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Project Information Document (PID)

Concept Stage | Date Prepared/Updated: 17-Oct-2019 | Report No: PIDC27618

BASIC INFORMATION

A. Basic Project Data

Country	Project ID	Parent Project ID (if any)	Project Name
Chad	P171611		Chad Local Development and Adaptation Project (P171611)
Region	**Estimated Appraisal Date**	**Estimated Board Date**	**Practice Area (Lead)**
AFRICA	Apr 28, 2020	Jun 23, 2020	Environment, Natural Resources & the Blue Economy
Financing Instrument	**Borrower(s)**	**Implementing Agency**	
Investment Project Financing	Republic of Chad	Ministry of Envrionment, Water and Fisheries	

Proposed Development Objective(s)

The project aims to support local inclusive development through, enhanced natural resources management, provision of basic water and sanitation services and increasing income generating opportunities.

PROJECT FINANCING DATA (US$, Millions)

SUMMARY

Total Project Cost	54.45
Total Financing	54.45
of which IBRD/IDA	50.00
Financing Gap	0.00

DETAILS

World Bank Group Financing

International Development Association (IDA)	50.00
IDA Grant	50.00

Non-World Bank Group Financing

Trust Funds	4.45

Global Environment Facility (GEF)	4.45

Environmental and Social Risk Classification	Concept Review Decision
Moderate	Track II-The review did authorize the preparation to continue

Other Decision (as needed)

B. Introduction and Context

Country Context

1. **Chad faces major economic and geographic challenges as it strives to reduce poverty and increase shared prosperity.** Chad is a poor, landlocked, low-density and climatically diverse, Sahelian country with a population of 15.2 million inhabitants in 2018, most of whom are rural (78 percent)1. The estimated average density of population is 8.5 inhabitants per km², but it is very unequally distributed with densities ranging from 0.6 inhabitants per km² in the Northern provinces (Borkou, Ennedi East, Ennedi West and Tibesti) and 63 inhabitants per km² in Logone Occidental (INSEED, Population Projections 2009-2030)[2].

2. **Economic growth has been severely affected since 2015 by the fall in oil prices and remains marked by conflict-related instability in border areas**. This fragility, combined with high population growth (3.6 percent per year) and aggravated by movements of refugees and displaced people and a humanitarian crisis, put some bounds on the gross domestic product per capita (US$720 in 2016) and the efforts undertaken to eradicate poverty.

3. **Nearly half of the population lives below the national poverty line, more than 90 percent of the poor live in rural areas, and Chad ranks last in the world on the human capital index.** Less than one in two children has access to safe drinking water, only one in 10 children has access to basic sanitation and only one in 17 children wash their hands with soap and water. 40 percent of children suffer from nutritional deficiencies affecting their growth. A Chadian girl spends about 62 days a year drawing water instead of studying. Increased investment in access to safe drinking water and sanitation and hygiene can effectively contribute to strengthening human capital.

4. **Despite governance and security challenges, particularly instability in neighboring countries, Chad has significant agricultural potential**. About 39 million hectares of arable land are available and the country counts a herd of over 100 million head of cattle (27,604,000 head of cattle, 30,791,242 head of sheep, 34,408,208 head of goat and 7,285,609 head of camels). The sector accounts for nearly 50% of GDP in 2017 and accounts for 90% of the population.

1 INSEED-Tchad: http://www.inseed-td.net/
2 INSEED-Tchad: http://www.inseed-td.net/index.php/thematiques/statistique-demographique/population

5. **Local development.** Despite the reforms initiated by the government in the context of decentralization, the transfer of powers from the state to the provinces, departments and communes is slow to take place. This results in significant differences in human development and local development indicators across regions in Chad. While the capital of Chad (N'djamena) has the highest Human Capital Index, some regions of the Sahelian-Saharan savannas landscape (Kanem and Borkou) are among the ten lowest. However, the establishment of a local development system is fundamental for any economic and social development and will allow people at the grassroots to take control of their destiny, manage and protect their own resources.

