Republic of Chad

United Nations Development Programme

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Project title: Chad National Adaptation Plan		
Country: Chad	**Implementing Partner:** Ministry of the Environment and Fisheries	**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 Output: Output 3.4: The institutional, legal and strategic frameworks (national and subnational) for disaster risk reduction (DRR) are operational and include women's specific needs. ***IRRF indicator 3.4.1 Number of national and regional plans that are gender responsive and address disaster and/or climate risk; IRRF Indicator 3.4.2. Extent to which gender is mainstreamed in the national action plan, the DRR strategy and mechanism for multi-stakeholder coordination***		
UNDP Social and Environmental Screening Category: Low		**UNDP Gender Marker:** 2
Atlas Project ID/Award ID number: 00108410		**Atlas Output ID/Project ID number:** 00108259
UNDP-GEF PIMS ID number: 5431		**GEF ID number:** 6968
Planned start date: March 2018		**Planned end date:** February 2022
LPAC date: TBD		

Brief project description: The Republic of Chad is land-locked climate is dominated by increasing aridification. As one of the world's most vulnerable countries to the adverse effects of climate change, Chad is particularly affected by low yields and a decline in harvests, which are exacerbated by weak forecasting, preparedness, response and adaptation.

The Chad National Adaptation Plan Advancement Project is intended to integrate climate change adaptation into medium- and long-term planning and budgeting of climate-sensitive sectors. Under Component 1, including the development of an integrated information system and a climate and socioeconomic database, the project will support planning and decision-making based on scientific evidence. As a result, Chad will be endowed with a national framework able to produce forecasts and assess the vulnerability of production systems to the adverse effects of climate change.

Component 1 of the project contributes to activities under Component 2 focusing on strengthening institutional capacities required for the effective integration of climate change adaptation into planning and budgeting. These training programmes will support the identification and prioritisation of adaptation options, which will be subsequently integrated into sector and local planning and budgeting frameworks/processes. A monitoring and evaluation system will be developed to support the coordination of adaptation planning efforts at all levels, evaluate

progress and identify lessons learnt. By developing climate and socioeconomic information systems and building the capacities of stakeholders, the project will strengthen Chad's forecasting efforts, preparedness and response while enhancing the effectiveness of existing adaptation efforts.		
FINANCING PLAN		
GEF Trust Fund *or LDCF or SCCF or other vertical fund*	US$ 5,775,000	
UNDP TRAC resources	US$ 1,405,900	
(1) Total Budget administered by UNDP	**US$ 7,180,900**	
PARALLEL CO-FINANCING (*all other co-financing that is not cash co-financing administered by UNDP)*		
Government	US$ 16,500,000	
Global Climate Change Alliance Project	USD 6,000,000	
Hydromet Project	US$ 4,000,000	
(2) Total co-financing	**USD 26,500,000**	
(3) Grand-Total Project Financing (1)+(2)	**USD 33,680,900**	
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:**

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II. LIST OF ACRONYMS AND ABBREVIATIONS

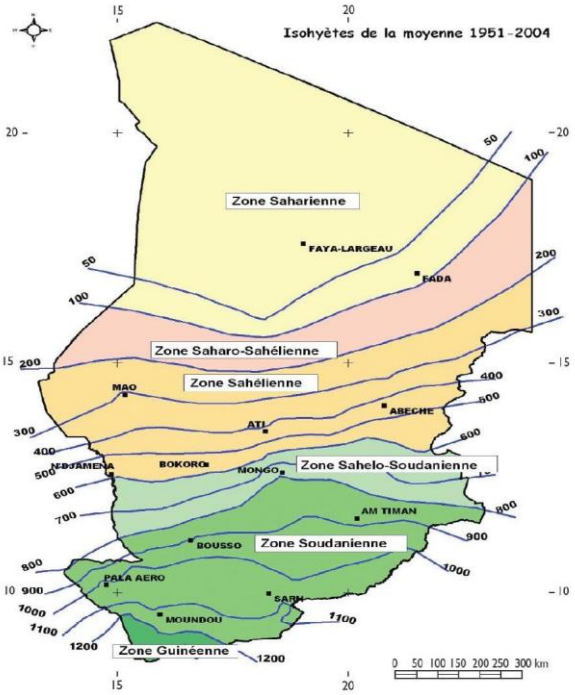
ANAM	*Agence Nationale de la Météorologie*, National Meteorological Agency
CC	Climate change
CLIAF	*Cellule de Liaison d'Information et d'Appui aux Femmes*, Women's Information and Support Liaison Unit
CPD	UNDP Country Programme Document
DRE	*Direction des Ressources en Eau*, Directorate of Water Resources
ECOSIT2	*Deuxième Enquête de Consommation des Ménages et du Secteur Informel au Tchad*, Second Survey of Household Consumption and the Informal Sector in Chad
EU	European Union
GEF	Global Environment Facility
GIS	Geographical Information System
HDI	Human Development Index
LCBC	Lake Chad Basin Commission
LDC	Least Developed Country
LDCF	Least Developed Countries Fund
LDP	Local Development Plan
MEEP	*Ministère de l'Environnement, de l'Eau et de la Pêche*, Ministry of Environment, Water and Fisheries
MEPD	*Ministère de l'Economie et de la Planification du Développement*, Ministry of Economy and Development Planning
MFB	*Ministère des Finances et du Budget*, Ministry of Finance and Budget
MYWP	Multi-Year Workplan
NAP	National Adaptation Plan
NAPA	National Adaptation Programme of Action
NASA	National Aeronautics and Space Administration
NDC	Nationally Determined Contribution
NDP	National Development Plan
OVI	Objectively Verifiable Indicator
PAP	Priority Action Plan
PPG	Project Preparation Grant
RDP	Regional Development Plan
RF	Results Framework
SC	Steering Committee
SCN	*Seconde Communication Nationale*, Second National Communication
SDEA	*Schéma Directeur de l'Eau et de l'Assainissement*, Water and Sanitation Master Plan
SDG	Sustainable Development Goal
TFP	Technical and Financial Partner
ToC	Theory of Change
TSC	Technical and Scientific Committee
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
WB	World Bank

III. DEVELOPMENT CHALLENGE

i. Background and global importance

1. Chad is a landlocked country in Central Africa with a very pronounced continental climate and no oceanic buffer. It has a surface area of 1,284,000 km² and borders six countries: Libya to the north, Sudan to the east, the Central African Republic to the south and Cameroon, Nigeria and Niger to the west. The nearest seaport is Douala in Cameroon, 1,700 km from the capital N'Djamena.

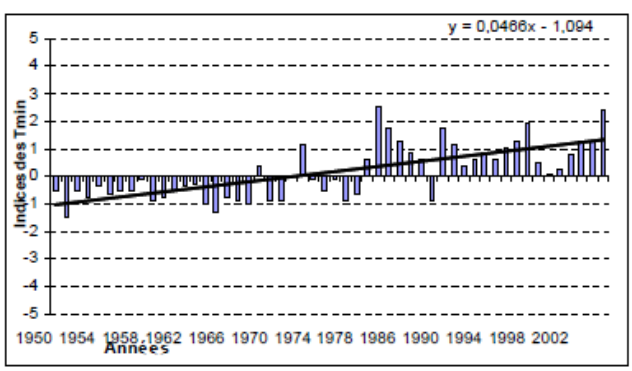
2. Chad has three bioclimatic zones: the Saharan zone, the Sahelian zone and the Sudanian zone. To the north, the Saharan zone covers 63 percent of the territory and is home to two percent of the population. It receives an annual rainfall of less than 200 mm (CN2, 2012). The Sahelian zone, in the centre of the country, falls within the 200 mm and 800 mm isohyets. It covers about 28 percent of the total land area and represents 51 percent of the total population. The Sudanian zone, to the south, is the wettest area (800 to 1200 mm) and occupies 25 percent of the total land area of Chad (FAO, 2005).



3.

4. **Figure 1**: Locations of bioclimatic zones in Chad (IRD, 2010)

5. Chad has experienced persistent drought for several decades. Deserts are advancing at a rate of 3 km per year in the northern part of the country (GFDRR, 2017). Precipitation varies from one year to another and from one decade to another. Meteorological observations in the Sudanian zone indicate a decrease in precipitation patterns during the rainy season (May-October) over the period from 1951 to 2000. In the Sahelian zone, rainfall has increased since the 1990s, with precipitation above the average over several years. Minimum average temperatures in Chad have increased by 0.5 to 1.7°C, depending on the observation stations, since 1950, while maximum annual temperatures have increased by 1.34°C over the same period.



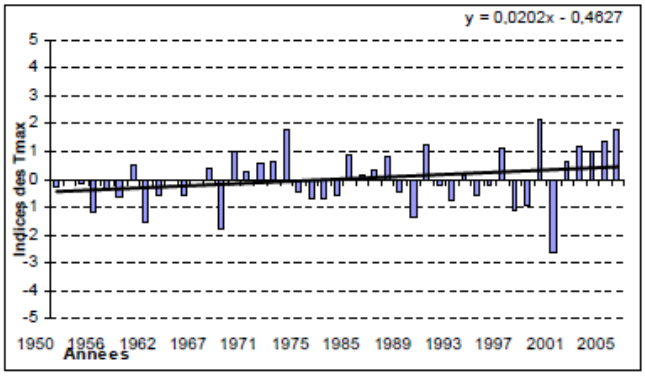


Figure 2: Minimum temperatures (1950-2002) and precipitation at N'Djamena (1956-2005) - (Source: CN2, 2012)

6. The geographical location of Chad makes it one of the most vulnerable countries to the adverse impacts of climate change. Chad's Second National Communication (June 2012) projects an average temperature increase of 1.2° by 2030, 2.2°C by 2050 and 4.1°C by 2100 in the Saharan zone of the country. The areas within the tenth and sixteenth parallels will be most affected by the temperature rise, with estimated increase of approximately 1.3°C, 2.4°C and 4.5°C in 2030, 2050 and 2100 respectively. In the Sudanese zone, the temperature increase will average 1.2°C in 2030, 2.2°C in 2050 and 4.2°C in 2100. Given the limited observation network in Chad, this localised data might be imprecise.

7. These results mirror IPCC projections (IPCC, 2014) of expected climate warning in Africa during the 21st century, exceeding the world's average's projected increase. According to these projections, the increase in average temperatures between 1980/99 and 2080/99 will reach 4°C over the entire African continent.

8. The projected variations of annual rainfall averages using different models are of -15 to +9 mm per month (-28 to +29 percent) by 2090 (UNDP, 2006). At the regional level, increased precipitation is expected in the south of the country during the rainy season.

9. Climate change will have particularly strong impacts on the living conditions of people, ecosystems, and economic and social development as it adversely effects agricultural, livestock and fisheries sectors, which employ about 80 percent of the total population, as well as on the water resources sector. **Agriculture**, which mainly consists of rain-fed crops, accounted for 16.6 percent of GDP in 2015 (ECA, 2016). Subsistence crops dominate agriculture, accounting for 80 to 85 percent of the subsector. However, agricultural performance has remained poor for 15 years. Climate hazards and inappropriate technologies are the main factors that influence production, especially food production that represents approximately 90 percent of agricultural activities, of which cereal crops are the principal component. Cultivated using low-performing traditional techniques and dependent on the amount and distribution of rainfall, cereals yields remain very low throughout the territory, while sown areas are increasing, employing 83 percent of the active population of Chad, including 47.9 percent of women (SCN, June 2012). Climate change will cause i) significant declines in yield and production (-10 to -25%) of food crops (millet, sorghum, maize) due to water shortage caused by successive droughts, high temperatures, late start and / or shorter rainy seasons; ii) a decrease of productive areas for cash crops, such as cotton, whose development has progressively shifted from the Sudanese-Sahelian zone to the Sudanese zone, due to the southward shift of isohyets, iii) a loss of land cover charge, and an expansion of cultivated land at the expense of forest land that may lead to irreversible deforestation in the long-term, and iv) the

extending geographical distribution of crop predators that could lead to a decrease in agricultural production.

10. The **livestock** sector contributed to 6.4 percent of the national GDP in 2015 (ECA, 2016) and provided direct or indirect income to 40 percent of the population. For this sector, the effects of climate variability and change are likely to: (i) reduce cattle and milk production, due to significant decreases in feed and thermal stress caused by temperature peaks; and (ii) increase the emergence of diseases (e.g. trypanosomiasis). Such impacts were already seen in 2009, when a late start to the rainy season and the development of vector diseases due to increased temperature created a shortage of grazing and an animal health crisis, which led to the death of almost 30 percent (780,000 head) of the herds in the regions of Kanem, Lake Chari-Baguirmi, Hadjer-Lamis and Bahr El Gazal.

11. Additionally, the **fisheries** subsector contribution to GDP, estimated at 10 percent in 2002, fell to 3.2 percent in 2012. Dependent on river flooding, fish production is also strongly influenced by climate variability and change, resulting in: i) a reduction in water bodies due to droughts; and ii) large increases in the amount of water, creating floods with devastating economic consequences. Ecologically, these floods result in severe erosion of the cultivated river banks and in unprecedented silting of water courses that are essential for the economic, social and cultural development of surrounding communities. These climate impacts are also exacerbated by an increase in the number of fishermen and the widespread use of small mesh nets and active gear, which undermines the fishing potential of the affected areas. The resulting droughts and siltation reduce the hydrographic network. As a result 210,000 hectares of spawning areas have been lost (SNRP2, 2008). In the Chadian part of the Lake Chad Basin, it is estimated that fish production fell from approximately 200,000 tonnes in the early 1960s to 60,000 to 120,000 tonnes in 2012 (SCN, 2012). This confirms the degradation of spawning areas due to cultivation along the banks of rivers and lakes as well as floods and other extreme weather conditions, which induce silting of water courses (SCN, June 2012).

12. Availability of water resources is heavily impacted by a reduction in the surface area of open waters of Lake Chad (25,000 km^2 in 1962 down to 2,000 km^2 in 1992). Water availability will be further affected by a decrease in groundwater, the variability of hydrological regimes in the Logone and Chari River Basins, the reduced stream flows of the main rivers, and the early draining of temporary streams.

13. A sharp downward trend of the Chari inter-annual average flow is observed because of rainfall variability and climate change. The hydrological year of 1984-1985 was characterised by a one-week interruption of the Chari River's flow in N'Djamena/Chagoua and a reduction of its volume from 39 billion m^3 (as estimated in a "good" year) to only 6.7 billion m^3. (SCN, June 2012).

14. The 2016 Human Development Index (HDI) places Chad in 186th place out of 188 countries.[1] According to the results of the Survey of Household Consumption and the Informal Sector in Chad (ECOSIT3), the national incidence of poverty is 46.7 percent, and is much higher in rural areas. The poverty threshold in Chad, based on the 2011 threshold, is around 237,942 FCFA per person per year, that is, 657 FCFA (US$ 1.16) per day. Approximately 47 percent of people in Chad live below this threshold. Heath hazards are eminent, access to decent housing and drinking water challenging, and the education level is low.

15. Economic and social development planning needs to acknowledge the high uncertainty of the future climate, particularly the variability of rainfall, in a context where rain-fed cultivation remains the foundation

[1] http://hdr.undp.org/sites/default/files/2016_human_development_report.pd, page 27

of the country's economic and social development. Weak adaptation of the development planning system to the adverse effects of climate change means that most efforts are slow to improve living conditions of the population including the most vulnerable.

16. Baseline scenarios indicate that climate change adaptation is marginally integrated into Chad's development agenda. Climate change has been given a low consideration in the 2013-2018 Five-Year Agriculture Development Plan, the 2009-2016 National Livestock Development Plan and existing Regional Development Plans. Climate change risks are not being integrated into development activities or investment decisions (including the Government's budget allocations) in different sectors of economic development. This situation is principally due to the weak institutional capacity of policymakers to extract or use climate, socioeconomic and environmental data and the information necessary to adjust the planning of policy and investment to manage risk. Policymakers lack capacity to steer policies that could respond to the projected impacts of climate change. This includes the prioritisation and implementation of adaptation activities. Chad does not currently have the institutional resources to implement adaptation projects and measures.

17. Consultations with the populations of the different areas of the country as part of the NAPA preparation process in 2010 helped rank the priority areas for intervention and the most vulnerable groups to the adverse impacts of climate change. The sectors targeted are water resources, agriculture, livestock, fisheries and forestry. In the Sudanian zone, women and children form the most vulnerable group, followed by the elderly (group 2) and displaced persons and refugees (group 3). In the Sahelian zone, the first three groups are women and children, the elderly and invalids. In the Saharan zone, invalids, the elderly, women and children form the most vulnerable groups.

18. Building on the NAPA, which was a response to immediate adaptation needs, the process to formulate and implement National Adaptation Plans (NAPs) was established as part of the UNFCCC Cancun Adaptation Framework (2010). It seeks to identify the medium- and long-term adaptation needs of countries and develop and implement strategies and programmes to meet those needs. In Chad, this process is still nascent. A basic needs' analysis and the preparation of a road map for conducting the NAP process have been carried out.

ii. Long-term solution and barriers to be overcome

19. Chad currently has limited capacities to address the adverse effects of climate variability and change on key sectors of the economy.

20. The long-term solution would be to promote the integration of adaptation to climate change into national, sector and regional planning and budgeting, and develop adaptation options based on reliable climate information grounded on the best available science. This long-term solution calls for an enhanced understanding of climate information and the development of integrating tools.

21. Barriers need to be removed to deliver on the expected project outputs to fully integrate adaptation into national, regional and local planning, budgeting and decision-making processes, and therefore enhancing production systems and protecting the most vulnerable communities. The following barriers were identified by all key actors during the project planning meeting held on 26 May 2017 in N'Djamena.

- **Barrier 1: Weak capacity of the institutions responsible for development, especially in the primary sectors, to access climate data and integrate them into development policies and plans.** The key institutions concerned, including the most vulnerable sectors such as agriculture, livestock and fisheries that employ over 80 per cent of the active population of the country, are not informed about future climate risks. As a result, these sectors experience adverse effects of climate change on production systems. Without reliable climate and socioeconomic information, institutions are unable to design strategy and integrate adaptation into development plans and policies. They lack the required forecasting and planning tools for effective integration of adaptation, necessary in the rain-fed agriculture context.

