not been fully developed during project design, even if relevant opportunities have been identified. • **1:** No clear analysis has been conducted on the role of other partners in the area that the project intends to work, and relatively limited evidence supports the proposed engagement of UNDP and partners through the project. There is risk that the project overlaps and/or does not coordinate with partners' interventions in this area. Options for south-south and triangular cooperation have not been considered, despite its potential relevance. *Note: Management Action or strong management justification must be given for a score of 1	**3** 2 1 **Evidence** *The project presents an in-depth analysis of the stakeholders and project partners, with the identification of roles and possibilities for synergies.*
SOCIAL & ENVIRONMENTAL STANDARDS	
7. Does the project seek to further the realization of human rights using a human rights based approach? (select from options 1-3 that best reflects this project): • **3:** Credible evidence that the project aims to further the realization of human rights, upholding the relevant international and national laws and standards in the area of the project. Any potential adverse impacts on enjoyment of human rights were rigorously identified and assessed as relevant, with appropriate mitigation and management measures incorporated into project design and budget. *(all must be true to select this option)* • **2:** Some evidence that the project aims to further the realization of human rights. Potential adverse impacts on enjoyment of human rights were identified and assessed as relevant, and appropriate mitigation and management measures incorporated into the project design and budget. • **1:** No evidence that the project aims to further the realization of human rights. Limited or no evidence that potential adverse impacts on enjoyment of human rights were considered. *Note: Management action or strong management justification must be given for a score of 1	3 **2** 1 **Evidence** *A social and environmental analysis for the project was conducted and concluded that the project will have positive impacts on the resilience of populations vulnerable to climate change. The project will therefore contribute to the advancement of human rights through the strengthening of physical security.*
8. Did the project consider potential environmental opportunities and adverse impacts, applying a precautionary approach? (select from options 1-3 that best reflects this project): • **3:** Credible evidence that opportunities to enhance environmental sustainability and integrate poverty-environment linkages were fully considered as relevant, and integrated in project strategy and design. Credible evidence that potential adverse environmental impacts have been identified and rigorously assessed with appropriate management and mitigation measures incorporated into project design and budget. *(all must be true to select this option)*. • **2:** No evidence that opportunities to strengthen environmental sustainability and poverty-environment linkages were considered. Credible evidence that potential adverse environmental impacts have been identified and assessed, if relevant, and appropriate management and mitigation measures incorporated into project design and budget. • **1:** No evidence that opportunities to strengthen environmental sustainability and poverty-environment linkages were considered. Limited or no evidence that potential adverse environmental impacts were adequately considered. *Note: Management action or strong management justification must be given for a score of 1	**3** 2 1 **Evidence** *An environmental and social project evaluation was conducted. The project will have a positive impact on the environment as it will reduce the risks climate change has on the environment, using sustainable practices.*
9. Has the Social and Environmental Screening Procedure (SESP) been conducted to identify potential social and environmental impacts and risks? The SESP is not required for projects in which UNDP is Administrative Agent only and/or projects comprised solely of reports, coordination of events, trainings, workshops, meetings, conferences and/or communication materials and information dissemination. [if yes, upload the completed checklist. If SESP is not required, provide the reason for the exemption in the evidence section.]	**Yes** No

MANAGEMENT & MONITORING

10. Does the project have a strong results framework? (select from options 1-3 that best reflects this project):

- **3:** The project's selection of outputs and activities are at an appropriate level and relate in a clear way to the project's theory of change. Outputs are accompanied by SMART, results-oriented indicators that measure all of the key expected changes identified in the theory of change, each with credible data sources, and populated baselines and targets, including gender sensitive, sex-disaggregated indicators where appropriate. *(all must be true to select this option)*
- **2:** The project's selection of outputs and activities are at an appropriate level, but may not cover all aspects of the project's theory of change. Outputs are accompanied by SMART, results-oriented indicators, but baselines, targets and data sources may not yet be fully specified. Some use of gender sensitive, sex-disaggregated indicators, as appropriate. *(all must be true to select this option)*
- **1:** The results framework does not meet all of the conditions specified in selection "2" above. This includes: the project's selection of outputs and activities are not at an appropriate level and do not relate in a clear way to the project's theory of change; outputs are not accompanied by SMART, results-oriented indicators that measure the expected change, and have not been populated with baselines and targets; data sources are not specified, and/or no gender sensitive, sex-disaggregation of indicators.

*Note: Management Action or strong management justification must be given for a score of 1

3 | 2 | 1

Evidence
The project has a strong results framework, including all the necessary sections (baseline, indicators, targets)

11. Is there a comprehensive and costed M&E plan in place with specified data collection sources and methods to support evidence-based management, monitoring and evaluation of the project?