Sectoral and Institutional Context

Climate Change

6. **Climate risk and desertification are considered as major threats for Chad**. Chad is expected to become a hotspot for extreme high temperatures, droughts, and desertification as climate change intensifies over the coming decades. Persistent drought has contributed to the acceleration of desertification in the northern part of the country while the Saharan and Sahelian climatic zones have shifted 150km southward. This caused a reduction in agricultural and pastoral areas, leading to the displacement of herders and farmers to areas more favourable to their activities and generally reinforcing inequalities and discrimination among the population. Water scarcity is already classified as high, over the Saharan and (nearly all) the Sahelian zones, with droughts expected to occur on average every 5 years, and this will worsen with climate change. Climatic forecasts by NASA have indicated that Lake Chad could disappear in 20 years at the current rate of water use and increased silting of upstream rivers. Agricultural production, livestock farming, and fishing all rely heavily on freshwater resources in Chad and the need for better management of these resources is necessary for the future. Climate change will aggravate the human pressure already on these systems and better management is needed to ensure Chadians have access to freshwater resources. River flood hazard is classified as high over the Sudanian and Sahelian zones. This means that potentially damaging and life-threatening river floods are expected to occur at least once in the next 10 years. And this might become worse with climate change.

7. **Chad - 4th most vulnerable country in the world - has great need for investment and innovations to improve readiness and a great urgency for action, according to the Notre Dame Global Adaptation Initiative (ND-GAIN).** The country's NDC identifies the following vulnerabilities, at the nexus of water, land and agriculture. The impacts of climate change are significant on the large hydrographic systems of the basins of Lake Chad: natural, agrosylvopastoral, fishery and human systems. They include changes to the agricultural seasons, disturbances in the biological cycles of crops, and a reduction in cereal crop production. The proposed Project will help Chad address climate change vulnerabilities and build resilience in its priority areas: water and agriculture. It will provide for institutional strengthening and capacity building of national agencies as well as rural communities to address knowledge, awareness, and capacity gaps on climate change adaptation. It also provides increased financing and technical assistance for climate investments in priority areas for Chad, to support the adoption of climate-smart rural production and landscape management investments that aim to achieve multiple benefits (e.g., climate resilience, food security, increased well-being of beneficiaries, including gender and social inclusion). As such, the Project will thus deliver on Chad's climate adaptation objectives, as stipulated in the country's NDC, as well as related global commitments on land degradation, such as the Great Green Wall for the Sahara and the Sahel Initiative (GGWSSI) or the AFR100 Initiative (under which the country committed to reaching land degradation neutrality by 2030 and restore 1.4 million hectares of degraded lands).

Water Supply and Sanitation

8. **Chad is endowed with abundant water resources that contribute to the country's economy but are affected by anthropogenic and climatic effects.** The availability and exploitability of groundwater resources vary widely across the country, making it difficult to mobilize water in the bedrock regions in Eastern and Northern Chad. Agriculture is the largest water user (80 percent) and total withdrawals are estimated to be below 5 percent of the renewable potential. However, as a result of climate change, the country is likely to experience a persistent decline in rainfall, associated with more frequent and more severe episodes of floods and droughts, further increasing the vulnerability of agriculture and livestock, which are the source of income for 80 percent of the population. Urbanization combined with a lack of adequate sanitation also leads to bacteriological contamination of shallow groundwater used by many wells and private boreholes.

9. **The increase in access to drinking water and sanitation is a priority highlighted in the national Sustainable Development Goals (SDGS) and "Vision 2030: The Chad We Want."** The funding needs are massive, both to expand water to drinking water and to develop sanitation, which remains quasi inexistent. The sector is engaged in a dynamic of reforms, some of which deserve to be strengthened or deepened to give full strategic and operational coherence to the efforts made. Ensuring the sustainability of water systems through management models adapted to local issues is particularly important to support the development of infrastructures and the quality of services provided to populations in small towns.