- **Barrier 2: Weak institutional capacity to capitalise on lessons learned from the local experience of communities, and limited ability of local communities to adapt to climate change**. Locally developed solutions have been adopted by local communities over decades as climate conditions deteriorate. Little is known on bridging local knowledge into policies and planning. In addition, communities have limited knowledge on: i) Climate change impacts; ii) Adaptation measures to minimise adverse affects of climate change; and iii) Human effects on the climate and actions that could be integrated into planning and budgeting.

- **Barrier 3: The low density of the hydrological and weather observation network and the general weakness of hydro-meteorological services**, provided by the National Meteorological Agency (ANAM) and the Directorate of Water Resources (DRE). The participatory diagnosis conducted during the PPG phase with stakeholders from ANAM and DRE highlights the outdated and ill-equipped situation of the observation network. The inadequacy or absence of meteorological stations (synoptic, agrometeorological, climatological, automatic, and rain-gauging) in Chad undermines the regular monitoring of important regions and vulnerable populations subjected to drought in the main agrosylvopastoral zones of the Sudanian and Sahelian part of the country. Likewise, the current hydrological network does not permit the monitoring of regions at high risk of flood and rapid rise in river levels. The meteorological radar sets acquired by the Government have not yet been installed. And yet, this advanced equipment is required for weather forecasting. The lack of regular inspection and maintenance of conventional stations (maintenance, calibration, etc.) is also a major challenge hindering the provision of reliable data for developing relevant, targeted and precise information for better decision-making in light of climate variability and change.

- **Barrier 4: The limited availability of qualified personnel on climate-related fields**. The baseline situation shows that there are insufficient numbers of climate and climatological information engineers. Overall, there are 27 staff managing the system at national, regional and local level. Of these 27 staff, only three are women, one of which observes an administrative support role. There are 85 professionals total in the observation network, of whom 80 are volunteers; none which are women. Overall, the network lacks expertise and the capacity to plan and run climate risk simulation models. Operating the forecasting model of current and future risks is a highly skilled task that requires several years of education and training. Experts in climate forecasting are often attracted by competitive offers. Consequently, Chad's Department of Meteorology and Hydrology lacks technical capacity in climate projection, data processing, telemetry, archiving and communications instruments.

- **Barrier 5: Insufficient financial resources** for an effective evaluation of and response to the needs of target sectors and vulnerable regions of the country with regard to climate change adaptation. Budgetary distortions and the lack of economic analyses of the costs and benefits of climate change adaptation interventions, avert adequate budgets to be allocated to climate change. Moreover, ministerial departments do not include multi-year expenditures planning in their budgets, further hampering the ability to forecast expenditures and, consequently, the effective integration of adaptation into policies and plans at national, regional and local levels.

- **Barrier 6: Limited ability of the Ministry of Environment to influence sectoral policies and limited awareness of climate change adaptation opportunities and risks in sectors**, resulting in the low integration of CCA. Adaptation to climate change is isolated from the development agenda, because its responsibility lies within the Ministry of the Environment, which only has limited influence over other ministerial departments. The efforts made by the Government since 2013 on the integration of adaptation within the 2013-2015 National Development Plan ("Protection of the environment and adaptation to climate change" is one of the eight priority goals of the NDP) and the subsequent 2017-2021 NDP also suffer from a lack of tools to facilitate the effective integration into sectoral and local planning and into operational programming.

22. In conclusion, barriers hindering effective integration of adaptation into development policies, plans and budgets and decision-making relate to i) weak institutional capacity to collect and apply climate data for policy development and development plans; ii) weak local knowledge on the threats of climate change; iii) the low density of the operational observation network and limited human and technical resources and equipment of the DRE and ANAM, as well as decentralised institutions to provide adequate climate information; iv) inadequate allocation of resources; and (v) limited ability of the Ministry of Environment to influence sector policies and low awareness of climate change adaptation opportunities and risks in sectors, resulting in the inadequate integration of CCA.

iii. Coherence with national and global priorities

23. The Government of Chad is aware of the urgency and importance of tackling adaptation issues. It is engaged in a new strategic direction towards becoming an emerging sustainable economy through the Chadian Vision 2030. The NAP will be anchored to this Vision and contribute to the effective integration of adaptation. It incorporates priorities including new productive capabilities and opportunities for the creation of decent work, the development of human capital, the fight against desertification, environmental protection, adaptation to climate change and improved governance.

24. This project will contribute to axis 4 of Vision 2030: "Improving the quality of life of the people of Chad", especially in its strategic objective 3: "Implement a participative and inclusive policy to fight climate change, to control and manage natural resources and safeguard the Lake Chad Basin." Specifically, the project will help establish a database to provide climate products for early warnings, projection and analysis of the impacts of climate change on the most vulnerable primary sectors and anticipation of appropriate preparedness measures needed to implement Chad's Vision 2030. Other priorities of Chad's Vision 2030, including the creation of new productive capabilities and opportunities for the creation of decent work, the development of human capital, the fight against desertification, the protection of the environment, will also be addressed.

25. In 2017, Chad adopted a 2017-2021 National Development Plan, the operational planning document for Vision 2030. The present project is in line with sub-axis 4.1 of the 2017-2021 NDP: "A healthy

environment with conserved natural resources", and especially result 4.1.3: "Good management of natural resources is effective", which sets out the following actions: i) implementation of policy to combat climate change and to conserve biodiversity; ii) implementation of climate-resilient agricultural practices; iii) ensuring there is an effective mechanism in place to prevent and manage risks and natural hazards; iv) create, restore and safeguard the ecosystems of wetlands and protected areas; v) safeguard Lake Chad; and vi) facilitate the population's access to mixed energy sources (new and renewable).

26. As a contribution to global efforts to reduce greenhouse gas emissions and to strengthen resilience to climate change, Chad developed its nationally determined contribution in 2015. Its NDC combines the vision of an emerging Chad by 2030 with a climate resilient low-carbon development pathway, focusing on the water, agriculture/agroforestry, livestock and fisheries sectors. The NAP project is a contribution to the priority needs identified in the NDC, in terms of human and institutional capacity-building and, more specifically, "assisting institutions in defining adaptation priorities per socioeconomic sector and based on the needs of the population, and in promoting intersectoral coherence, especially through the National Adaptation Plan formulation process." A National Climate Change Strategy is also being formulated.

27. In line with the UNFCCC guidelines, in 2010 Chad developed its NAPA following a consultation process conducted between 2005 and 2008. The Chad NAP project incorporates five of the 10 priority areas identified in the NAPA, and extends implementation over the medium- and long-terms. These are: i) Priority Action 4 on information, education and communication on climate change adaptation, ii) Priority Action 6 on improving intercommunity grazing areas, iii) Priority Action 7, on improving the forecasting of seasonal rains and surface water flows, iv) Priority Action 8 on the creation of an observatory of climate change adaptation policies, and v) Priority Action 10 on the management of climate risks.

28. Chad has developed a National Gender Policy 2011-2020, from which the vision below is taken: "By 2020, Chad will be a country free from all forms of gender inequalities and inequities and all forms of violence, where men and women have the same chances of access to and control of resources and participate in a fair manner in decision-making bodies with a view to sustainable development". The project is aligned with this vision, especially through Strategic Focus 1: "Systematic integration of the gender dimension into systems of planning, budgeting, implementation and monitoring and evaluation of strategies, policies and/or national development programmes", and Strategic Focus 3: "Equal and equitable access to basic social services, resources and benefits by men and women."

29. The NAP project is in line with national priorities as defined in national-level planning instruments (Vision 2030, 2017-2021 NDP, NDC, NAPA and the NAP road map) and builds on this enabling framework. It was the subject of broad consultation during the PPG phase, followed by a workshop held on 20 June 2017 in N'Djamena, which defined the strategic direction of the project.

iv. Coherence with the Sustainable Development Goals

30. The adverse effects of climate change in a business-as-usual scenario will result in the increased precariousness of living conditions in rural areas where they are already critical. These effects are likely to compromise the achievement of the Sustainable Development Goals in Chad. The project will support the achievement of several SDGs in Chad, including SDG7 (Gender equality), SDG12 (Sustainable production and consumption), SDG13 (Measures relating to the fight against climate change), and SDG15 (Life on land). This contribution concerns the following objectives of Vision 2030 and the 2017-2021 NDP: (i) by 2030, to improve the living conditions of the population and reduce social inequalities while ensuring the preservation of natural resources by adapting to climate change. This result will be achieved through implementation of a

participatory and inclusive policy to fight climate change, control and manage natural resources and safeguard the Lake Chad Basin; implementation of a system to prevent and manage risks and natural disasters and other humanitarian crises; (ii) by 2030, to develop and implement a gender policy (45 percent women in decision-making bodies); (iii) by 2021, cross-cutting issues are integrated into public sector policies. This will be done through capacity-building in mainstreaming gender, employment and the environment and the establishment of a mechanism to monitor the effectiveness of their implementation.

IV. STRATEGY

31. The project will contribute to the advancement of the Chad National Adaptation Plan (NAP) process. To this effect, the objective of the project is to facilitate the integration of adaptation to climate change into the medium- and long-term planning and budgeting processes of climate-sensitive sectors.

32. To achieve this objective, the strategic approach of the Theory of Change (ToC) designed for this preferred solution will focus on two interrelated components which seek to address the root causes of the challenge for the integration of adaptation into national, regional and local policies, plans and budgets (figure 1). The priority intervention sectors covered by the project are those identified in the Chad NDC (water, agriculture/agroforestry, livestock and fisheries).

33. In this strategy, the preferred solution aims to:

- ***Improve access to climate information,*** through implementation of component 1. The project will provide the climate information needed for the analysis of climate trends for integration of adaptation into national, regional and local planning and budgeting processes.
- ***Build the capacity of national, regional and local actors to collect, analyse and use climate information:*** Meetings of the PPG team with stakeholders confirmed that hydrometeorological network staff lacked the capacity in climate analysis and projection and that planners in key sectors did not have the climate data they needed for the effective integration of climate concerns and risks into decision-making and planning. Communities, which depend on sectors that are highly sensitive to the adverse effects of climate change, such as agriculture, livestock and fisheries, also lack access to these data. These data are necessary for the preparation of effective and efficient responses to and account of climate change in planning processes. Currently, institutions have low capacity to carry out outreach and dissemination of climate information.
- ***Channel and focus efforts and resources on adaptation:*** By initiating actions to integrate and update adaptation planning at national, regional and local levels, the project will serve to target efforts and resources on adaptation, constituting a second powerful lever in the NAP process in addition to increasing access to climate information. With reconstruction underway following recent conflicts in the country, it is timely to strengthen institutional capacity to manage climate change through the process of formulating National Adaptation Plan. In addition, this NAP process coincides with the implementation of the recently-developed NDP and nationally determined contribution (NDC). This constitutes an opportunity for coordination and alignment of adaptation into national, regional and local priorities for the period 2017-2021. The new round of cooperation between UNDP and Chad forms part of this dynamic with the 2017-2021 CPD. The Chad NAP project is one of the tools available to the UNDP to support the Government's efforts to adapt to climate change. This process will be supported by access to climate information based on climate scenarios and vulnerability assessments, which will help determine not only priority adaptation actions but also monitoring and evaluation mechanisms.
- ***Enhanced preparation of beneficiaries to climate change:*** The project will propose priority adaptation actions, capitalising on the best gender-responsive techniques and technologies. These actions will thus foster an enabling environment for reducing vulnerability, strengthening resilience and promoting adaptation

and sustainable inclusive growth, which is an axis of Chad Vision 2030 and one of the pillars of the cooperation framework between UNDP and the Government of Chad. By strengthening the current hydro-meteorological network system and improving the capacities of network staff to conduct hydroclimatic analysis, the project will make it possible to generate critical climate products such as early warnings and projected impacts of climate change on systems of production and identify the most appropriate alternative options for adaptation.

- ***Recognition of the needs of the most vulnerable groups in national, regional and local planning:*** With the dissemination of climate information, the project will strengthen the resilience of vulnerable communities, with an accent on community groups with precarious livings from the primary sector. To this end, the project will benefit the most vulnerable groups, such as women, nomads, transhumant pastoralists and refugees whose only means of livelihoods are rain-fed crops. With the environmental awareness, information and communication programme on adaptation, the dissemination of climate information will be able to reach the maximum number of people and, in the long term, with equitable and inclusive access to these climate products for the promotion of inclusive adaptation.

The detailed project intervention strategy is presented below:

34. Benefits at national level

- The establishment of an integrated information system including a database of climate and socioeconomic data (Outputs 1.1, 1.2 and 1.3), the capacity-building of network staff (Output 1.4) on the operation and maintenance of the system, and the vulnerability assessments (Output 2.2) will identify adaptation options based on medium- and long-term climate trends (Output 2.2) and will ensure the integration of adaptation into planning processes (Output 2.3). Providing reliable climate predictions, warnings and projections is essential at national level to inform, guide and steer the planning process in the country.
- By developing the national-level planning system, the project will enable the country to have better effectiveness and efficiency in the allocation of existing resources to adaptation, while avoiding duplication, through the promotion of synergies and complementarities.
- These climate information products will be used by the ministerial departments for the most vulnerable sectors through various capacity-building modules, to facilitate the updating and integration of adaptation into agriculture, pastoral, fisheries and water policies. They will also contribute to facilitating the mainstreaming of cross-cutting issues into sector policies, as part of the priority objectives of the 2017-2021 NDP.
- These will also feed into development of Chad's NAP, providing a selection of priority adaptation actions to be included in the formulation of the plan.
- Nationally, the NAP process will be conducted in an inclusive and participatory manner. It will be an opportunity for identifying and engaging with all stakeholders and for conducting large-scale awareness-raising and outreach on adaptation. With the promotion of better techniques and technologies for use in systems of production, environmental services will be improved to generate the overall environmental benefits of a reduction in the alarming silting of rivers and degradation of land, the fight against illegal brush fires and clearances, and the conservation of biodiversity.

35. Benefits at local level

- The project will be an opportunity to promote better adaptation options based on medium- and long-term weather patterns (Output 2.2), in the implementation of local development plans. This will lead to the creation of climate-resilient livelihoods opportunities, and improved living conditions for vulnerable groups and their involvement in the economic and social development process.

- The project will also be a tool for social cohesion at the local community level through outreach, education and information on adaptation; this will limit the numerous conflicts particularly between arable and pastoral farmers, thanks to the adoption of better adaptation techniques and technologies.
- The involvement of research and development into the selection of early-cropping, short-cycle agricultural species will promote local adaptation and development through the promotion of cereals and sectors promising inclusive growth in the value chain.
- It will also directly benefit 90 policymakers from various of the most vulnerable sectors of development, increasing their capacity to understand the risks of climate change and to identify priority adaptation options to incorporate into policies and plans.

36. Benefits to the consideration of gender

- The involvement of women in the climate system is very low. Of a staff of 27, there are three women (11 percent), one of whom is a secretary. Of a total of 85 observers, 80 of whom are volunteers, there are no women.
- The participative and inclusive NAP process will involve women in the implementation of all the expected outputs of this project. To this end, the promotion of female employment will be effective within the system for the establishment of the climate and socioeconomic database, through the development of their capacities (Output 1.4).
- The development and implementation of training modules on the integration of adaptation into sectors that are vulnerable to the adverse effects of climate change (Output 2.1) will benefit women working in these institutions, particularly in the departments of agriculture, livestock, fisheries and water resources. To this end, issues relating to gender aspects will be fully taken into consideration in addressing adaptation needs in systems of production and value chains dominated by women and will also be reflected in the climate products that will be developed.
- The involvement of women in the institutional arrangements for the implementation of the project will also help steer the project's products towards gender considerations, despite still-persisting prejudices.
- To strengthen the capacity of the project to better mainstream gender throughout its entire implementation, monitoring and evaluation arrangements, at national, regional and local levels, a gender specialist will be recruited to review the overall situation of gender equity at all levels. For this purpose, specific gender training will be built in to Outputs 1.4 and 2.1.

37. Benefits to ongoing initiatives in Chad

- The project's innovative approach of removing barriers to adaptation will bring added value to every current initiative. By lifting persistent barriers identified in the baseline situation, the project will foster an enabling environment for improving the effectiveness and efficiency of current actions. Current actions that should benefit from the LDCF intervention are shown in section V, on results and partnerships.
- In addition, through identification of the best adaptation options, based not only on medium- and long-term climate trends (Output 2.2), but also on the integration of priority adaptation actions into the NAP process (Output 2.3) the project will contribute to the improved effectiveness and efficiency of current interventions. Thus, all investment in the project will generate benefits for all the baseline actions.
- Promoting the updating of national, regional and local development plans will be another project lever for the establishment of effective synergies and complementarities for greater efficiency.
- Knowledge management and exchange visits (Output 2.5, activity 2.5.2) will also benefit all the current actions that the project has drawn from to identify solutions and additional alternatives.