Yes (3) | No (1)

12. Is the project's governance mechanism clearly defined in the project document, including planned composition of the project board? (select from options 1-3 that best reflects this project):

- **3:** The project's governance mechanism is fully defined in the project composition. Individuals have been specified for each position in the governance mechanism (especially all members of the project board.) Project Board members have agreed on their roles and responsibilities as specified in the terms of reference. The ToR of the project board has been attached to the project document. *(all must be true to select this option)*.
- **2:** The project's governance mechanism is defined in the project document; specific institutions are noted as holding key governance roles, but individuals may not have been specified yet. The prodoc lists the most important responsibilities of the project board, project director/manager and quality assurance roles. *(all must be true to select this option)*
- **1:** The project's governance mechanism is loosely defined in the project document, only mentioning key roles that will need to be filled at a later date. No information on the responsibilities of key positions in the governance mechanism is provided.

*Note: Management Action or strong management justification must be given for a score of 1

3 | 2 | 1

Evidence
The Governance mechanism of the project was discussed, approved and integrated in the project document, in agreement with national partners.
The project has planned for a steering committee and a technical monitoring comittee.

13. Have the project risks been identified with clear plans stated to manage and mitigate each risks? (select from options 1-3 that best reflects this project):

- **3:** Project risks related to the achievement of results are fully described in the project risk log, based on comprehensive analysis drawing on the theory of change, Social and Environmental Standards and screening, situation analysis, capacity assessments and other analysis. Clear and complete plan in place to manage and mitigate each risk. *(both must be true to select this option)*
- **2:** Project risks related to the achievement of results identified in the initial project risk log with mitigation measures identified for each risk.
- **1:** Some risks may be identified in the initial project risk log, but no evidence of analysis and no clear risk mitigation measures identified. This option is also selected if risks are not clearly identified and no initial risk log is included with the project document.

*Note: Management Action must be taken for a score of 1

3 | 2 | 1

Evidence
A risk analysis was conducted for the project. Mitigation measures were identified and integrated.

EFFICIENT

14. Have specific measures for ensuring cost-efficient use of resources been explicitly mentioned as part

Yes (3) | No (1)

of the project design? This can include: i) using the theory of change analysis to explore different options of achieving the maximum results with the resources available; ii) using a portfolio management approach to improve cost effectiveness through synergies with other interventions; iii) through joint operations (e.g., monitoring or procurement) with other partners.		
15. Are explicit plans in place to ensure the project links up with other relevant on-going projects and initiatives, whether led by UNDP, national or other partners, to achieve more efficient results (including, for example, through sharing resources or coordinating delivery?)	**Yes (3)**	No (1)
16. Is the budget justified and supported with valid estimates? • **3:** The project's budget is at the activity level with funding sources, and is specified for the duration of the project period in a multi-year budget. Costs are supported with valid estimates using benchmarks from similar projects or activities. Cost implications from inflation and foreign exchange exposure have been estimated and incorporated in the budget. • **2:** The project's budget is at the activity level with funding sources, when possible, and is specified for the duration of the project in a multi-year budget. Costs are supported with valid estimates based on prevailing rates. • **1:** The project's budget is not specified at the activity level, and/or may not be captured in a multi-year budget.	**3** / 2 / 1 **Evidence** *The budget was formulated with the identification of precise activities and different financing sources.*	
17. Is the Country Office fully recovering the costs involved with project implementation? • **3:** The budget fully covers all project costs that are attributable to the project, including programme management and development effectiveness services related to strategic country programme planning, quality assurance, pipeline development, policy advocacy services, finance, procurement, human resources, administration, issuance of contracts, security, travel, assets, general services, information and communications based on full costing in accordance with prevailing UNDP policies (i.e., UPL, LPL.) • **2:** The budget covers significant project costs that are attributable to the project based on prevailing UNDP policies (i.e., UPL, LPL) as relevant. • **1:** The budget does not adequately cover project costs that are attributable to the project, and UNDP is cross-subsidizing the project. *Note: Management Action must be given for a score of 1. The budget must be revised to fully reflect the costs of implementation before the project commences.	**3** / 2 / 1 **Evidence** *The project management costs were fully covered in the project budget.*	
EFFECTIVE		
18. Is the chosen implementation modality most appropriate? (select from options 1-3 that best reflects this project): • **3:** The required implementing partner assessments (capacity assessment, HACT micro assessment) have been conducted, and there is evidence that options for implementation modalities have been thoroughly considered. There is a strong justification for choosing the selected modality, based on the development context. *(both must be true to select this option)* • **2:** The required implementing partner assessments (capacity assessment, HACT micro assessment) have been conducted and the implementation modality chosen is consistent with the results of the assessments. • **1:** The required assessments have not been conducted, but there may be evidence that options for implementation modalities have been considered. *Note: Management Action or strong management justification must be given for a score of 1	3 / 2 / **1** **Evidence** *The HACT assessment for the implementation partner is ongoing. The UNDP CO will apply direct payments to limit the risks.*	
19. Have targeted groups, prioritizing marginalized and excluded populations that will be affected by the project, been engaged in the design of the project in a way that addresses any underlying causes of exclusion and discrimination? • 3: Credible evidence that all targeted groups, prioritising marginalized and excluded populations that will be involved in or affected by the project, have been actively engaged in the design of the	**3** / 2 / 1 **Evidence** *The project targets most vulnerable communities. They were consulted and engaged*	