10. **Despite marked efforts in constructing water points and piped systems since 2003, Chad failed to achieve the Millennium Development Goal of 60 percent of the population with access to improved water sources.** Estimates of access to drinking water vary significantly between the 42.5 (2015) percent of the WHO-UNICEF Joint Monitoring Program (JMP), and the much higher estimates (61.8 percent in 2017), by the Ministry in charge of water. Both sets of figures follow different methodologies. A stable methodology based on reliable and comprehensive information on the status of the facilities is needed to reconcile the approaches and support decision making based on a robust access rate.

11. **It is estimated that 40 percent of villages, two thirds of semi-urban centers and 20 percent of urban centers lack public water facilities**. This indicates the gaps to be closed in terms of access, by levels of service associated with each context. Villages with less than 1,200 people (regrouping 48 percent of the total population of the country) rely on water points equipped with handpumps, for a total estimated at 15,000 nationwide. Per national standard, semi-urban centers (1,200 to 10,000 inhabitants, 26 percent of the population) must benefit from small piped systems (*adductions d'eau potable*, AEP). The 578 existing ones mostly provide water through public stand posts. The country also counts 65 piped systems in larger urban centers (26 percent of the population, of which almost half live in the capital, N'Djamena).

12. **The majority of Chadian households has no access to sanitation and the prevalence of open defecation is strong (68 percent in 2015 according to the JMP), particularly in rural areas (82 percent)**. The JMP estimated the access rate to improved sanitation at 9.5 percent in 2015 (32 percent in urban areas and less than 3 percent in rural areas). The disposal of septage, as well as wastewater (domestic and industrial) is carried out in the natural environment. There is no collective sanitation and public latrines are rare; most (87 percent) of the schools have no latrines. The situation of stormwater drainage in urban areas is just as worrying, particularly in N'Djamena. The drainage network, whenever it exists, is underdeveloped and poorly maintained, while floods are frequent.

13. **The lack of household access to improved sanitation, combined with the absence of adequate septage and wastewater disposal and inadequate drainage generates significant economic costs, particularly affecting the poorest strata of the population.** The Water and Sanitation Program thus estimated the economic losses associated with poor

sanitation (higher infant mortality, increased health costs and increased travel time to a safe site of defecation) at 2.1 percent of the GDP.

Biodiversity and Natural Resources Management

14. **Chad is divided into multiple biomes,** in the north, a desert zone (Saharan zone), a shrub steppe, semi-arid belt in the center and a more fertile extensive woodland savannah Sudanian zone in the south. Tropical deciduous forests (Guinean zone) exist in the extreme southern tip of the country. Lake Chad after which the country is named, is the largest wetland in Chad and the second-largest in Africa. These biomes are largely caused by differences in annual rainfall, which also govern land use by humans and the wildlife abundance. The variety of habitats existing in this spectrum of climatic conditions originally supported a richness and diversity of birds, large mammals, and other vertebrates that was comparable to the fauna of eastern and southern Africa.

15. **However, these unique ecosystems are at risk of serious and irreversible degradation**, stemming from poor management of water resources, the progressive depletion and declining fertility of agricultural soils, the intensification of agricultural production, and the encroachment of human settlements on natural forests, resulting in desertification, soil degradation, deforestation and decline in the quantity and quality of water resources. The degradation of the ecosystem is resulting in socioeconomic effects are becoming increasingly evident, as productivity and resource availability decreases.

16. **Concurrently, Chads wildlife populations, and specifically its elephant population, are declining.** The elephant population has decreased from an estimated 300,000 in the 1930s[3] was around 3885 individuals in 2006[4]. Chads remaining elephants are around Zakouma National Park ecosystem, and in the south, along the Central African Republic and Cameroon boundary. Elephant poaching to supply the illegal trade in ivory is the forefront of this decline in numbers and distribution. The poachers are organized and equipped and will kill most of the herd in one event. The ivory from Chad is thought to be trafficked via Sudan, Cameroon or Nigeria to its end destination. The population decline in elephants and other species is worsened by habitat destruction and fragmentation for agriculture, development, and the southwards extension of the desert due to desertification. This creates barriers and disrupts elephant's seasonal movements in search for water and food, which increases human –elephant conflicts. Wildlife population decline has been further exacerbated by the long-term instability and civil wars.