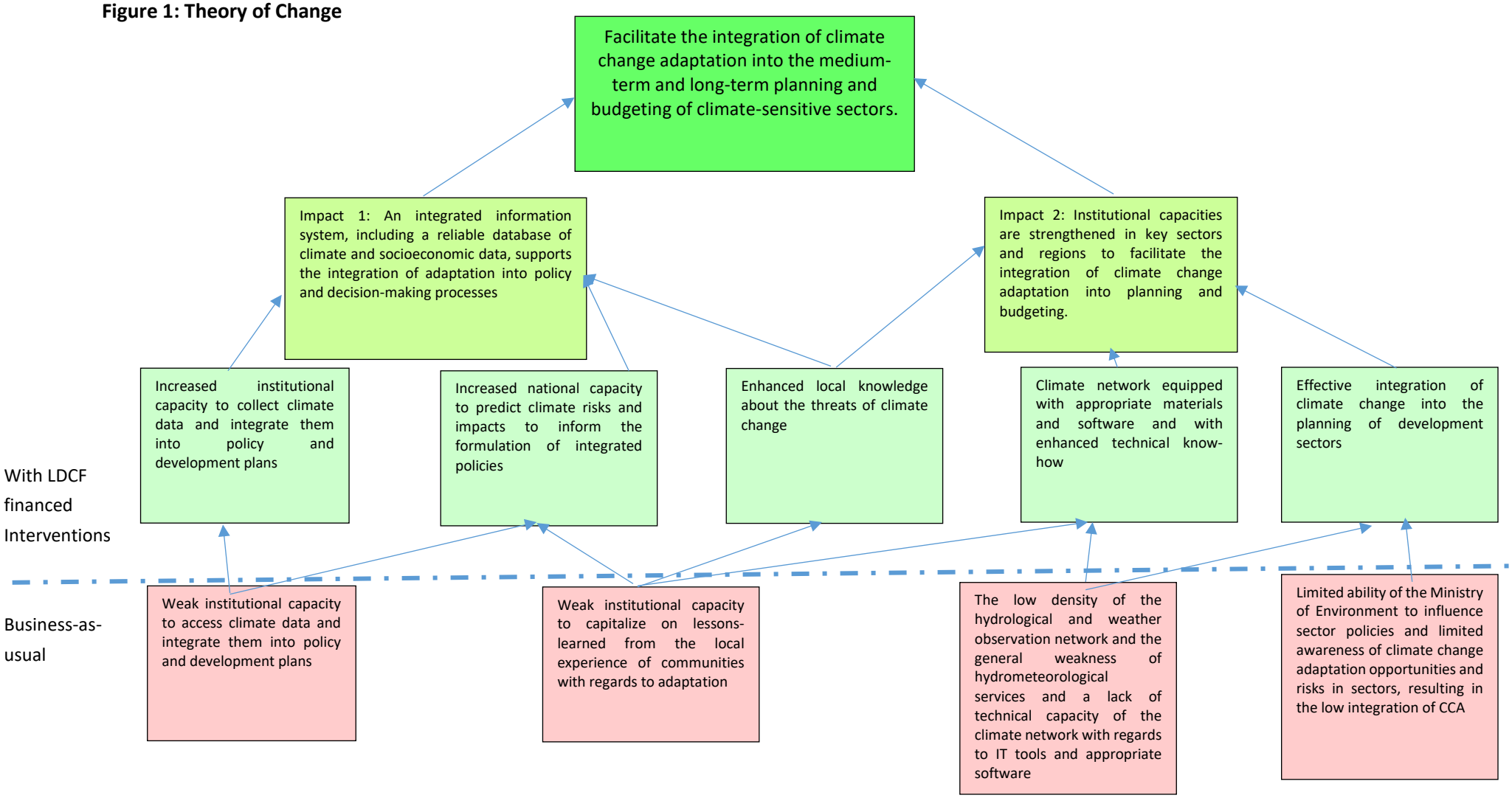
38. Contribution to achievement of the strategic impacts of the LDCF

The Global Environmental Impacts and Benefits also include the contribution of the project's impacts to achievement of the strategic impacts of the LDCF, as shown in table 2 below.

Expected impacts of LCDF	Expected outcomes of Chad NAP project
IMPACT 2.2: Improved scientific knowledge and techniques for identification of priorities for the implementation of adaptation strategies and measures	Outcome 1: An integrated information system, including a reliable database of climate and socioeconomic data, supports the integration of adaptation into policy and decision-making processes
IMPACT 3.2: The associated policies, plans and processes are developed and strengthened to identify the priorities to be included in adaptation strategies and measures	Outcome 2: Institutional capacities are strengthened in key sectors and regions to facilitate the integration of climate change adaptation into planning and budgeting

Table 1: Alignment of NAP project with strategic impacts of LDCF

Figure 1: Theory of Change



V. RESULTS AND PARTNERSHIPS

i. Expected outcomes

Project objective, outcomes, outputs and activities

39. **The objective of the project is:** To facilitate the integration of climate change adaptation into the medium-term and long-term planning and budgeting of climate-sensitive sectors. The sectors concerned are agriculture, livestock, fisheries and water resources. The levels covered are the national, sector and regional. The project will involve the ministries of planning, finance, environment, agriculture, livestock, fisheries, water resources, land-use planning and hydro-meteorological services, as well as NGOs, research, private actors, parliamentarians and journalists. To reach this goal, the project will, when completed, have established an effective integrated information system (including climate and socioeconomic databases) to inform and guide decision-making (Outcome 1). To achieve this goal, it will be necessary to strengthen institutional capacities in key sectors and regions, in order to facilitate the integration of climate change adaptation into planning and budgeting (Outcome 2).

40. The integration of adaptation into policy, planning and budgets at national, regional and local levels together with regular monitoring and evaluation and updates will strengthen the resilience and adaptation of systems of production, ecosystems and communities to the adverse effects of climate change.

41. Addressing the barriers above (Figure 2) will require, on the one hand, building the capacity of the information system for producing reliable weather data, and, on the other hand, strengthening the capacities of the institutions involved in the processes of integrating adaptation into policy, planning and budgets at every level: national, regional and local.

42. The project will build on the achievements of current actions and on the establishment of a robust partnership for effective synergies. The current actions will be based on the existing national development planning processes under implementation (the NDP) and the Government-funded project to strengthen the climate observation network.

43. The Government of Chad is stepping up its efforts to implement its 2017-2021 NDP. On 6-8 September 2017, it organised an international roundtable in Paris to mobilise funding for the implementation of the NDP. Coordination and partnerships will be sought with bilateral and multilateral partners which pledged to support the implementation of the NDP to ensure coherence of action, particularly in the sectors of focus, and capitalise on the partners' influence and convening powers to help accelerate the integration of climate change adaptation into relevant policies, plans and associated processes. Bilateral and multilateral partners made pledges, including:

- The World Bank pledged US$ 1.1 billion over the next three years to finance major structural reforms to improve the management of public resources and budget execution, promote economic diversification and increase social protection for the poor and vulnerable populations.
- The African Development Bank pledged US$ 540 million in capital funds, focusing on supporting energy and agro-industry sectors and the youth population.[2]

[2] https://www.afdb.org/en/news-and-events/afdb-pledges-us-540-million-in-support-of-chad-making-it-one-of-the-largest-donors-at-paris-roundtable-17340/

- The European Union pledged US$ 925 million for the period 2017-2021 for supporting nutrition, food security and resilience, sustainable agriculture, democratic governance, security, promotion of the rule of law, and employment and vocational training.

44. With funding from the ANAM budget, the Project to Build the Climate Network is centred on the effective setting up of 28 agro-meteorological stations, 22 synoptic stations, 153 rainfall stations, eight weather stations and nine automatic stations. The project has also procured four high-resolution radar sets at an overall cost of **US$ 6 million** using Government funding to support ANAM. The radar sets are yet to be installed and six of the 22 existing synoptic stations are to be refurbished. The UNDP-GEF project, through LDCF funds, will be used to enhance this system, concentrating on the Sahelian and Sudanian zones. LDCF funds will also be used to train climate network staff in the operation, upkeep and maintenance of the equipment, to ensure the sustainability of gains. There are also 20 water level-gauging stations, out of a total of 60 needed throughout the country. The Government's contribution amounts to a total of US$ 16 million over the 4-year project implementation period, covering the salaries of staff of ANAM and the Hydrology Directorate and of the 85 observers, in addition to the contributions by the Environment Ministry and those by members of the Project Steering Committee and Scientific and Technical Committee.

45. These initiatives which will focus on central institutions as well as the target sectors of this project, which are both key to the Chadian socio-economic development and most vulnerable to climate change. However, they do not support the integration of climate change considerations into development planning and budgeting. The proposed project is in line with subaxis 4.1 of the 2017-2021 NDP: "A healthy environment with conserved natural resources", and especially result 4.1.3: "There is good management of natural resources", which sets out the following actions: (i) implement the policy to combat climate change and to conserve biodiversity; (ii) implement climate-resilient agricultural practices; (iii) ensure there is an effective mechanism to prevent and manage risks and natural disasters; (iv) create, restore and safeguard the ecosystems of wetlands and protected areas; (v) safeguard Lake Chad; and (vi) facilitate the population's access to mixed energy sources (new and renewable). It will also especially complement activities under Axis 2 on "Strengthening the basis for good governance and the rule of law", which aims at strengthening public administration and the national statistical system (INSEED), as well as ensure the mainstreaming of cross-cutting issues in public policies.

46. The project will complement efforts to build a sustainable and coherent vision for development in implementing the project through the outcomes, outputs and activities presented as follows.

COMPONENT 1: Enhanced climate change information systems to support adaptation planning
Outcome 1: An integrated information system, including a reliable database of climate and socioeconomic data, supports the integration of adaptation into policy and decision-making processes

The overall cost of funding outcome 1 is US$ 15,996,600, to be distributed as follows:

Outcome 1 co-financing: **US$ 12,732,900**
LDCF funding for outcome 1: **US$ 3,263,700**

Without LDCF intervention (baseline situation):

47. Without the LDCF intervention, the causes at the origin of the limited integration of adaptation into development processes will not be addressed. The situation of ongoing efforts leaving significant barriers in place (see section: Threats, roots of causes and barriers to adaptation) demonstrates that removal of these barriers is necessary. With the current impaired and under-equipped climate network, there will be a constant shortage of reliable climate and socioeconomic data, impeding the Chad´s ability to have a reliable early warning system, make impact projections, and identify adaptation options in a context of aridification and increased vulnerability. Eventually, if there is no system for climate simulations and assessment of the effects of climate change, priority adaptation actions will be isolated from the development agenda. The PPG phase of the project could capitalise on lessons learned from ongoing actions and build on their gains, to propose the necessary change in the establishment of an environment favourable to the integration of adaptation.

48. To date, there are 22 synoptic stations, 16 of which are functional and six of which are not in operation and are to be completely refurbished. This situation means that the current system only covers 13 percent of the 128 stations needed. Given the number of stations required and their high cost, the project prioritises the equipping of stations located in the Sahelian and Sudanian regions. This choice is due to both exposure, because the Sudanese zone will see the biggest variation in rainfall and temperatures, and sensitivity with both the Sudanese and Sahelian zones being more densely populated. Given the 16 stations currently operational, 32 stations need to be refurbished to bring the total number of operational stations to 48, the required number for the system network. These synoptic stations are fundamental to the system as they generate reliable weather data over an area of 100 km^2, with facilities for automatic data processing and transmission. The synoptic stations will be complemented with modules so that they can also serve as agrometeorological stations that provide additional data on bioclimatic conditions such as air humidity and minimum and maximum air temperatures at 1.50 m from the ground, as well as ground humidity and temperature at a depth of 1 to 1.5 m, and agroclimatic conditions. Indeed, there are currently only 28 agrometeorological stations, only five of which are in operation, of the total network requirement of 128, or in other words, an effective serviceability rate of 4 percent in comparison with the standard. The baseline situation for weather stations shows that only one of the existing eight stations is serviceable. Sixteen weather stations would be needed which means that the current serviceability rate is only of 6 percent. Turning to automatic stations, the baseline situation shows nine stations, none of which is in working order, from a needed 128. Finally, the baseline situation for rainfall stations shows 153, of which just 87 are serviceable, from a needed 2,054. None of these stations is equipped with the information technology tools or appropriate software to provide reliable weather data products.

49. Regarding radars, a network of four sets is required for reliable data; these have already been procured using Government funds. This is a significant contribution (US$ 6 million) by the Government to the effective establishment of the climate database. These fours stations still need to be set up to enable the production of climate projections for various forecast horizons, and the production of vulnerability assessments and maps. The baseline situation shows a complete absence of high-altitude stations for observations at an altitude of 10 km or so, stations, despite their importance for climate prediction.

50. Regarding the hydrological network, a total of 35 water level-gauging stations are required in the intervention areas, while there are only 20 in service, that is, a coverage rate of 33 percent for the whole country requirement of 60. Regarding automatic stations, there is a need for four of these, but there are no stations available. Turning to data centralisation, although the need for a server and computer equipment for the transmission, processing and production of climate data on flood risks is vital, there is no such centralization.

With LDCF intervention (adaptation alternative)

51. To address the projected effects of climate variability and change, there is a need to base medium- and long-term planning and strategies on scientifically reliable evidence, generated in part from climatological, meteorological and hydrological data, products and services. To do this, this first component will be implemented on the basis of i) an in-depth and detailed diagnosis of the existing meteorological and hydrological network, and the operationality of the technical system and human resources, to issue recommendations in the Sahelian and Sudanian regions; ii) the upgrade of new and old stations that have fallen out of date, ensuring that they have the equipment needed for the production of relevant weather data, this to include the installation of the four radar sets already acquired by the Government; iii) the establishment of an integrated information system capable of performing projections, analysis and vulnerability assessments of production systems and infrastructure to the adverse effects of climate change, using forecasts for the different horizons of 2030, 2050 and 2100; and iv) strengthening human technical capacity for the maintenance and use of the improved information system.

52. After the identification of the network of stations needed in the Sahelian and Sudanian zones for good data reliability, this first component will support the installation of new stations and the refurbishment of out-of-date stations in every location where coverage standards requires one. The project plans to have covered all the need by its mid-term, to enable optimal operation of the network as from the end of the second year of project implementation. This will enable it to cover two years of effective provision of climate products, forecasting, scenario analyses and alerts.

53. The network's 32 synoptic stations will be equipped with the modules, logistics, equipment and software needed to produce the climate data (Output 1.1) for the integration of adaptation into development policies and plans at national, regional and local levels. The complementary modules needed for installation of the radar sets will also be acquired. This high-performance meteorological system will be enhanced by a geographic information system (GIS) intended to create a bank of informative and reliable climate and socioeconomic data (Output 1.2).

54. This database will enable the integration of climate monitoring data from the meteorological and hydrological stations and satellite data into forecasts of the weather and seasons. This first component will also contribute to facilitating access to new climate change data projections (MAGICC/SCENGEN 5.2, CMIP, Cordex and other more current projections, depending on need). With this integrated database, the first component will provide Chad with a national system capable of adjust projections based on regional models and of assessing the vulnerability of production systems and infrastructure to the adverse effects of climate change, using forecasts for the different horizons of 2030, 2050 and 2100 (Output 1.3).

55. It will also establish the collection and production systems and mechanisms for providing information and communicating data, particularly through (i) harmonized standard indicators; (ii) strengthening data-collection systems in vulnerable sectors; and (iii) supporting the provision of climate information to sectors and other users, in partnership with other institutions, programmes and projects active in the field of climate data.

56. With this first component, the long-term analysis of climate trends will be undertaken to understand how current climate change risks are likely to evolve under different scenarios. This activity will integrate qualitative data from local knowledge. Satellite and high-resolution radar images, as well as other relevant data (roads, infrastructure, access to markets, etc.) will be combined with climate data to obtain real-time information provided to decision makers and at-risk communities for them to be able to make better-informed decisions in the short, medium, and long terms.

57. LDCF resources will be used for the development of human technical capacity and the maintenance and use of the improved information system (Output 1.4). A training programme will be developed for (a) the technicians of the ministries involved, on the operation, maintenance and repair of critical meteorological and hydrological equipment; (b) meteorologists in weather forecasting and hydrologists in forecasting high water levels; and (c) technicians and experts in GIS in the receipt, filing, compilation, processing and analysis of data. The ongoing training will focus on the use of technologies that can interface to existing systems and that minimise external dependency for the supply of equipment and software.

58. Outputs proposed in this first component are intended to establish a climate information database that, once operational, will provide appropriate information to inform policy and decision-making, to facilitate the integration of adaptation to the adverse effects of climate change into national and sector planning. Building on the ongoing decentralization process in Chad, this integration of adaptation will be carried out in regional and local development plans with a view to promoting adaptation that benefits the most vulnerable groups, taking account of gender equity and disadvantaged groups, especially including women heads of households and refugees.

59. . Once the climate database will be generated by component 1, the information needed to adjust the planning of policies and investments for the management of risks will therefore be available. Decision makers will, then, have the steer, orientation and guidance on what measures to take and when to respond to the projected impacts of climate change.

60. With the establishment of the powerful lever formed by this climate database to remove persisting barriers to effective adaptation, the project will be able to provide the outputs required to achieve its outcome 1. The activities planned for each of the four outputs needed to achieve outcome 1 are now presented as follows:

Output 1.1: Based on the gap analysis of existing hydro-meteorological network supplementary equipment (i.e. 32 new stations, 15 hydrological water level-gauging stations, 165 rain gauges, four automatic stations, a server, computers with hydrological software and additional equipment for the installation of the four radar sets already purchased by the Government) procured and installed

61. A consultative study is planned to provide clear directions for the implementation of activities and an accurate needs assessment. This study will begin in the first quarter of project implementation by carrying out a thorough diagnosis of the existing meteorological and hydrological network and to propose equipment, automated telemetry systems, and simulation and complementary GIS software for the 32 synoptic and 15 hydrological stations.

This study will determine the equipment and materials needed to fill the gaps in the current network and improve existing coverage and reliability of the climate products, in the Sahelian and Sudanian zones. To this end, the LDCF Project will strengthen the network by equipping 32 automatic synoptic stations and installing the four high-resolution radar sets that have already been procured. To achieve this first output, the following activities will be conducted:

62. Activity 1.1.1: Conduct a thorough diagnosis of the hydro-meteorological network of the Sudano-Sahelian zone (central and southern areas), and provide recommendations on the installation and management of the additional provision to be put in place.

This activity will be conducted by an international consultant specialised in meteorology and/or hydrology, in collaboration with three national expert consultants specialised in hydrology and socioeconomics. The specific actions expected from this activity include:

- An assessment of the current hydro-meteorological provision against reliability standards in the two target zones, and their effective operationality.
- A determination of the locations for the additional synoptic stations (32 stations, as per the evaluation, within a maximum range of 150 km) to be established, to supplement the 16 operational stations in the central (Sahelian) and southern (Sudanian) zones of the country, areas with the highest rural population densities, as well as 15 new water level-gauging hydrological stations, 165 rain gauges and four automatic stations.
- An analysis of staff skills, of the number of existing posts and those to be created, and of the required levels of qualifications and expertise for managing the hydro-meteorological network and database.
- A proposal for technical specifications for equipment (hydrological and meteorological), automatic telemetry systems, and simulation and complementary GIS software required for the 48 automatic synoptic stations, including the 32 stations installed within the project. This action aims, among others, to promote automatic telemetry systems for processing observer data in real time, to reduce the margins of error associated with manual transmission by observers.
- An assessment of end users' needs for climate and socioeconomic information, for constructing the information system to propose the logistical and human system needed.
- A proposal of measures to ensure the sustainability of the hydro-meteorological system, to reduce the risk of the system's collapse once the project ends. These sustainability options include the identification of funding by the departments involved in climate information and the Government taking responsibility for the ongoing expense of the operation and maintenance of the database.

63. Activity 1.1.2: Acquire equipment and materials to support the strengthening of the hydro-meteorological network. More specifically, this will focus on:
    - The acquisition, supply and installation of complete additional modules for 48 automatic hydro-meteorological synoptic stations, including 32 new stations, 15 hydrological water level-gauging stations, 165 rain gauges, four automatic stations, a server and computers with hydrological software.
    - The acquisition of additional equipment for the installation of the four radar sets already purchased by the Government. Training in the use and maintenance of the network is covered in activity 1.4.