project. Their views, rights and any constraints have been analysed and incorporated into the root cause analysis of the theory of change which seeks to address any underlying causes of exclusion and discrimination and the selection of project interventions. • 2: Some evidence that key targeted groups, prioritising marginalized and excluded populations that will be involved in the project, have been engaged in the design of the project. Some evidence that their views, rights and any constraints have been analysed and incorporated into the root cause analysis of the theory of change and the selection of project interventions. • 1: No evidence of engagement with marginalized and excluded populations that will be involved in the project during project design. No evidence that the views, rights and constraints of populations have been incorporated into the project.	*in the project design.*
20. Does the project conduct regular monitoring activities, have explicit plans for evaluation, and include other lesson learning (e.g. through After Action Reviews or Lessons Learned Workshops), timed to inform course corrections if needed during project implementation?	**Yes (3)** / No (1)
21. The gender marker for all project outputs are scored at GEN2 or GEN3, indicating that gender has been fully mainstreamed into all project outputs at a minimum. *Note: Management Action or strong management justification must be given for a score of "no"	**Yes (3)** / No (1) **Evidence** *The project conducted a gender analysis and the gender marker for the project was scored as GEN 2.*
22. Is there a realistic multi-year work plan and budget to ensure outputs are delivered on time and within allotted resources? (select from options 1-3 that best reflects this project): • **3:** The project has a realistic work plan & budget covering the duration of the project *at the activity* level to ensure outputs are delivered on time and within the allotted resources. • **2:** The project has a work plan & budget covering the duration of the project at the output level. • **1:** The project does not yet have a work plan & budget covering the duration of the project.	**3** / 2 1 **Evidence** *The project includes a detailed work plan over four years with associated budgets.*
SUSTAINABILITY & NATIONAL OWNERSHIP	
23. Have national partners led, or proactively engaged in, the design of the project? (select from options 1-3 that best reflects this project): • **3:** National partners have full ownership of the project and led the process of the development of the project jointly with UNDP. • **2:** The project has been developed by UNDP in close consultation with national partners. • **1:** The project has been developed by UNDP with limited or no engagement with national partners.	3 / **2** 1 **Evidence** *National partners were involved along the entire formulation process, with the national and international consultants and UNDP consulting them regularly. They were also involved to validate the project before its submission.*
24. Are key institutions and systems identified, and is there a strategy for strengthening specific/ comprehensive capacities based on capacity assessments conducted? (select from options 0-4 that best reflects this project): • **3:** The project has a comprehensive strategy for strengthening specific capacities of national institutions based on a systematic and detailed capacity assessment that has been completed. This strategy includes an approach to regularly monitor national capacities using clear indicators and rigorous methods of data collection, and adjust the strategy to strengthen national capacities accordingly. • **2.5:** A capacity assessment has been completed. The project document has identified activities that will be undertaken to strengthen capacity of national institutions, but these activities are not part of a comprehensive strategy to monitor and strengthen national capacities. • **2:** A capacity assessment is planned after the start of the project. There are plans to develop a strategy to strengthen specific capacities of national institutions based on the results of the capacity assessment. • **1.5:** There is mention in the project document of capacities of national institutions to be strengthened through the project, but no capacity assessments or specific strategy development are planned. • **1:** Capacity assessments have not been carried out and are not foreseen. There is no strategy for	**3** / 2.5 2 / 1.5 1 **Evidence** *The project specifically targets capacity strengthening for national institutions for an improved management of climatic threats.*

strengthening specific capacities of national institutions.		
25. Is there is a clear strategy embedded in the project specifying how the project will use national systems (i.e., procurement, monitoring and evaluation) to the extent possible?	**Yes (3)**	No (1)
26. Is there a clear transition arrangement/ phase-out plan developed with key stakeholders in order to sustain or scale up results (including resource mobilisation strategy)?	**Yes (3)**	No (1)

Annex H: Letters of Cofinancing (separate document)

Annex I: Standard Basic Assistance Agreement between UNDP and the Government of Tchad