Output 1.2: Operational tools to assess climate change impacts on key sectors are introduced

64. The purpose of this output is to help develop a system for monitoring climate and climate impacts in key sectors, using existing climate and socioeconomic databases and the studies conducted as part of developing vision 2030, data from the National Institute of Statistics and Economic and Demographic Studies (INSEED), data provided by the climate monitoring system (the observation network forming part of Output 1 and radar and satellite data), and climate projection models (MAGICC/SCENGEN 5.2, CMIP 5 and Cordex). LDCF resources will enable the establishment of an integrated information system that includes the production of information in the form of maps and graphics, in cooperation with the National Development Research Centre (CNRD) and the RESEAU project for mapping water resources for their better use by stakeholders. The assessment of climate and socioeconomic needs carried out in Output 1.1 will be used as an input for achieving Output 1.2.

The following activities will contribute to achieving this output:

65. Activity 1.2.1: Conduct a detailed design study for integrated information system to support the monitoring and evaluation of climate impacts on key socioeconomic sectors.

The first step will be to conduct a detailed design study in view of the establishment of an integrated information system, taking account existing ongoing initiatives, including the CNRD GIS and the water resources mapping under the RESEAU project. This activity will be carried out by an international consultant in collaboration with two national consultants specializing in climate information, information/database management and in GIS. This will include:

- The identification of existing hydro-meteorological and socioeconomic databases, their strengths and weaknesses and making recommendations on ways to link existing databases to the integrated information system to be established.
- A proposal for an integrated information system, to include:
    - The technical specifications for integrating data from meteorological stations, radar and satellite and socioeconomic data into the system to be established.
    - The requirements and costs associated with the acquisition of climate change projection data (such as MAGICC/SCENGEN 5.2, CMIP 5 and Cordex) for use in the information system.
    - Harmonised standard indicators for the monitoring and assessment of climate impacts on sectors, as well as ways to collect and produce information.
    - Models of products generated by the mining, processing and analysis of data.

66. Activity 1.2.2: Set up an information system (database) that includes climate and socioeconomic databases and available GIS data. This activity will include:
    - The signing of memorandums of understanding between the managers of the various databases already in existence.
    - The design and implementation of the integrated information system.
    - Training the information system's managers.
    - Designing tools to assess the vulnerability of key socioeconomic sectors. The vulnerability analyses conducted under activity 2.2.1 will be used as a baseline. They will be associated with standard harmonised indicators developed under activity 1.2.1 to provide vulnerability monitoring. The collection of the data needed for monitoring will be supported in Output 2.4. This activity will be conducted in cooperation with the CNRD and the Ministry of Water.

Output 1.3: Long-term analysis of climate change trends is undertaken to improve the understanding and management of changing climate risks

67. LDCF funds will be used to update and analyse climate trends, so as to provide decision makers and communities with projections (over the medium and long terms) that enable to take informed decisions. The projections will contribute to the climate and socioeconomic database held within the integrated information system established under Output 1.2 and will be for 2020, 2030, 2050 and 2100. This activity will be conducted by ANAM with the support of an international consultant specializing in climate information. ANAM will establish a committee composed of bodies that provide information and users, to support the formulation process and provide monitoring. This committee will give guidelines on the specific needs of users, the level of spatial resolution required to facilitate its use in planning, the types of variable (averages and/or extremes), the sources of available data and target applications.

Overall, the following activity will contribute to achieving Output 1.3:

68. Activity 1.3.1: Conduct a medium- and long-term analysis of climate trends (2020, 2030, 2050 and 2100).

This activity will build on existing long-term and regional models to develop a long-term analysis of climate trends. The actions to be conducted under this activity are:

- Nominating members of the team including, among others, the directors of ANAM and the Directorate of Water Resources (DRE), representatives of sector ministries (agriculture, livestock, fisheries, forestry, and water resources), and representatives of target zones.
- Recruitment of the international consultant.
- The formulation of scenarios.
- The validation of the scenarios through a national workshop.

Output 1.4: The technical training programme for ANAM and DRE staff on the use and maintenance of the hydro-meteorological network and the processing and analysis of data developed and delivered (eight training workshops)

69. This output is intended to strengthen the operation and sustainability of the existing system and of the database. To do this, a technical programme to train ANAM and DRE leaders and staff will be jointly developed with these two bodies. Implementation of the training programme will provide both institutions with the tools and skills needed to maintain the system put in place.

Overall, the specific activities are:

70. Activity 1.4.1: Development of a training programme for ANAM and DRE (i) technicians in the operation, maintenance and repair of the network; (ii) meteorologists and hydrologists in climate prediction, (iii) GIS technicians and experts in the receipt, filing, compilation, processing and analysis of data at the CNRD and Ministry of Water. So far as possible, the training programme will incorporate interfaces with existing systems to minimize external dependency for software and hardware provision.
71. Activity 1.4.2: The organization of eight training workshops, each lasting 10 days, for ANAM and DRE personnel, involving 63 staff from the 48 synoptic stations and 15 hydrological stations. The training will focus on the operation, maintenance and repair of the network; climate prediction; and the receipt, filing, compilation, processing and analysis of data.

COMPONENT 2: Climate change adaptation planning and budgeting in the target sectors and regions

Outcome 2: Institutional capacities are strengthened in key sectors and regions to facilitate the integration of climate change adaptation into planning and budgeting

The overall funding needed to achieve this second project outcome is US$ 16,641,500.

Co-financing for outcome 2: **US$ 14,405,200**

LDCF grant requested for outcome 2: **US$ 2,236,300**

Without LDCF intervention (baseline situation):

72. Adaptation is not sufficiently integrated into the development agenda in Chad, especially at sector and local levels. This is the case for the 2013-2018 Five-Year Agriculture Development Plan, the 2009-2016 National Livestock Development Plan, the Water and Sanitation Master Plan (SDEA) and existing Regional Development Plans. There is little communication on climate challenges and climate information is not widely disseminated, remaining confined to the hands of experts. Without intervention, institutions' low capacities to manage the adverse effects of climate change will be exacerbated and the local knowledge developed by communities in the face of aridification of the environment will not be capitalised

on for use as strategies to adapt. This will result in a lack of promotion of alternative options for adaptation and preparation for various climate shocks. This situation will thus result in a lack of alternative options for the technical management of the response to climate shocks and low institutional capacity in terms of climate prediction to guide the management of the integration of adaptation into the strategies and processes of economic and social planning.

73. The functional tools to monitor and evaluate climate and socioeconomic impacts set up within the GCCA project will not be effectively operationalised and the NAP process will be dominated by the non-integration of adaptation into planning processes at national and regional levels and into sector development policies. In addition, the process of implementing and reviewing the Chad NDP will not benefit from participatory mechanisms to raise environmental awareness of adaptation, through a lack of publicity for and dissemination of climate products for which social demand is becoming increasingly high due to growing risk and vulnerability.

With LDCF intervention (adaptation alternative)

74. The second component, strategically based on reliable climate and socioeconomic information inputs and the database developed under Component 1, will undertake an evaluation of vulnerability and the process of integrating adaptation into medium- and long-term planning and budgeting in the relevant sectors and regions.

75. Through this second project component, LDCF resources will be used to develop and institutionalise training modules and programmes for the integration of climate change into sensitive sectors (water, agriculture/agroforestry, livestock and fisheries). These programmes are intended for policy developers and will be conducted in partnership with national educational institutions. Their goal is to improve stakeholders' management expertise (including results-based management, coordination, climate funding, negotiation, communication, advocacy, participative approaches and budgeting) and technical expertise (including analysis of climate risks, the economics of adaptation including cost/benefit analyses and climate diplomacy).

76. Based on medium- and long-term analyses (component 1), the adaptation options will be identified and prioritised at multiple levels to support priorities in relation to vulnerability. This includes: i) assessing climate vulnerabilities and identifying adaptation options at national, sector and regional levels; and ii) appraising priority adaptation options including their costs and economic, environmental and social benefits.

77. Through this second project component, LDCF resources will be used to support the Government to integrate climate change into current sector development at national and regional levels. To this end, Chad has chosen the option of updating existing plans and policies and incorporating priority adaptation strategies and options into them, rather than formulating new policies and new plans. This strategic option will be based on existing budgets for implementation of the plans and policies mentioned above, rather than on the mobilization of new budgets. Within this option, the midterm and annual reviews of the country's 2017-2021 National Development Plan (NDP) and formulation of the 2022-2026 NDP will be targeted on improving the level of integration of adaptation. At subnational level, a total of 15 Regional Development Plans (RDPs) will also be updated to effectively incorporate priority strategies and options for adaptation. A range of options to achieve these results will be carefully analysed with national and regional institutions to gauge what is most appropriate in the planning context. In all cases, a complete understanding of the political processes will be developed, comprising (a) the steps in the formulation of policies, planning and resource allocation; (b) timelines and benchmarks; (c) key deliverables; (d) plans

for the involvement of those stakeholders who should be engaged as part of the process of national ownership for channelling climate change into planning and budgeting. Links will be established with the Special Environment Fund for Chad,[3] aiming to finance the adaptation options identified.

78. A set of capacity-building modules will be developed to foster the effective integration of adaptation in the most vulnerable sectors (Output 2.1). Adaptation options will be defined based on risks and vulnerabilities, considering medium- and long-term climate trends (Output 2.2). This important output will facilitate the integration of adaptation into national, sector and local plans during their period of review by the provision of integration guides and tools, and by advocacy actions (Output 2.3). Building on Output 2.2, this output will provide indicators for monitoring and evaluation and for improvement of the performance of the Ministry of the Environment, to ensure management of the process (Output 2.4). This system will facilitate the overall coordination of work at national or sector levels. It will also support the definition of objectives and targets, the selection of indicators and verification methods, the identification of data sources, data-collection methods, information management, the launch of specific evaluations and the facilitation of reporting and reviews.

79. The Ministry of the Environment will have an outreach and extension programme (Output 2 2.5) to facilitate communication, education and public access to information about climate change adaptation. Information on impacts, vulnerabilities and adaptation will be documented and consolidated for the construction of a support system for decision-making for future adaptation planning.

80. Overall, Component 2, based on the achievements of Component 1, will support the revision process of the National Development Plan (NDP) (2017-2021) and those to come. LDCF resources will be used to strengthen the country's capacity in terms of medium- and long-term planning and implementation of adaptation. Information on expertise and tools will be provided to decision makers to facilitate the integration of risks and opportunities associated with medium- and long-term planning for climate change and the necessary budget. Appropriate national policies and plans will be targeted, such as: the revised NDP, the Water and Sanitation Master Plan (SDEA) under review, risk and disaster management and the development of regional and local development plans.

81. By tackling the second category of barriers to adaptation, Component 2 will produce the optimal conditions for the effective and judicious use of climate products arising from Component 1. For effectively achieving Outcome 2 under this second component, it will be necessary to implement a series of outputs:

Output 2.1: Training modules and programmes on the integration of adaptation into climate-sensitive sectors are developed and implemented

82. Activities necessary for obtaining, from the first component, the second component of the project on capacity-building will particularly be conducted through the participatory identification, development and implementation of practical training modules for key sectors affected by the integration of adaptation into plans and policies at national and regional levels, target regions and civil society actors.

83. The baseline situation indicates the low capacity and understanding of the risks of climate change on the part of policymakers and of identification of the priority options for adaptation in policies and plans. Therefore, the project aims to build the capacities of 90 decision makers to understand the expected changes, through training officials in the priority action areas (agriculture, livestock, fisheries and water

[3] http://www.fse-tchad.org/

resources), as well as in the cross-cutting areas of the environment, planning and finance. At regional level, the project targets 15 regional officials. Civil society actors (5 NGO, 10 journalists) will also be involved in training. Half of the people trained will be women. The Women's Information and Support Liaison Unit (CLIAF), represented in 15 of the 23 regions of Chad, will play an essential role in the identification of women's training needs and in their mobilization.

84. This output will also target the improvement of stakeholders' knowledge and expertise in results-based management, the coordination of adaptation actions, climate funding, negotiation, communication, advocacy, participative approaches and budgeting. Technical skills will also be strengthened, particularly the analysis of climate risks, the economics of adaptation (including cost/benefit analysis) and climate diplomacy. These training areas will be refined during the training consultation and programme development phase. Implementation of this activity will be through a business service delivery contract with training institutes or bodies. The involvement of national training institutes will be necessary to create at the national level, a critical mass of expertise capable of providing the same type of training after the project. The activities necessary for achievement of this output are as follows:

85. Activity 2.1.1: Develop two training guides on the integration of CC into sector and regional planning and provide these to planners in the target ministries. This includes the ministries responsible for finance and planning, relevant sector ministries, regions and civil society actors, in partnership with training institutions. The mainstreaming of gender in the planning of CCA will also be taken into account.

86. Activity 2.1.2: Develop and implement the training programme on the integration of climate change adaptation through participative workshops. The programme will strengthen the technical skills of sector and regional actors to facilitate the integration of climate change adaptation into sector and regional planning and budgeting. This activity will be conducted under the leadership of the Ministry of Finance and the Budget and the Ministry of the Economy, Planning and International Cooperation. It will involve the planning departments of the target sector ministries and regions as well as representatives from the private sector.

Output 2.2: Adaptation options are identified and prioritised on the basis of medium- and long-term trends, climate risks and vulnerability analyses and assessments

A service provision contract for research and the selection and leveraging of priority adaptation options will be made with research and development institutions. This study will first focus on assessing climate vulnerability. It will then go on to identify priority options for sector adaptation at national level.

Overall, the activities needed to achieve this output consist of:

87. Activity 2.2.1: Conduct vulnerability assessments of target socioeconomic sectors.

Following the analysis of climate scenarios and taking into account the priority intervention sectors and target areas, thorough evaluations of current and future vulnerability will be conducted. Climate analyses will be combined with an analysis of socioeconomic determinants and trends. The vulnerability assessments will provide as much information as possible disaggregated by group and sex. A gender analysis will also be conducted. The actions to be undertaken are:

- The establishment of an ad hoc advisory and monitoring committee.
- The recruitment of an international lead consultant and four national consultants specialised in agriculture, livestock, fisheries and water resources.
- The identification of the zones to be covered in the Sudanian and Sahelian regions.

- The conduct of vulnerability assessments and of a gender analysis, in connection with adaptation to climate change, together with an action plan broken down by group and gender, accompanied by a gender analysis.
- The validation of the results of the study by a workshop. This activity will be based on INSEED data and vulnerability studies conducted as part of other initiatives such as household vulnerability studies (HEA), using protocol agreements for data sharing. National and regional decision makers as well as private sector representatives will be invited to the workshop.

88. Activity 2.2.2: Develop climate products to inform short- medium- and long-term decision-making and provide these to planners in target socioeconomic sectors and regions.

This activity will support the development of eight vulnerability maps (two per year for each zone for the rainy season and the dry season) for 2020, 2030, 2050 and 2100, on the basis of climate projections, and vulnerability assessments conducted under activities 1.3.1 and 2.2.1. The vulnerability maps will inform development of the next National Development Plan (the next NDP is planned for 2022) and Regional Development Plans supported by the project (see Output 2.3).

In the short and medium terms, this activity will contribute to the forecasts provided by ANAM and DRE within the rainy season during each rainy season (for the 4-year project life) and for the time horizons specified. In particular, this will, in the short term, enable the provision of eight intra-seasonal forecasts (two per year for each zone), eight seasonal forecasts based on the regional forecasts by PRESA SS annually developed by ACMAD (two per year in each zone). These annual seasonal forecasts, combined with appropriate socioeconomic response measures, will enable the development of eight early warning products to inform decision-making at national, sector and regional levels. This activity will also promote the sharing of products with their users and their integration into the information system to be established.

These maps will be produced by CNRD with project support with software, climate projections and vulnerability assessments.

89. Activity 2.2.3: Identify and prioritise adaptation options.

The project will then identify priority options for sector adaptation at national level. Based on the assessment of biophysical and socioeconomic vulnerability, of the analysis of current and future climate scenarios and of implementation of NAPA priority options, the corresponding adaptation options will be identified and prioritised using a multicriteria analysis that includes, among others, costs/benefits and a gender-differentiated analysis. The prioritization criteria will be discussed and approved by the ad hoc committee. This activity will be led by an international consultant and four national consultants specialised in agriculture, livestock, fisheries and water resources. The actions include:

- The definition and approval of criteria for prioritization of adaptation options by the ad hoc committee, including account being taken of the specific vulnerability of certain groups, including women.
- The recruitment of international and national consultants specialised in agriculture, livestock, fisheries and water resources, for the identification of adaptation options and their categorization.
- The study to identify and classify adaptation options, including the compilation, with women farmers' organizations, of priority options for adaptation to climate change.
- The approval of adaptation options by a national workshop, taking account of gender issues. National and regional decision makers as well as private sector representatives will be invited to the workshop.

- An action plan will be developed and costed. Options for private sector engagement will be explored.

Output 2.3: A practical guide for the integration of climate change into the development planning and budgeting processes of Chad at national, sector and provincial level delivered

90. This third output covers the integration of climate change into sector development at national and regional levels. The PPG workshop held on 20 June 2017 in N'Djamena opted for an update of the NDP and each of the 15 RDPs, to integrate priority adaptation actions into planning and budgeting. The activities required to achieve this important output will be conducted through a business service contract to update the current NDP and 15 RDPs.

91. More specifically, this product will strengthen the understanding of the planning and budgeting process at national, sector and regional levels. It will also ensure the integration of adaptation into four sector policies, namely: a) agricultural policy; b) pastoral policy; c) the new fisheries policy; and d) water policy. This output will be based on the results of Output 2.1, in particular the development of integration guides and strengthening the capacities of key actors, as well as on gender analysis.

The activities under this output are:

92. Activity 2.3.1: Enhance understanding of climate-resilient planning and budgeting processes at national, sector and regional levels.

This activity will be through a study conducted by a national consultant (30 days). It will allow the identification in sector and regional plans (including budgets) of entry points for the integration of adaptation, and will provide recommendations on opportunities for integration into these plans (and budgets), and the most appropriate review periods to grasp. The study will propose an implementation plan targeting the NDP 2022-2026, sector agricultural, pastoral, fisheries and water plans and the Special Environment Fund for Chad.

93. Activity 2.3.2: Support the integration of priority adaptation actions into national, regional and local development plans.

On the basis of the study mentioned above and the implementation plan under 2.3.1, the project will commence outreach actions for planning officers in the target ministries and regions. The actions include:

- The development of a circular for planners based on the study under activity 2.3.1.
- The organisation of advocacy meetings with target stakeholders and regions. These meetings will form integral parts of the outreach, information and communication activities in Output 2.5.
- The documentation and consolidation of information on vulnerability, impacts and adaptation to build a support system for decision-making, looking forward to new adaptation planning in the future. This action will be conducted by the project management unit.

94. Activity 2.3.3.: Strengthen the capacity of the Chad Special Environmental Fund to access financing and select adaptation projects

Aligned with the adaptation priorities identified under activity 2.2.3., the project will support the Chad Special Environmental Fund to identify funding sources to operate and finance relevant adaptation projects and programmes in Chad. This will have to be closely coordinated with the GCF Readiness project. This will include:

- The recruitment of an international consultant specialised in climate finance for the development of trainings for the staff of the Chad Special Environmental Fund;

- Develop two trainings for building the capacity of the Fund to (i) access climate funding sources and (ii) identify efficient and sustainable climate change adaptation projects, in line with the priorities identified under activity 2.2.3.;
- Conduct the trainings.

95. Activity 2.3.4: Strengthen research to improve adaptation options.

Research on adaptation options will be conducted to assess and propose improvements and predict their potential application in future projects. This could apply to the "Community Based Adaptation" project which PIF has recently been approved by the LDCF. Based on studies conducted under activity 2.2.3, two priority interventions will be identified for each of the four sectors and the studies required for their implementation will be conducted. This could include, for example, research to identify improved seed varieties adapted to the Chadian context, study visits, the establishment of partnerships with regional research institutions, feasibility studies for the construction of wells or solar pumps enabling sustainable access to water sources without endangering available resources, the introduction of agricultural product processing stations for the benefit of women, etc. This will be conducted through partnerships and grants with four research institutes / universities. Actions include:

- Identify relevant research institutes/universities.
- Strengthening the capacity of research institutes / universities to test and develop adaptation options in the four sectors.
- Conduct the research and analysis necessary to evaluate the effectiveness, feasibility and reproducibility of two priority adaptation options for each of the four sectors targeted by this project, including actions to empower women.

Output 2.4: The Ministry of Environment has an effective monitoring and evaluation system to support the overall coordination at national and sector levels

96. This output will support the institutionalization of monitoring and evaluation of adaptation to climate change. This process will enable the country to have a monitoring and evaluation system for all the processes initiated in this area, including aspects related to adaptation (national communication, INDC, NAP, etc.). This will facilitate the overall management and coordination of the NAP process at national and sector levels. It will also make it possible to assess the development of integration processes and the implementation of priority adaptation actions in national and regional policies, plans and budgets. More specifically, it will support (i) the development of proposals for strengthening the monitoring and evaluation system (goal, scope, orientation, indicators, data and information types, sectors, verification methods, data sources, reporting, and gender disaggregation); (ii) the development of tools; and (iii) the operationalization of the system (institutional provisions and resources, and information gathering using identified parameters). Lessons learned from monitoring and evaluation implementation of activities will be summarised and shared at local, national and international levels. They will feed into the review of the national processes in which the country is engaged in the field of CCA (national communication, NDCs, etc.). A service provision contract will be made with an organization chosen by tender to support implementation of the activities under Output 2.4. This activity will build on the liminal work implemented under the GCCA project.

The following activities will contribute to achieving this output:

97. Activity 2.4.1: Strengthen the monitoring and evaluation mechanisms of the Ministry of Environment, by including a system for the monitoring and evaluation of adaptation to climate change. The actions to be conducted under this activity are:

- Strengthening the monitoring and evaluation system put in place under the GCCA project (goal, scope, orientation, indicators, data and information types, sectors, verification methods, data sources. and reporting). This study will also propose more effective monitoring and evaluation tools (collection, processing and management of information, specific evaluations, reporting, and gender disaggregation).
- The integration of the indicators identified into the monitoring and evaluation system of the Ministry of the Environment and possibly into the monitoring and evaluation systems of target sector ministries and the NDP.
- The operationalization of the monitoring and evaluation system, through support for the collection of baseline data and annual monitoring data.

98. Activity 2.4.2: Strengthen the capacities of target ministries and regions and civil society on collection methods, including sexr-disaggregated data, information processing, the conduct of evaluations, and the presentation of reports and reviews. This activity will provide the main actors involved in the data-collection chain with the skills needed to feed into the monitoring and evaluation system. Two workshops will be held: (i) a workshop for 30 people, 50 percent of whom will be women, from the ministries responsible for planning and the budget, sector ministries and NGOs; (ii) a workshop for 15 people, 50 percent of whom will be women, from the 15 target regions.

99. Activity 2.4.3: Strengthen the capacities of ministries, target regions and civil society in strategic planning and results-based and gender-sensitive management. The objective of this activity is to provide those involved in the monitoring and evaluation system with the skills needed to link strategic planning to adaptation and with results-based adaptation-measuring tools to measure adaptation actions. Two workshops will be held: (i) a workshop for 30 people, 50 percent of whom will be women, from the ministries responsible for planning and the budget, sector ministries and NGOs; (ii) a workshop for 15 people, 50 percent of whom will be women, from the 15 target regions.

100. Activity 2.4.5: Capitalise on and share the best adaptation techniques, technologies and practices in target sectors. This activity will draw on lessons learned from the monitoring and evaluation process to analyse the drivers of success and failure of currently implemented adaptation practices and will develop case studies. Four case studies will be prepared and shared on the use of climate information in adaptation practice in the fields of agriculture, livestock, fisheries and water resources.

Output 2.5: The Ministry of Environment has an operational and accessible outreach, information and communication programme on adaptation

101. This output aims to raise public understanding of the development challenges related to adaptation and to engage them actively in the process. Civil society actors, parliamentarians, journalists and community-based organizations will be particularly targeted, due to the influence that they can have on policymaking at national and local levels. The aim is to build informed opinion able to conduct advocacy towards political actors beyond the project life cycle and to facilitate the use of climate products by community actors. The opportunity will be seized to disseminate the products resulting from the activities listed below and the products generated by the integrated information system. Actions are planned to be conducted through the development and implementation of an outreach, education, information and communication programme on adaptation with the aim of reaching the maximum number of people through a range of communications media.

102. This output aims to ensure that the climate and socioeconomic information needed for integrating adaptation into policies, plans and budget and into vulnerable sectors is widely available and understandable to end users. The activities needed to achieve this result are:

103. Activity 2.5.1: Implement the environmental education strategy on adaptation in the 15 regions through:

- The development of specific products for the target public (policy briefs, posters, flyers, etc.).
- The organization of an outreach meeting for parliamentarians on the NAP process. This meeting will be held before an annual parliamentary budget arbitration meeting, to raise their awareness of the issues of the integration of adaptation into budgeting.
- The organization of an outreach workshop for journalists and NGOs on the NAP and the issues of the integration of adaptation into planning. This meeting will also be open to the sector ministries involved in implementation of the NAP, to ensure better understanding of the process.
- Development of a database of women's organizations involved in the field of climate change to facilitate support of their leadership in priority adaptation actions.
- The organization of an exchange visit to one of the Lake Chad border countries to share and draw lessons from their experiences of the implementation of integrated information systems including the management of the Lake Chad hydrological network in a context of climate change.

104. These outputs will build on major current initiatives listed above, both at the level of Government actions and at that of technical and financial partners in the field of adaptation and the promotion of sustainable development.

ii. Partnerships

105. The project will build on current experience to strengthen gains and bring additional contributions to adaptation efforts. To this end, the project will establish partnerships and synergies with the ongoing initiatives presented below:

Project name and implementation period	Areas and axes of intervention	Areas of collaboration
World Bank: Hydromet Project: Planned to start in 2018 and to last five years, this project will provide hydrological and piezometric (groundwater level) monitoring. The Ministry of the Environment and Fisheries provides oversight of the project.	Geographical coverage: perennial water courses Monitoring changes in surface waters will be a focus of collaboration with the project through the hydrological network envisaged by the NAP.	The NAP will benefit from the strengthening of the hydrological network brought about by the Hydromet Project. The strengthening of the hydrological network (Outputs 1.1 and 1.2) will enhance and facilitate the work of this important project.
IFAD: "Improving agriculture resilience against climate change" This project is intended to reduce the impacts of climate change on the natural resources and ecosystems that support agricultural production and food security. (PARSAT) Duration: 2014-2021.	Geographical coverage: Regions of Guéra (Sudanian zone), Batha (Sahelian zone) and Hadjer-Lamis (Sudanian zone). The focus of cooperation will be the promotion of agropastoral production	The NAP will capitalise on adaptation technical and technological practices developed by this project, in particular the intensification of agropastoral systems of production that are resilient to climate change in the Sudano-Sahelian zone.

Project name and implementation period	Areas and axes of intervention	Areas of collaboration
	systems that are resilient to climate change: cereals (millet, sorghum), complementary crops (peanuts, sesame, cowpeas), market gardening and small livestock.	The outputs of both components of the NAP, as well as those related to climate information and the integration of adaptation and those to do with capacity-building will support the actions of this important project through the IFAD funding initiative.
European Union: The project, Adaptation to the Effects of Climate Change and the Development of Renewable Energies within the framework of the Global Climate Change Alliance (GCCA), under the oversight of the Ministry of the Environment and Fisheries together with the Directorate for the Fight against Climate Change as delegated prime contractor. It will be implemented from 2013 to 2020.	Geographical coverage: national Area 1: Strengthening climate change governance through the integration of climate change into development policies and strategies Area 2: Conducting field activities to foster climate change adaptation in the agriculture and livestock sector.	The NAP will capitalise on the experience from the project (i) that supported the integration of adaptation into the 2017-2021 Chad National Development Plan; and (ii) that led several pilot projects in the field of adaptation and agriculture. The production of climate and socioeconomic information to guide the management of the integration of adaptation into policies and plans will provide this important project with several inputs.
UNDP: The community-based adaptation project financed by the LDCF. This project is implemented through UNDP and is in the course of formulation. It will be implemented from 2018 to 2023.	Geographical coverage: to be defined during formulation Component 1: Early warning system for preparedness for climate disaster risks. Component 2: Strengthening risk management capacities	The climate information collected under the NAP will inform the new early warning system. The studies conducted under activity 2.3.3 will inform implementation of certain activities. The part-time staff recruited by the project using UNDP funds will be complemented by this project to recruit one full-time person to oversee both projects.
UNITAR: "RésEau for mapping water resources" project. This project is implemented by UNITAR. The project is a 10-year project with three phases. It started in 2012 and is in its second phase, that will last until 2019.	The project supports both the development of maps and GIS. In the first phase, two series of hydro-geological maps have been produced in northern and eastern Chad. And a cartographic web portal	The information collected will be used by the project to support vulnerability studies and the production of maps and climate information products. Besides the capacity building will facilitate the sustainability of the

Project name and implementation period	Areas and axes of intervention	Areas of collaboration
	allows access to all geographic information compiled and produced. During the second phase, the central part of the country, covering parts of Lake Mega-Chad is covered. The project also strengthens the capacities with partnerships between the University of N'Djamena and the University of Lausanne, to train professionals from the water sector and students to understand and resolve qualitative and quantitative management issues concerning surface water, groundwater and soils, and to use geographic information systems to conduct spatial analyses.	project. The project will strengthen the GIS set up under the RésEau project.
Islamic Development Bank: Programme for Resilience Development and Fight Against Food Insecurity The programme is co-financed by the Republic of Chad and the Islamic Development Bank (IDB) for a total of US$ $ 30 million over five years.[4]	It provides recovery support to populations from fifteen regions affected by climate hazards and strengthen their agricultural production capacity to combat food insecurity. Its first component focuses on building climate resilience and addressing food insecurity. It plans to strengthen water resources management infrastructures, build capacities to prevent food crises and set up food storage facilities.	Eleven out of the fifteen regions are in the Sahelian zone covered by the proposed project. Coordination will be ensured especially under Outcome 2 for activities targeting the regional level
UNEP: GCF NAP support (under development)	The development of a project proposal to the GCF to support the Chadian NAP process the process was recently launched in December 2017.	Close collaboration between the present project and the GCF NAP project development will be required to avoid duplication.

[4] http://pdrliat.org

Project name and implementation period	Areas and axes of intervention	Areas of collaboration
UNDP: GCF Readiness support (300,000 US$)	The Government of Chad is also benefiting from the support of the Green Climate Fund under the Readiness Programme (300,000 US$), with UNDP as a delivery partner, to strengthen the National Designated Authority and develop its strategic engagement with the Fund.	Activities aiming at strengthening activities of the NDA under the Ministry of Environment will need to build on the existing project?

Table 2: Potential synergies with ongoing projects in Chad

iii. Stakeholder engagement

106. The various key stakeholders in the process of the formulation and implementation of the projects, with their roles and contributions, are presented below:

Stakeholder	Function and role relevant to the project
Ministry of the Environment, Water and Fisheries (MEEP)	It is the main Government implementing agency of this project under the National Implementation Modality (NIM) modality. It provides implementation of environmental policy including fisheries and is responsible for sustainable development. It provides technical oversight of the project and the Chair of the Steering Committee, which is the organ of strategic direction and steering of project activities. It provides supervision of the Technical and Scientific Committee. Its responsibilities and contributions extend over all the outputs of the two components of the project. Outputs 1.4 and 2.5 are intended to strengthen its system for monitoring and evaluating adaptation and its role in raising public awareness and knowledge of the development challenges related to CC. Working in close collaboration with the finance and planning ministries, it provides coordination and management of the process of integration of adaptation into planning. It contributes to Output 2.1, on training in planning and adaptation processes, to Output 2.2, on climate and socioeconomic products, and to 2.3, on the integration of adaptation into national, regional and local sector policies and plans.
The Ministry of Finance and the Budget (MFB)	It is the Government Coordinating Agency for all technical and financial partners in Chad. It provides financial oversight of the project placed under the management arrangement of (NIM). Its role in the project, other than signing off expenditure and approving requests for advances of funds covers budget postings in the implementation of the priority action plans of adaptation policies and plans. It will particularly contribute to Outputs 2.3, 2.4 and 2.5 under the budgeting of the priority action plans of sector plans. It is a member of the Project Steering Committee.

Stakeholder	Function and role relevant to the project
The Ministry of the Economy, Planning and International Cooperation (MEPCI)	This ministerial department is responsible for planning the development of the country and leads the design and monitoring of all key planning documents such as the 2017-2021 NDP implementation and the formulation of UNDP 2022 for effective integration of adaptation into the planning of development at national, regional and local levels. The opportunity will be seized for each of these plans at different levels to be matched by an action plan for priority adaptation actions. The climate and socioeconomic products will steer processes in light of forecasts of risks and vulnerabilities, while offering solutions using the best adaptation options on the basis of the results of projections and analyses. The opportunity will also be seized to demonstrate that for any development planning action to be effective and efficient, it must henceforth result in adaptation planning. This ministerial department is at the centre of all the project's outputs incorporating the planning of actions to reflect gender equity and the inclusive strengthening of resilience. It will play a strong role in Outputs 2.1 (building capacity for the integration of adaptation into ongoing processes) and 2.3 (integration of adaptation into national, regional and local plans). It is a member of the Steering Committee (SC) and of the Project Technical and Scientific Committee (TSC).
Ministry of Civil Aviation and National Meteorology	The Ministry provides oversight of ANAM and supervises and guides the missions and activities of the Agency, chairing its Board of Directors. It negotiates the Agency budget with the Ministry of Finance and the Budget. It is responsible for the entire system of the establishment and operation of the integrated information system, including the climate and socioeconomic database. With the Ministry of the Environment, it oversees the implementation of conventions and protocols on climate change. It provides the functions of the IPCC National Focal Point and the functions of the Deputy National Focal Point for Climate Change alongside the Ministry of the Environment. It is the Permanent Representative of Chad to the WMO. This department is a member of the Project Steering Committee. It is also a member of the Project Technical and Scientific Committee.
Ministry of Agriculture	This ministerial department deals with primary sector activities that are among the most vulnerable to the adverse effects of climate change. It will take part in the project through actions to update agricultural policy for effective integration of adaptation, particularly in Output 2.1 (trainings on integration); Outputs 2.2 (vulnerability maps and priority adaptation actions) and 2.3 (integration of adaptation into sector policies). It will also be part of the validation process of products stemming from Component 1. It is a member of the Steering Committee (SC) and of the Technical and Scientific Committee (TSC).
Ministry of Water and Sanitation	This ministry is responsible for the management of surface and underground water and oversees the establishment and operation of the bank of hydrological data. It is a member of the Steering Committee (SC) and of the Project Technical and Scientific Committee (TSC). Its participation in the project will be focused on all the outputs of component 1 on improving the hydrological network (Outputs 1.1, 1.2 and 1.3) and on capacity-building for the sustainability of the network (Output 1.4). Its

Stakeholder	Function and role relevant to the project
	involvement will also concern the training modules on integration of adaptation into vulnerable sectors (Output 2.1), vulnerability assessment (Output 2.2) and the integration of adaptation into the updates of existing policies and plans (Output 2.3).
Ministry of Livestock	After agriculture, this is one of the most vulnerable sectors to climate change. It will participate in the project through Outputs including 2.1 on building capacities for the integration of adaptation into pastoral adaptation policy (2.3) and the translation of this policy into priority action plans with budgeting and implementation of priority adaptation actions (2.2), the guidelines for which are expected from information in the database (Outputs 1.1, 1.2, 1.3 and 1.4). It is a member of the Steering Committee (SC) and of the Project Technical and Scientific Committee (TSC).
Directorate of the Fight against Climate Change	This directorate is under the technical supervision of the Ministry of the Environment. Its mission is to coordinate actions related to the fight against climate change, through all development sectors. It provides technical oversight of project related to the theme of the fight against climate change. Its role in the project will be fundamental. It will steer all actions related to the other directorates responsible for the national budget and national planning, and the sector directorates. Within the NAP project, this Directorate will contribute to the integration of adaptation into sector plans of the environment. Specifically, the Directorate will contribute to the production of climate information under Output 1.3, the integration of adaptation into sectors vulnerable to CC through Output 2.1 and to the selection of identified and categorised adaptation options (Output 2.2).
Directorate of Meteorological exploitation and applications at ANAM	This directorate is under the technical oversight of ANAM, attached to the Ministry of Civil Aviation and National Meteorology. It was formed on 12 May 2017 within the National Meteorological Agency to strengthen capacity of mobilization of financial resources and actions to better fulfil its missions of the forecasting, production, dissemination and application of meteorological information. Within the project, ANAM will be responsible for implementation of component 1 on climate information. In this context, its actions will concern the implementation of outputs of component 1, and in particular Outputs 1.1, 1.2, 1.3 and 1.4. ANAM will be a member of the Project Steering Committee. It is a member of the Project Technical and Scientific Committee.
Decentralised departments of territorial administration	These departments support the administrative regions and the whole decentralization system throughout the prefectures at department and subprefecture levels. This system transmits, executes and manages national guidelines and policies, implements laws and regulations and maintains security; it performs public spending; it leads, coordinates and inspects all regional and prefectural administrative councils and their staff; it issues opinions on the transfer, promotion and support of civil servants; it supports decentralization and community groupings, cooperatives, NGOs in the management of their projects, and it plans and promotes socioeconomic and cultural development in the regions, prefectures and subprefectures. Under the supervision of Governors responsible for planning regional-level development, these entities representing the State at regional, departmental [i.e. of departments] and sub-prefectural levels will play a central role in

Stakeholder	Function and role relevant to the project
	updating regional, departmental and sub-prefectural plans together with priority action plans. Their interventions in the project will mainly be in relation to Outputs 2.1 (capacity-building), 2.2 (climate and socioeconomic products for steering and guiding planning) and 2.3 (updating regional- and local-level action plans and action plans).
NGOs and civil society	Their role is to provide the interface between Government actors and communities. Their role will be fundamental in Outputs 2.1 on training programmes, 2.2 on climate products for steering and guiding the planning process and 2.3 on updating plans and policies. They will also play a key role in the dissemination of climate products incorporating gender equity and in sharing project experiences (Outputs 2.4 and 2.5). The Women's Information and Support Liaison Unit (CLIAF) will reach out to women with information on climate risks. It is represented in 15 of the 23 regions of Chad.
Environmental conventions' focal points	Focal points for UNFCCC, LCD, CBD and Ramsar will play an active role in the networking and sharing of information about the project and will be invited to participate in the project's Executive Committee.
Community-based organizations and agricultural associations	These will be among the main beneficiaries of project activities and will participate in the design, implementation and monitoring of every component of project activities. They will participate in project performance evaluations and identification of corrective actions to bring.
Private sector	The private sector will be particularly targeted by the outreach interventions. Representatives from the PS will be invited to restitution workshops for the activities identified as priorities for each sector, and capacity building activities will be conducted to encourage their participation to the adaptation effort. Options to establish partnerships with the private sector to strengthen the sustainability of the production of climate information will be explored.
Research institutes and universities	They will support the two studies for the priority adaptation interventions identified. Their capacity will also be strengthened to test and develop adaptation options in the four sectors. The NETWORK will support the exploitation and the analysis of the data to be presented in cartographic and graphic form.

Table 3: Stakeholder matrix

iv. Equity and gender considerations

107. The project will include gender considerations to ensure equal participation of women and men in decision-making processes and in the implementation of adaptation activities. It is also important to ensure that these activities do not contribute to exacerbating gender inequalities. The channelling of gender aspects through the NAP will lead to communities that are more resilient and therefore to the success of adaptation.

108. The integration of gender consideration into the NAP process could lead to a range of activities. These extend to:

- Ensuring the participation of vulnerable groups, including women, into the NAP process. This includes integrating women's perspectives and using unique knowledge of adaptation and management of local strategies in the formulation of the NAP.

- Adjusting and implementing NAP activities to respond to gender dynamics and the potentially disproportionate impact of climate change on women.
- Assessing the information available, especially on vulnerable groups including women and focusing on these groups in future studies.
- Connecting the potential of women as agents of change in relation to their communities and investing in this potential as an integral part of the NAP process in Chad.
- Undertaking outreach to ensure that the different stakeholders understand how adaptation to climate change can have effects in terms of gender.
- Monitor and report on the integration of gender consideration in the NAP process.
- Include gender consideration in the assessment of adaptation activities and carry out any improvements needed.
- Build women's capacity by their involvement in the generation of climate and socioeconomic information and particularly in vulnerability diagnosis and mapping exercises.
- Strengthen the role of women in the processes of integration of adaptation into policies, plans and budgets at national, regional and local levels and in decision-making processes at sector level in the most vulnerable sectors.
- Concentrate efforts and resources on gender, especially in the programme of outreach, education, information and communication on adaptation.
- Increase the participation of women in the Steering Committee and Technical and Scientific Committee and in the project management system, with an important role in institutional arrangements.
- Organise community monitoring debates with corrective measures to improve the performance of the project with regard to the adaptation of systems of production and ecosystems.
- Share the project's achievements in the fields of prevention, simulation and management of risks at national, regional and local levels, as well as internationally.

109. Overall, for each component of the project and the plan to channel gender equity through the various project outputs, the situation is as follows:

Outcome/output	Responsible body	Gender actions within project
Outcome 1: An integrated information system, including a reliable database of climate and socioeconomic data, supports the integration of adaptation into policy and decision-making		
Output 1.1: Based on the gap analysis of existing hydro-meteorological network supplementary equipment (i.e. 32 new stations, 15 hydrological water level-gauging stations, 165 rain gauges, four automatic stations, a server, computers with hydrological software and additional equipment for the installation of the four radar sets already purchased by the Government) procured and installed	MEEP/MFB/MEPD.	• Promote the involvement of women in climate and socioeconomic observation posts throughout the meteorological/hydrological network.

Outcome/output	Responsible body	Gender actions within project
Output 1.2: Operational tools to assess climate change impacts on key sectors are introduced	MEEP/MFB/MEPD	• Encourage the participation of women in expressions of needs for climate products, for gender equity to be effectively taken into account.
Output 1.3: Long-term analysis of climate change trends is undertaken to improve the understanding and management of changing climate risks	MEEP/MFB/MEPD	• Include gender equity concerns in the maps of production systems' vulnerabilities to climate change.
Output 1.4: The technical training programme for ANAM and DRE staff on the use and maintenance of the hydro-meteorological network and the processing and analysis of data developed and delivered (eight training workshops)	MEEP/MFB/MEPD	• Consideration of the gender approach in staff recruitment for the climate and socioeconomic network, and promote their training in the operation, upkeep and management of the database.
Outcome 2: Institutional capacities are strengthened in key sectors and regions to facilitate the integration of climate change adaptation into planning and budgeting		
Output 2.1: Training modules and programmes on the integration of adaptation into climate-sensitive sectors are developed and implemented	MEEP/MFB/MEPD	• Promote effective participation of women in programmes to build the capacities of those working in vulnerable sectors.
Output 2.2: Adaptation options are identified and prioritised on the basis of medium- and long-term trends, climate risks and vulnerability analyses and assessments	MEEP/MFB/MEPD	• Integrating gender-responsive priority adaptation activities into climate products that will steer the channelling of adaptation in ongoing plans and sector policies. • Promote gender-responsive priority alternative options into the process of reducing vulnerability and inclusively strengthening resilience. • At least 51 percent of the beneficiaries of climate and socioeconomic products are women.
Output 2.3: A practical guide for the integration of climate change into the development planning and budgeting processes of Chad at national, sector and provincial level delivered	MEEP/MFB/MEPD	• Promote women's access to climate information to better direct the management of the integration into adaptation of priority gender-responsive Adaptation actions

Outcome/output	Responsible body	Gender actions within project
Output 2.4: The Ministry of Environment has an effective monitoring and evaluation system to support the overall coordination at national and sector levels	MEEP	• Strengthen the role of women in systems to monitor and evaluate the performance of the project in the process of planning, budgeting and decision-making on adaptation.
Output 2.5: The Ministry of Environment has an operational and accessible outreach, information and communication programme on adaptation	MEEP	Foster the active role of women in the development, implementation and monitoring and evaluation of the environmental outreach, training, information and communication programme and to benefit from climate products that anticipate, prepare for and respond to the adverse effects of climate change.
Adaptive project management	MEEP	• Involve women in the system of project coordination and management with roles in the project SC and TSC.

Table 4:Integration of gender equity into project implementation

110. More details on the gender baseline and mainstreaming are available in Annex J

v. South-South and Triangular Cooperation (SSTrC):

111. The Chad NAP project will be a powerful lever of cross-border cooperation on adaptation with neighbouring countries with which Chad shares the same climatic and socioeconomic challenges, especially the border countries around Lake Chad: Cameroon, Niger and Nigeria. The lessons of experience at strategic, programmatic and operational levels drawn from implementation of the hydrological component of the integrated system will be shared with these countries, to identify potential lines of cooperation.

112. The project will encourage visits with these countries to discuss and share experiences of building the capacities of institutions and communities planned under activities 2.3.3 and 2.5.1 on the integration of adaptation into planning.

VI. FEASIBILITY

i. Cost efficiency and effectiveness:

113. By addressing the causes of accelerating climate and socioeconomic vulnerability, the project will produce reliable climate tools to inform the identification of the best adaptation options to be included in policies and plans, which will be accessible to all stakeholders. Integrating priority adaptation options into existing policies and plans, the project will provide these with avenues to construct development planning

founded on scientific evidence. Updating existing policies and plans will help minimise the costs of developing new policies and plans

114. Focusing on techniques and technologies that are easy to use and maintain and to which the meteorological network team is generally accustomed will have the effect of strengthening sustainability, at the same time as reducing recurrent costs of repair and upkeep, in addition to reduced dependency on foreign assistance. This reduced dependency will also be strengthened by the training received by meteorological and hydrological network staff.

115. The project will seek to embed the knowledge, skills, technical and technological capacities for risk informed sector and regional planning and budgeting within the key national and regional institutions. That will create an overarching framework for adaptation investments. It will also help internalise certain cost of adaptation through public funding as well as catalyse other sources of finance towards adaptation investments in priority vulnerable sectors and the regions.

116. The status of the project's performance indicators for each product is presented with the baseline situation in section V, on the project's logical framework.

117. Other options were considered during the PPG phase:

National coverage of the meteorological network

118. Instead of covering 15 regions, the project could have covered the entire country with updated or new meteorological stations, as initially planned in the PIF. However, the available resources did not allow for the procurement of equipment that could adequately cover all the regions while providing the needed level of climate information as per the initial gap analysis conducted during the PPG.

119. The project formulation team, together with the involved stakeholders, did not identify this alternative as the most cost-effective and suggested to reduce the benefiting regions to 15, limiting the geographic scope to the Sudanian and Sahelian zones. One of the criteria for the selection of the regions was the density of populations living in the Sudanian and Sahelian zones. While reducing to 15 regions significantly reduced the estimated budget, the reduction in the number of people not covered by the meteorological network was less than proportional. In addition, the exposure in both zones is more important, with the Sudanian zone expected to see the biggest variations in rainfall and temperatures.

Focus the integration of adaptation concerns in one or more sectors

120. The project could have focused the interventions in the most sensitive sectors, such as agriculture, water or fisheries. This approach is particularly relevant in a country where initial work on climate change adaptation planning and budgeting was already initiated. This is the case for a large number of developing countries in Africa and globally, where the NAP process has been initiated and is already advanced. Considering the time elapsed since the submission of the PIF, the formulation team conducted extensive consultations to avoid overlapping with existing initiatives towards the advancement of the NAP process. Nevertheless, in Chad, little has been done and the bases still need to be strengthened. And without a general support and interest to climate change adaptation, targeted sectors would not be given the means to have a broader impact.

121. This project will therefore conduct the initial work for the integration of climate change adaptation into budgeting and planning at a national and regional level. This is likely to enable the dissemination of climate change concerns more broadly and impact the most vulnerable sectors through the improved understanding of climate challenges.

ii. Risk management

122. In accordance with UNDP procedures, the Project Manager will conduct quarterly monitoring of changes in the risk situation, at the country office. The UNDP Country Office will input changes in the risk situation into Atlas, whenever changes occur. The management of critical risks will be reported to GEF in the Project Implementation Report (PIR). Overall, the risks shown below were reported in the PIF and remain valid during the PPG phase.

123. Table 5 below gives an indication of the details of the main risks to which the project is likely to be exposed, and their mitigation measures:

Description	Type	Impact & Probability	Mitigation Measures	Owner
Low willingness to adjust governance frameworks (e.g. policies, plans, strategies and programmes, etc.)	Political	Likelihood: 2 Impact: 4	Awareness-raising and involvement of high-level Government policymakers to ensure their understanding of the opportunities and benefits of climate change integration into policies and plans	PMU
Unclear roles distribution for the maintenance of synoptic and hydrological stations	Operational	P= 3 I= 3	Training workshops on the operation and maintenance of equipment, stations and systems implemented under the LDCF-financed project. Long-term maintenance plans including identification of stakeholder roles and funding sources will be developed for meteorological and hydrological stations, implemented under this project to promote their maintenance and/or management by the relevant authorities beyond the project lifespan	PMU
Communication support do not reach the most vulnerable populations.	Strategic	P = 2 I= 4	The supports developed under the output 2.5 will be designed to ensure they are accessible to vulnerable communities, in an accessible format (for instance taking into account the level of literacy of the beneficiaries).	PMU

Description	Type	Impact & Probability	Mitigation Measures	Owner
Low staff technical knowledge and expertise (e.g. Ministry of the Environment, Water Resources and Meteorology) and target ministries for support for NAP process	Financial	Likelihood: 3 Impact: 3	The project intends to develop the technical capacities of the hydro-meteorological services in the management and maintenance of the network. The capacities of the sector ministries will be strengthened for better understanding of the NAP process and, through provision of tools to integrate adaptation into planning	PMU
Unsustainability of investments in hydro-meteorological observation	Financial Operational	Likelihood: 3 Impact: 4	The long-term maintenance of investments in hydro-meteorological observations is provided by the Government of Chad and by ANAM and DRE, withdedicated staff with a budget allocation for the maintenance and operation of observations and early warning systems. The financial sustainability of the institutions will be evaluated during the preparatory phase for accommodation of the need to manage additional stations. The project will plan to charge for service provision to ensure recurring costs are covered (by ensuring a budget allocation within Government institutions which require climate information)	PMU
Women are not adequately integrated into the NAP process.	Strategic	Likelihood: 3 Impact: 3	Women will be at the center of the activities. A gender specialist will be recruited to conduct a gender analysis and the trainings will be gender-sensitive and include gender mainstreaming components . Besides ensuring the integration of women in the activities of the project, the interventions will promote the integration of gender considerations in the medium and long-term planning and budgeting in Chad.	*WG/MEEP/PNUD*

Table 5: Risk assessment and options for management

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

iii. Social and environmental safeguards:

125. Overall, the project will reduce vulnerability, strengthen inclusive resilience and promote adaptation. To this end, the risk that the project could harm some groups is almost non-existent. However, as the project is implemented, it will ensure that exclusion definitively lies outside its field of actions and that the just and equitable sharing of the benefits of adaptation are at the heart of its concerns. Accordingly, gender equity will be very closely monitored, as will the inclusion of groups recognised to be the most vulnerable (refugees and returnees).

126. Grievances expressed by any group whatever will be monitored and responded to throughout the four years of project implementation and even beyond, through the climate adaptation networks at national and local levels with communities.

127. Annex F provides a more detailed analysis of the risks associated with social and environmental safeguards.

iv. Sustainability, scaling potential and innovation

128. In terms of sustainability, Chad will use LDCF resources to develop and test tools for integrating adaptation into the most vulnerable development sectors. The tools and technologies could be used to integrate adaptation into sectors and regions not targeted by this project. The capacity-building activities planned under this project will go a long way towards forging the ownership and the institutionalization of the tools for the long-term viability and sustainability not only of this project, but also of other adaptation projects implemented in Chad.

129. Scaling at the political level will be facilitated by the incorporation of climate change concerns onto the political agenda, encouraging Government engagement. At the same time, participative approaches and other collaborative planning processes will allow the many stakeholders involved to share knowledge, develop awareness and improve learning and replication. Strengthening the expertise of staff at ministerial and decentralised levels on climate vulnerability and the identification of the most appropriate adaptation options will facilitate scaling, as will the dissemination of tools to integrate adaptation into development.

130. Regarding innovation, the activities planned with LDCF support will add value to the 2010 NAPA, through responding to adaptation needs over the medium and long terms, as integral parts of the development planning process. It will also provide a framework for political dialogue that embraces and includes several sectors and programmatic approaches. The NAP approach will have a significant impact in the key sectors affected by climate change and will provide planners, policymakers and those responsible for the budget with the tools and expertise to ensure that climate change is baked in to the country's policies and budgets. It is a way of ensuring that the Government of Chad is in a position to address the adverse effects of the climate not only today but in the future. This is an innovative approach to the optimization of resources, to capacity-building, to knowledge-sharing and partnership with the various organizations already on the ground, based on already existing work and success.

VII. PROJECT RESULTS FRAMEWORK

This project will contribute to the following Sustainable Development Goal (s): SDG 5: Achieve gender equality and empower all women and girls SGD 13: Take urgent action to combat climate change and its impacts
This project will contribute to the following country outcome included in the UNDAF/Country Programme Document: UNDAF outcome: 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 3.4: The institutional, legal and strategic frameworks (national and subnational) for disaster risk reduction (DRR) are operational and include women's specific needs.

	Objective and Outcome Indicators	Baseline	Midterm Target	End of Project Target	Assumptions
Project Objective: **To facilitate the integration of climate change adaptation into the medium-term and long-term planning and budgeting of climate-sensitive sectors.**	**Indicator 1:** IRRF 3.4.1. Number of national and regional plans that are gender responsive and address disaster and/or climate risk.	**3**	5	**5**	Existence of appropriate mechanisms/tools and an institutional environment conducive to the institutionalization of gender in target sectors and regions
	Indicator 2: IRRF 3.4.2. Extent to which gender is mainstreamed in the national action plan, the DRR strategy and mechanism for multi-stakeholder coordination.	**Low**	Medium The 5-year Plan of Ag. Development, the Livestock Development Plan and 7 PRDs are revised to integrate CCA and are gender-sensitive	**High** Gender is mainstreamed into the NDP and 15 PRDs	Effective implementation of the National Gender Policy
	Indicator 3: Number of direct beneficiaries of climate products with % of women a: Number of beneficiaries with % of women	**a: 0**	a: 65,000, that is 50 % of the target, including 33,150 women and 31,850 men, that is, 51 percent women	a: 130,000 beneficiaries, including 66,300 women and 63,700 men, that is, 100 % of the end-of-project target including 51 percent women	The direct beneficiaries will benefit from the dissemination of climate products and will use them to encourage others to use them
Component 1 **Outcome 1: An integrated information system, including a reliable database of climate and socioeconomic data, supports the integration of adaptation into policy and decision-making processes**	**Indicator 4:** Number of operational stations capable of providing relevant climate information to guide policies and decision-making a. **Synoptic stations** b. **Hydrological stations** b1: Water-level gauging stations b2: Automatic stations	**a1: 16/48 (33 %)** **b1: 20/35 or 57 %** **b2: 0/4**	**a1: 48/48 (100 %)** b1: 35/35 or 100 % b2: 4/4 or 100 %	**a1: 48/48 (100 %)** b1: 35/35 or 100 % b2: 4/4 or 100 %	ANAM and DRE budget allocations for internal resources, earmarked for maintenance, will be mobilised

	Objective and Outcome Indicators	Baseline	Midterm Target	End of Project Target	Assumptions
Component 2 **Outcome 2: The institutional capacities required are strengthened and facilitate the integration of adaptation to climate change into planning and budgeting frameworks at national and local levels**	**Indicator 5:** Number of policymakers targeted capable of understanding the risks of climate change and of identifying priority adaptation options in policies and planning	**0/90**	90/90, 50 % of whom are women	90/90, 50 % of whom are women	Beneficiaries of training sessions find modules to be innovative and useful for the adaptive planning of development and continue with the training
	Indicator 6: Number of plans and budgets effectively integrating priority adaptation actions (a) national (NDP) (b) regional (RDP)	**(a): 0/1 0/1** **(b): 0/15 0/23**	(a) 1/1 (100 %) (b) 10/15 (66 %)	(a) 1/1 (100%) (b) 23/15 (100%)	Adaptation plans target priorities for strengthening resilience and inclusive growth
	Indicator 7: Number of sector policies and associated action plans with effective integration of priority adaptation actions, posting and implementation of these actions through annual ministerial departmental budgets of the most vulnerable sectors with regular updating of action plans (a) Agriculture policy revised to incorporate adaptation (b) Pastoral policy revised to incorporate adaptation (c) Fisheries policy revised to incorporate adaptation (d) New water policy incorporating adaptation	**(a): 0 (no targeted adaptation)** **(b) 0 (no targeted adaptation)** **(c) 0 (no targeted adaptation)** **f 0 (no targeted adaptation)**	(a) 1/1 with adaptation targets (b) 1/1 with adaptation targets (c) 1/1 with adaptation targets **f: with adaptation targets**	(a) 1/1 with adaptation targets (b) 1/1 with adaptation targets (c) 1/1 with adaptation targets f: with adaptation targets	Adaptation priorities are targeted in policy action plans

VIII. MONITORING AND EVALUATION (M&E) PLAN

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

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

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

M&E Oversight and monitoring responsibilities:

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

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

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

137. 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.

138. 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 workplan. 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 organise key GEF M&E activities including the annual GEF PIR, the *independent midterm 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.

139. 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.

140. 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).

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

142. Audit: The project will be audited according to UNDP Financial Regulations and Rules and applicable audit policies on NIM implemented projects.[5]

Additional GEF monitoring and reporting requirements:

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

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

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

145. GEF Project Implementation Report (PIR): The Project Manager, the UNDP Country Office, and the UNDP-GEF Regional Technical Adviser will provide objective input to the annual GEF PIR covering the reporting period July (previous year) to June (current year) for each year of project

[5] See guidance here: https://info.undp.org/global/popp/frm/pages/financial-management-and-execution-modalities.aspx

implementation. The Project Manager will ensure that the indicators included in the project results framework are monitored annually in advance of the PIR submission deadline so that progress can be reported in the PIR. Any environmental and social risks and related management plans will be monitored regularly, and progress will be reported in the PIR.

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

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

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

- The baseline/CEO Endorsement GEF Focal Area Tracking Tool(s) – submitted in annex D to this project document – will be updated by the Project Manager/Team and shared with *the* midterm review consultants and terminal evaluation consultants (not the evaluation consultants hired to undertake the *MTR* or the TE) before the required review/evaluation missions take place. The updated GEF Tracking Tool(s) will be submitted to the GEF along with the completed Midterm Review report and Terminal Evaluation report.

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

150. Terminal Evaluation (TE): An independent terminal evaluation (TE) will take place upon completion of all major project outputs and activities. The terminal evaluation process will begin three months before operational closure of the project allowing the evaluation mission to proceed while the project team is still in place, yet ensuring the project is close enough to completion for the evaluation team to reach conclusions on key aspects such as project sustainability. The Project Manager will remain on contract until the TE report and management response have been finalized. The terms of reference, the evaluation process and the final TE report will follow the standard templates and guidance prepared by the UNDP IEO for GEF-financed projects available on the UNDP Evaluation Resource Center. As noted in this guidance, the evaluation will be 'independent, impartial and rigorous'. The consultants that will be hired to undertake the assignment will be independent from organizations that were involved in designing, executing or advising on the project to be evaluated. The GEF Operational Focal Point and other stakeholders will be involved and consulted during the terminal evaluation process. Additional quality assurance support is available from the UNDP-GEF Directorate. The final TE report will be cleared by the UNDP Country Office

and the UNDP-GEF Regional Technical Adviser, and will be approved by the Project Board. The TE report will be publically available in English on the UNDP ERC.

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

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

IX. MANDATORY GEF MONITORING AND EVALUATION REQUIREMENTS AND BUDGET

GEF M&E requirements	**Primary responsibility**	**Indicative costs to be charged to the Project Budget[6] (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.

[6] Excluding project team staff time and UNDP staff time and travel expenses.

GEF M&E requirements	**Primary responsibility**	**Indicative costs to be charged to the Project Budget[6] (US$)**		**Time frame**
		GEF grant	**Co-financing**	
Addressing environmental and social grievances	Project Manager UNDP Country Office BPPS as needed	None for time of Project Manager, and UNDP CO		
Project Board meetings	Project Board UNDP Country Office Project Manager			At minimum annually.
Supervision missions	UNDP Country Office	None[7]		Annually.
Oversight missions	UNDP-GEF team	None[7]		Troubleshooting as needed.
Knowledge management as outlined in Outcome 4	Project Manager	Staff time		Ongoing.
GEF Secretariat learning missions/site visits	UNDP Country Office and Project Manager and UNDP-GEF team	None		To be determined.
Midterm GEF Tracking Tool to be updated by (add name of national/regional institute if relevant)	Project Manager	Staff time		Before midterm review mission takes place.
Independent Midterm Review (MTR) and management response	UNDP Country Office and Project team and UNDP-GEF team	US$ 20,000 -		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$ 88,000, that is, 1.5 percent**		

Table 6: Mandatory GEF M&E Requirements and M&E Budget

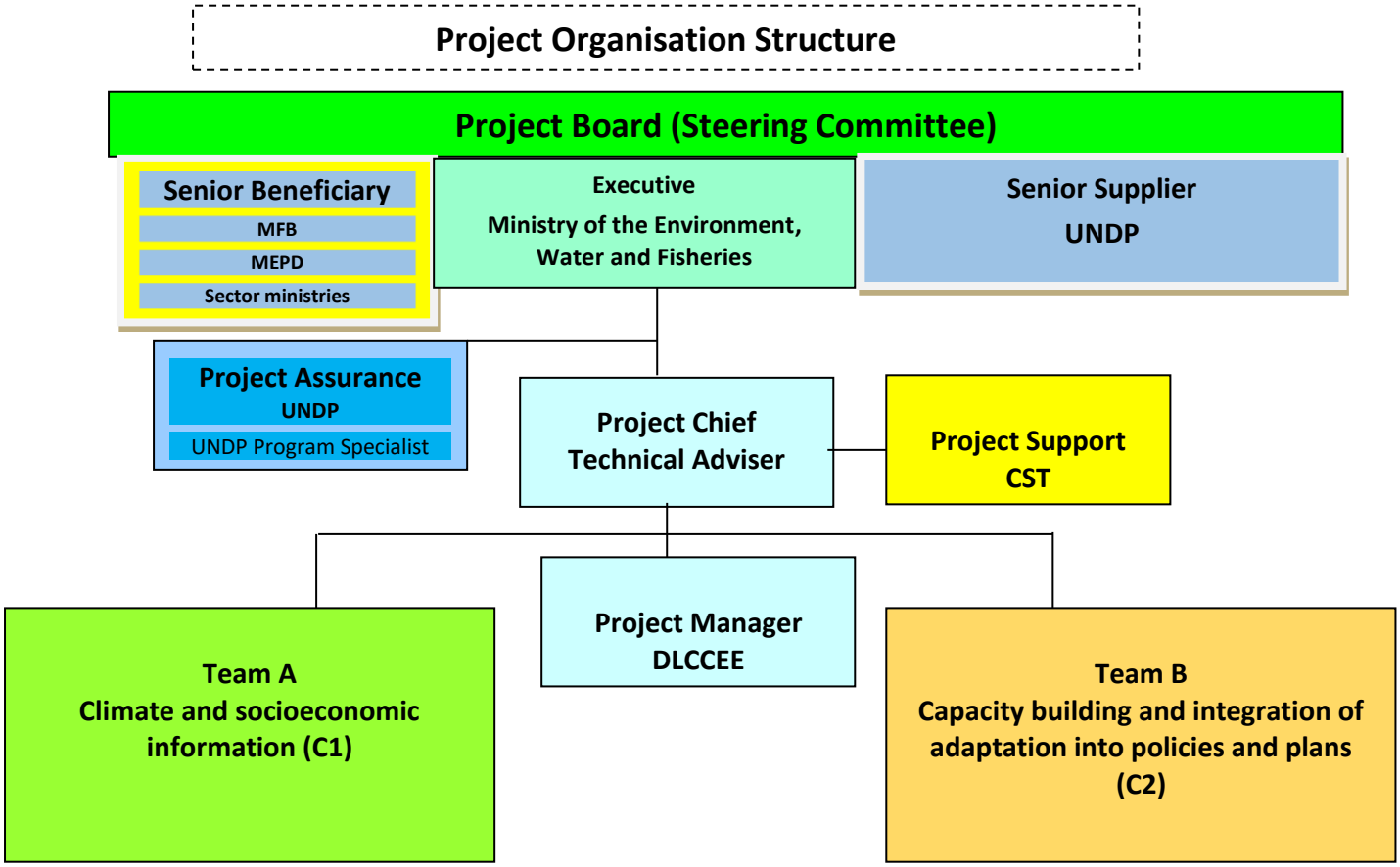
[7] The costs of UNDP Country Office and UNDP-GEF Unit's participation and time are charged to the GEF Agency Fee.

X. GOVERNANCE AND MANAGEMENT ARRANGEMENTS

153. 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.

154. The **Implementing Partner** for this project is the Ministry of the Environment. The Implementing Partner is responsible and accountable for managing this project, including the monitoring and evaluation of project interventions, achieving project outcomes, and for the effective use of UNDP resources.

The project organisation structure is as follows:


Project Organisation Structure
Project Board (Steering Committee)
Senior Beneficiary
MFB
MEPD
Sector ministries
Executive
Ministry of the Environment, Water and Fisheries
Senior Supplier
UNDP
Project Assurance
UNDP
UNDP Program Specialist
Project Chief Technical Adviser
Project Support
CST
Project Manager
DLCCEE
Team A
Climate and socioeconomic information (C1)
Team B
Capacity building and integration of adaptation into policies and plans (C2)

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

The Project Board is comprised of the following individuals:

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

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

158. The **project assurance** roll will be provided by the UNDP Country Office specifically and strengthened with the recruitment of an international staff (P3) for the supervision of the project. Additional quality assurance will be provided by the UNDP Regional Technical Adviser as needed.

159. Agreement on intellectual property rights and use of logo on the project's deliverables and disclosure of information**:** 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[8] and the GEF policy on public involvement[9].

XI. FINANCIAL PLANNING AND MANAGEMENT

160. The total cost of the project is US$ 33,680,900. This is financed through LDCF grant of US$ 5,775,000 and US$ 1,405,900 in cash co-financing to be administered by UNDP. Parallel Co-financing is expected the Project Hydromet funded by WB for an amount of 4,000,000 US$, a contribution from project GCCA of an amount of 6,000,000$ and a contribution in-kind of the Government of 16,500,000 US$. 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.

161. Parallel co-financing: The actual realization of project co-financing will be monitored during the midterm review and terminal evaluation process and will be reported to the GEF. The planned parallel co-financing will be used as follows:

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

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

Table 7: Parallel co-financing

Co-financing source	Co-financing type	Co-financing amount	Planned Activities/Outputs
Government of Chad	In-Kind	16,500,000	Co-financing in kind by the Government covers both components of the project, particularly through the existing stations of the existing climate network and its equipment (Outputs 1.1 and 1.2) and the staff already in place (Output 1.4). The Government's contribution also relates to component 2 with the establishment of institutions and staff already in place and their empowerment after the project (Outputs 2.1, 2.2, 2.3, 2.4 and 2.5).
European Union: With the context of the Global Climate Change Alliance (GCCA) global initiative, under the oversight of the Ministry of the Environment and Fisheries together with the Directorate for the Fight against Climate Change as delegated prime contractor. Launched in December 2013 for a period of seven years, with EUR 8 million in funding, this project is based on two important areas, namely: o Area 1: Strengthening climate change governance through the integration of climate change into development policies and strategies o Area 2: Conducting field activities to foster climate change adaptation in the agriculture and livestock sector.	In-Kind	6,000,000	The production of climate and socioeconomic information through the strategy of the establishment of a database to guide the management of the integration of adaptation into policies and plans will provide this important project with a number of inputs to strengthen efficiency. The areas of complementarity will be around Outputs 1.1 and 1.2 and 1.3, and Outputs 2.2 and 2.3.
World Bank: Hydromet Project: Planned to start in 2018 and to last five years, with US$ 6.7 million in funding, this project will provide hydrological and piezometric (groundwater level) monitoring. The Ministry of the Environment and Fisheries provides oversight of the project.	In-Kind	4,000,000	Strengthening the hydrological network through Outputs 1.1, 1.2 and 1.3 will be an axis of cooperation between the two projects.
		26,500,000	

162. 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 workplan

allowing the Project Manager to expend up to the tolerance level beyond the approved project budget amount for the year without requiring a revision from the Project Board. Should the following deviations occur, the Project Manager and UNDP Country Office will seek the approval of the UNDP-GEF team as these are considered major amendments by the GEF:

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

163. 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).

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

165. 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.

166. 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.

167. 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).

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.

163.DPC: This project is under NIM, UNDP will provide direct project services. The services would follow the UNDP DPC policies on GEF funded projects on the recovery of direct costs. As is determined by the GEF Council requirements, these service costs will be assigned as Project Management Cost, duly identified in the project budget as Direct Project Costs. Eligible Direct Project Costs should not be charged as a flat percentage. They should be calculated on the basis of estimated actual or transaction based costs and should be charged to the direct project costs

account codes: “64397- Services to projects – CO staff” and “74596 – Services to projects – GOE for CO

XII. TOTAL BUDGET AND WORKPLAN

Total Budget and Workplan			
Atlas Proposal or Award ID:	00108410	Atlas Primary Output Project ID:	00108259
Atlas Proposal or Award Title:			
Atlas Business Unit	TCD10		
Atlas Primary Output Project Title	Output 3.4: The institutional, legal and strategic frameworks (national and subnational) for disaster risk reduction (DRR) are operational and include women's specific needs. ***IRRF indicator 3.4.1 Number of national and regional plans that are gender responsive and address disaster and/or climate risk; IRRF Indicator 3.4.2. Extent to which gender is mainstreamed in the national action plan, the DRR strategy and mechanism for multi-stakeholder coordination***		
UNDP-GEF PIMS No.	5431		
Implementing Partner	Ministry of Environment and Fisheries		

GEF Component-Outcome/Atlas Activity	Responsible Party/ [1] (Atlas Implementing Agent)	Fund ID	Donor Name	Atlas Budgetary Account Code	Atlas Budget Description	Amount Year 1 (US$)	Amount Year 2 (US$)	Amount Year 3 (US$)	Amount Year 4 (US$)	Total (US$)	See Budget Note:
OUTCOME 1: An integrated information system, including a reliable database of climate and socioeconomic data, supports the integration of adaptation into policy and decision-making processes	WG/MEEP	62160	GEF/LDCF	71200	International Consultants	45,000.00	18,000.00	-	-	63,000.00	L01
		62160	GEF/LDCF	71300	Local Consultants	18,000.00	30,000.00	0	-	48,000.00	L02
		62160	GEF/LDCF	71400	Contractual Services-Individual	14,400.00	14,400.00	14,400.00	14,400.00	57,600.00	L03
		62160	GEF/LDCF	72100	Contractual services	440,000.00	20,000.00	20,000.00	20,000.00	500,000.00	L04
		62160	GEF/LDCF	72200	Equipment and furniture	2,547,635.00	-	-	-	2,547,635.00	L05
		62160	GEF/LDCF	72500	Supplies and consumables	2,500.00	2,500.00	1,965.00	2,500.00	9,465.00	L06
		62160	GEF/LDCF	75700	Training, Workshops and Conf.	11,000.00	11,000.00	8,000.00	8,000.00	38,000.00	L07
					Subtotal GEF	3,078,535.00	95,900.00	44,365.00	44,900.00	3,263,700.00	
	WG/MEEP	04000	UNDP	71600	Travel	54,450.00	54,450.00	42,000.00	42,000.00	192,900.00	L08
		04000	UNDP	72200	Equipment and furniture	150,000.00	-	-	-	150,000.00	L09

		04000	UNDP	73400	Maintenance and other equipment	35,000.00	35,000.00	35,000.00	35,000.00	140,000.00	L11
					Subtotal UNDP	239,450.00	89,450.00	77,000.00	77,000.00	482,900.00	
		TOTAL OUTCOME 1				3,317,985.00	185,350.00	121,365.00	121,900.00	3,746,600.00	
OUTCOME 2: Institutional capacities required are strengthened and facilitate the integration of adaptation to climate change into planning and budgeting frameworks at national and local levels	WG/MEEP	62160	GEF/LDCF	71200	International Consultants	57,000.00	45,000.00	45,000.00	9,000.00	156,000.00	L12
		62160	GEF/LDCF	71300	Local Consultants	30,000.00	69,000.00	18,000.00	-	117,000.00	L13
		62160	GEF/LDCF	71600	Travel	11,000.00	11,000.00	11,000.00	11,000.00	44,000.00	L14
		62160	GEF/LDCF	72100	Contractual services	52,000.00	462,000.00	404,000.00	333,000.00	1,251,000.00	L15
		62160	GEF/LDCF	72500	Supplies and consumables	10,700.00	10,000.00	10,000.00	10,000.00	40,700.00	L16
		62160	GEF/LDCF	73400	Maintenance and other equipment	20,000.00	20,000.00	20,000.00	20,000.00	80,000.00	L17
		62160	GEF/LDCF	74500	Miscellaneous expenses	7,000.00	7,000.00	7,000.00	7,000.00	7,000.00	L18
		62160	GEF/LDCF	71600	Travel	15,500.00	15,500.00	15,500.00	15,500.00	62,000.00	L19
		62160	GEF/LDCF	71400	Contractual Services – Individuals	14,400.00	14,400.00	14,400.00	14,400.00	57,600.00	L20
		62160	GEF/LDCF	75700	Training, Workshops and Conf.	110,000.00	150,000.00	70,000.00	70,000.00	400,000.00	L21
					Subtotal GEF	327,600.00	803,900.00	614,900.00	489,900.00	2,236,300.00	
		04000	UNDP	71400	Contractual Services-Individual	28,800.00	28,800.00	28,800.00	28,800.00	115,200.00	L22
		04000	UNDP	72100	Contract Services	10,000.00	10,000.00	10,000.00	10,000.00	40,000.00	L23
					Subtotal UNDP	38,800.00	38,800.00	38,800.00	38,800.00	155,200.00	
			TOTAL OUTCOME 2			366,400.00	842,700.00	653,700.00	528,700.00	2,391,500.00	
Project Management	WG/MEEP	62160	GEF/LDCF	71600	Travel	7,500.00	7,500.00	7,500.00	7,500.00	30,000.00	L24
		62160	GEF/LDCF	72500	Supplies and consumables	2,500.00	2,500.00	2,500.00	2,500.00	10,000.00	L25
		62160	GEF/LDCF	73400	Maintenance and other equipment	5,000.00	5,000.00	5,000.00	5,000.00	20,000.00	L26

		62160	GEF/LDCF	74100	Professional services	3,000.00	3,000.00	23,000.00	48,000.00	77,000.00	L27
		62160	GEF/LDCF	75700	Training, Workshops and Conf.	11,000.00	0.00	0.00	0.00	11,000.00	L29
		62160	GEF/LDCF	74596	Direct Project Costs	54,450.00	25,000.00	25,000.00	22,550.00	127,000.00	L30
					Subtotal GEF	83,450.00	43,000.00	63,000.00	85,550.00	275,000.00	
		04000	UNDP	61300	Staff	237,500.00	237,500.00	-	-	475,000.00	L31
	WG/MEEP	04000	UNDP	71400	Contractual Services-Individual	73,200.00	73,200.00	73,200.00	73,200.00	292,800.00	L32
					Subtotal UNDP	310,700.00	310,700.00	73,200.00	73,200.00	767,800.00	
			TOTAL PROJECT MANAGEMENT			394,150.00	353,700.00	136,200.00	158,750.00	1,042,800.00	
TOTAL PROJECT		TOTAL LDCF				3,489,585.00	942,800.00	722,265.00	620,350.00	5,775,000.00	
		TOTAL UNDP				588,950.00	438,950.00	189,000.00	189,000.00	1,405,900.00	
		TOTAL PROJECT				4,078,535.00	1,381,750.00	911,265.00	809,350.00	7,180,900.00	

Summary of Funds: [10]

Funding Source	Amount Year 1	Amount Year 2	Amount Year 3	Amount Year 4	Total
GEF	3,445,135.00	936,800.00	762,765.00	630,300.00	5,775,000.00
UNDP	588,950.00	438,950.00	189,000.00	189,000.00	1,405,900.00
GCCA	1,500,000.00	1,500,000.00	1,500,000.00	1,500,000.00	6,000,000.00
Government	6,000,000.00	3,500,000.00	3,500,000.00	3,500,000.00	16,500,000.00
HYDROMET	1,000,000.00	1,000,000.00	1,000,000.00	1,000,000.00	4,000,000.00
TOTAL	12,534,085.00	7,375,750.00	6,951,765.00	6,819,300.00	33,680,900.00

Table 7: Summary of Funds

[10] Summary table should include all financing of all kinds: GEF financing, co-financing, cash, in-kind, etc.

See Budget Note:	Project Activities	Budget notes
L01	1.1.1. 1.2.1. 1.2.2. 1.3.1.	4 International Consultants (IC) specialized in meteorology and hydrology: - 1 IC to conduct a thorough diagnosis of the existing meteorological and hydrological network and to offer equipment, automatic telemetry systems, simulation software and complementary GIS for the 32 synoptic stations. 30 days @ US$ 600/day. Y1 - 1 IC to assist in the consolidation of the database for the development of reliable climate forecasts, to integrate climate monitoring information with satellite data into climate and seasonal forecasts and to facilitate access to new climate change data forecasting (Maggic Scengen vs 5.2., Cmip, Cordex). 30 days @ US$ 600/day. Y2 - 1 IC to support the development of forecast and assessment of climate impacts and to combine satellite imagery with high-resolution radar to be used for simulation. 30 days @ US$ 600/day. Y1 - 1 IC to assess existing management skills for the hydro-meteorological network and the database. 15 days @ US$ 600/day. Y1
L02	1.1.1. 1.2.1. 1.2.2. 1.3.1.	6 national consultants (NC): - 3 NCs to work with the IC to conduct a thorough diagnosis of the existing meteorological and hydrological network and to offer equipment, automatic telemetry systems, simulation software and complementary GIS for the 32 synoptic stations and ensure the sustainability of the network. 30 days each (90 days in total) @ US$ 200/day. Y1 - 1 NC to assist the IC in the consolidation of the database for the development of reliable climate forecasts, to integrate climate monitoring information with satellite data into climate and seasonal forecasts and to facilitate access to new climate change data forecasting (Maggic Scengen vs 5.2., Cmip, Cordex). 30 days @ US$ 200/day. Y2 - 1 NC to support the IC in the updating of the forecasts and to combine the satellite imagery with the high-resolution radar to be used for simulation and create a database. 30 days each (60 days in total) 30 days @ US$ 200/day. Y2 - 1 NC to create the database. 90 days @ US$ 200/day. Y2
L03	1.1; 1.2; 1.3; 1.4.	1 national meteorology / hydrology expert for the management of component 1. 4 years (48 months) @ US$ 1,200/ month. Y1, Y2, Y3 & Y4
L04	1.1.1. 1.1.2. 1.4.1. 1.4.2	Contractual services with companies, engineering firms or NGOs to monitor the operation of the 48 synoptic stations (including 32 new) and 15 hydrological stations and the maintenance of the system, with regular training for climate network agents in establishing, operating and maintaining the climate network to ensure the sustainability of the system. @ US$ 80,000 Y1, Y2, Y3 & Y4 Installation of the 4 high-resolution radars already acquired through Government's funds, and capacity-building of the actors in GIS and maintenance and use of database. @ US$ 420,000 Y1
L05	1.1.2	Acquisition, provision and installation of complete and complementary meteorological equipment including: - 32 new stations @ US$ 67,000/station, - 15 hydrological stations @ US$ 10,000/station, - 165 rain gauges at US$ 165/unit.

		- Acquisition of additional equipment for the benefit of the 4 radars already acquired by the Government and 4 automatic hydraulic stations @ US$ 211,410, - 4 computers @ UD 1,000/computer, - 2 servers @ US$ 3,000/server, - GIS software @ US$ 5,000 for the CNAD and MoW. Total amount of US$ 2,547,635. Y1
L06	1.4.1. 1.4.2	Acquisition of ink cartridges for printing and photocopying, reams of paper for training documents. @ US$ 9,465. Y1, Y2, Y3 & Y4
L07	1.1.1. 1.2.1. 1.2.2. 1.3.1. 1.4.1. 1.4.2	8 training workshops of 10 days each including 2 per year (@ US$ 4,000/workshop) gathering 63 participants from the 48 synoptic stations and 15 hydrological stations. Y1, Y2, Y3 & Y4 2 workshops to validate consultative studies (@ US$ 3,000/workshop). Y1 & Y2
		Total LDCF financing for component 1: US$ 3,263,700
L08	1.1. 1.2. 1.3. 1.4.	Travel costs for the training sessions of climate network agents on operating and maintaining the stations, and travel costs for the members of the Scientific and Technical Committee to ensure a regular follow-up of the equipment to be installed. @ US$ 88,000. Y1, Y2, Y3 & Y4 Travel costs for international and national consultants for the activities to be carried under products 1.1 and 1.2. These missions include the DSA of the drivers and the accompaniment of the missions by the MoEF / Meteorology / Hydrology. @ US$ 24,900. Y1, Y2, Y3 & Y4 Fuel for field missions. @ US$ 65,000. Y1, Y2, Y3 & Y4 Travel for international consultants @ 15,000 Y1, 10,000 Y2
L09	1.1.; 1.2.; 1.3.; 1.4.	Acquisition of 4 vehicles (@US$ 35,000 each) and 4 motorcycles (@US$ 2,500 each) to ensure the progress of the technical field missions of the project. @ US$ 150,000. Y1
L11	1.1.; 1.2.; 1.3.; 1.4.	Operation and maintenance of offices with the payment of water, telephone, electricity and Internet access. @ US$ 140,000. Y1, Y2, Y3 & Y4
		Total UNDP financing for component 1: US$ 482,900
		Total financing for component 1: US$ 3,746,600
L12	2.1.1. 2.2.1. 2.2.2. 2.5.1.	6 International consultants: - 1 socioeconomic modelling specialist to conduct the analysis of climate and socioeconomic information for the provision of reliable products, including vulnerability maps, for inclusion in policies and plans. 60 days @ US$ 600/day. Y1 & Y2; - 1 IC for the formulation of vulnerability studies. 60 days @ US$ 600/day. Y1 & Y2; - 1 IC to conduct a gender analysis. 20 days @ US$ 600/day. Y1 - 1 IC to evaluate the operation of the equipment before the project midterm evaluation mission and to make recommendations for necessary corrective measures. 30 days @ US$ 600/day. Y3 - 1 IC in charge of gender mainstreaming in planning activities and the development of a database of women's organizations working in climate change. 60 days @ US$ 600/day. Y1, Y2, Y3 & Y4 - 1 IC expert in climate financing for the trainings for the staff of the Chad Special Environmental Fund. 30 days @ US$ 600/day. Y3
L13	2.2.1. 2.2.2. 2.2.3. 2.3.1. 2.3.2. 2.4.1.	12 national consultants: - 1 socioeconomic modelling specialist to support the analysis of climate and socioeconomic information for the provision of reliable products, including vulnerability maps, for inclusion in policies and plans. 60 days @ US$ 200/day. Y1 & Y2 - 4 NCs to conduct vulnerability assessments for the agriculture, fisheries, water resources and livestock sectors. 45 days each @ US$ 200/day. Y1 & Y2

		- 1 NC will assess gender equity in the project and propose corrective measures to improve performance before the project midterm evaluation. 30 days @ US$ 200/day. Y1 - 4 NCs to carry out the prioritization exercise in each of the 4 priority sectors (agriculture, fisheries, water resources and livestock) 45 days each @ US$ 200/day. Y2 - 1 NC will compile the priority options and prepare the action plan and budgeting. 45 days @ US$ 200/day. Y3 - 1 NC for identifying entry points for integrating climate change adaptation into sector and regional plans (including budgets) and providing recommendations. 45 days @ US$ 200/day. Y2 - 1 NC for the analysis of M&E mechanisms of the MoEF and make recommendations for their reinforcement. 45 days @ US$ 200/day. Y3
L14	2.1. 2.2. 2.3. 2.4.	Travel costs for international and national consultants' missions; Missions of the Scientific and Technical Committee to support the development of climatic vulnerability products and priority adaptation actions to be integrated into policies and plans. @ US$ 44,000. Y1, Y2, Y3 & Y4
L15	2.1.1. 2.1.2. 2.2.2. 2.2.3. 2.3.3.	Contractual services with companies, consulting firms or NGOs for the development of 2 climate change integration guides in sector and regional planning, including gender considerations; and training of senior staff in key ministries. Contractual services for the development of 8 vulnerability maps. Contractual services for the updating of the Chad National Development Plan (NDP) and the 15 Regional Development Plans (PRD) to integrate adaptation once climate products have started to generate information on the modelling of socioeconomic impacts of climate risks. @ US$ 290,000. Y2, Y3 & Y4 Contractual services for training of trainers and agents of the climate and socioeconomic network Contract services for participatory development and implementation of required training modules for 90 Departmental Executives to understand and influence the integration of adaptation into planning and implementation of sector policies to benefit ministerial departments of the most vulnerable key sectors, Contractual services for specific capacity-building training for MoEF officials, Contractual services for the prioritization of adaptation options through training in evaluation methodologies and the conduct of multicriteria studies. Contractual services for the organization of 16 workshops (one per region and one national) on integrating gender considerations into plans, policies and budgets. @ US$ 420,000. Y1, Y2, Y3 & Y4 Contract services with national research institutes in the 4 key sectors. @ US$ 120,000. Y2, Y3 & Y4 8 contractual services of companies with expertise in the adaptation priorities identified under output 2.2. and selected to conduct in-depth feasibility studies (activity 2.3.3) @ US$ 421,000. Y2, Y3 & Y4
L16	2.1. 2.2. 2.3. 2.4.	Acquisition of ink cartridges for printing and photocopying, reams of paper for training documents. @ US$ 40,700. Y1, Y2, Y3 & Y4
L17	2.1. 2.2. 2.3. 2.4.	Operation and maintenance of offices with the payment of water, telephone, electricity and Internet access. @ US$ 80,000. Y1, Y2, Y3 & Y4
L18	2.1. 2.2. 2.3. 2.4.	Contingencies: exchange rate, banking transactions. @ US$ 28,000. Y1, Y2, Y3 & Y4
L19	2.1. 2.2. 2.3. 2.4.	Fuel for field missions and travel for international consultants. @ US$ 62,000. Y1, Y2, Y3 & Y4
L20	2.1. 2.2. 2.3. 2.4.	1 M&E expert. 4 years (48 months) @ US$ 1,200/month. Y1, Y2, Y3 & Y4

L21	2.2.1. 2.2.3. 2.4.2. 2.4.3. 2.4.5. 2.5.1.	8 10-day training workshops for 90 managers/policymakers to understand the risks of climate change and identify priority adaptation options in policies and plans. @ US$ 35,000/workshop. Y1, Y2, Y3 & Y4 2 workshops to equip the main actors involved in the data-collection chain with the skills needed to feed the monitoring and evaluation system. @ US$ 10,000/workshop. Y2 2 workshops to provide actors involved in the monitoring and evaluation system with the necessary skills to link strategic planning to adaptation and to have tools for adaptation measures for results-based adaptation actions. @ US$ 10,000/workshop. Y2 An awareness meeting for parliamentarians on the NAP process. @ US$ 10,000. Y1 An awareness workshop for journalists and NGOs on the NAP process and the challenges of integrating adaptation into planning. @ US$ 10,000. Y2 Workshops to validate the work done by national and international consultants on the integration of adaptation in policies and plans the monitoring and evaluation mechanisms. @ US$ 60,000. Y1 & Y2
		Total LDCF financing for component 2: US$ 2,236,300
L22	2.1. 2.2. 2.3. 2.4.	1 national expert in participatory approaches and institutional capacity-building. 4 years (48 months) @ US$ 1,200/month. Y1, Y2, Y3 & Y4 1 national communication expert. 4 years (48 months) @ US$ 1,200/month. Y1, Y2, Y3 & Y4
L23	2.1. 2.2. 2.3. 2.4.	Contractual services for the implementation of communication and awareness activities. @ US$ 40,000. Y1, Y2, Y3 & Y4
		Total UNDP financing for component 2: US$ 155,200
		Total financing for component: US$ 2,391,500
L24	Outputs of C1 and C2	Fuel and lubricants required for the consultants' missions, the implementation of all outputs and the supervision missions of the SC and the STC on all outputs. Exchange visit to one of Lake Chad bordering countries. @ US$ 40,000. Y1, Y2, Y3 & Y4
L25	Outputs of C1 and C2	Acquisition of ink cartridges for printing and photocopying, reams of paper for training documents and for the management and supervision of the project. @ US$ 1 0,000. Y1, Y2, Y3 & Y4
L26	Outputs of C1 and C2	Operation and maintenance required for the implementation of the activities under outcome 1 and 2. @ US$ 20,000. Y1, Y2, Y3 & Y4
L27	Outputs of C1 and C2	Professional services for annual project audits, monitoring and evaluation of project performance according to the M&E table in section VIII of the Project Document.
L28	Outputs of C1 and C2	Costs for inception workshop
L29	Outputs of C1 and C2	Direct project costs as per letter of agreement between UNDP and the Government of Chad (see Annex k)
		Total LDCF financing for project management costs: US$ 275,000
L30	Outputs of C1 and C2	International P3 staff acting as CTA for 12 months part-time during the 4 years of the project to assist the CO in project implementation missions and accelerate the overall delivery of the office, the other half being supported by another LDCF project under development. @ US$ 475,000. Y1, Y2, Y3 & Y4
L31	Outputs of C1 and C2	Monthly salary of the coordinator @ US$ 1,500/month, of the Administrative and Financial Manager @ US$ 1,200/month, of a secretariat of Direction @ 1,000 US$ / month and of 3 drivers @ 800 US$ / month each

		Total UNDP financing for PMC: US$ 767,800
		Total financing for component: US$ 1,042,800

XIII. MANDATORY ANNEXES

A. Multi-year Workplan

B. Monitoring Plan

C. Evaluation Plan

D. GEF Tracking Tool (s) at baseline

E. Terms of Reference for Project Board, Project Manager, Chief Technical Adviser and other positions as appropriate

F. UNDP Social and Environmental and Social Screening Template (SESP)

G. Environmental and Social Management Plan (ESMP) for moderate and high risk projects only

H. UNDP Project Quality Assurance Report

I. UNDP Risk Log

J. Results of the capacity assessment of the project implementing partner and HACT micro assessment

K. Additional agreements