17. **The Government of Chad is committed to stop the poaching crisis and the wildlife trafficking and protect its natural resources.** Chad was one of the founding governments for the Elephant Protection Initiative, and has developed a robust draft of a National Elephant Conservation and Management Strategy (NECMS), which details the multi-faceted actions needed to secure these remaining elephant populations – including improving law enforcement and judiciary; strengthening land use planning and management to secure ecosystem connectivity and functionality, and reduce habitat degradation and restore vegetation coverage; and improve community engagement for wildlife management which needs to be coupled to poverty evaluation and improved livelihoods. These actions will ultimately contribute to sustainable productivity in landscapes, and climate change mitigation measures.

3 Antonínová M., Malachie D.N., Banymary D., 2014: National Elephant Conservation and Management Strategy for Chad (NECMSC) 2015 – 2019. DPNRFC & African Parks, Chad.
4 Blanc, J.J., Barnes, R.F.W., Craig, G. C., Dublin, H.T., Thouless, C.R., Douglas-Hamilton, I. and Hart, J.A. (2007).
African elephant status report 2007, an update from the African elephant Database IUCN/SSC African Elephant Specialise Group. IUCN.

Relationship to CPF

18. **The project's objectives are fully aligned with Chad Country Partnership Framework (CPF).** The three identified themes of engagement for FY16-20 are: (i) Strengthening management of public resources; (ii) improving returns to agriculture and building value chains; and (iii) building human capital and reducing vulnerability. The proposed project addresses the second and third themes of the CPF by supporting investments and development in sustainable and integrated agrosylvopastoral production systems, enhancing resilience livelihoods of local communities, strengthening social accountability mechanisms and improve access to drinkable water.

19. **The LDAP is perfectly in line with Chad's needs and vision** and is in line with the main lines of its National Development Plan, which are: (i) Strengthening good governance and the rule of law; (ii) Development of a diversified and competitive economy; and (iii) Improving the quality of life of Chadians.

20. **The project directly contributes to the World Bank's corporate goals of alleviating extreme poverty and building shared prosperity in a sustainable fashion:** It focuses on remote rural areas that suffers that display high poverty rates and high vulnerability to climate change. It aims to reduce strengthen the resilience of community livelihood while conserving biodiversity and reducing the impacts of climate change.

21. **Furthermore, the project directly contributes to the action areas "creating climate-resilient landscapes" and "promoting climate smart agriculture" in the World Bank's Africa Climate Business Plan.** The project also aligns with the World Bank Group's Climate Change Action Plan (2016).

PROPOSED PDO/RESULTS

Proposed Project Development Objective(s)

22. The project aims to support local inclusive development through, enhanced natural resources management, provision of basic water and sanitation services and increasing income generating opportunities.

23. More specifically, it aims to (i) strengthen the resilience of community livelihood around protected areas in the Chadian Sahelo-Saharan savannah, (ii) promote sustainable and integrated agro-sylvo-pastoral production systems, (iii) improve access to drinkable water and sanitation services and (iv) create generating income activities. Conserving biodiversity and reducing the impacts of climate change will guide these objectives. Main project beneficiaries will be vulnerable groups (including women and youth) in selected target areas in the Chadian Sahelo-Saharan savannah. The promotion of sustainable and integrated agrosylvopastoral production systems will be maximized by the focus on groups who are already or are likely to exploit resources in the protected area as a survival strategy due to their vulnerability.

Key Results (from PCN)

- Surface areas under land restoration practices (planting, watershed protection, Zaï);
- Surface area under sustainable climate-smart technologies and practices disseminated by the project;
- Beneficiaries reach with sustainable climate-smart agriculture services (disaggregated by gender);
- Number of people in selected areas provided with access to improved water sources under the project (disaggregated by gender);

- Improve some key categories related to the Local Development Index (LDI; number of index points improvement; exact categories to be defined during project preparation).
- Terrestrial protected area under improved management for conservation and sustainable use (ha);
- Population of key species (Dama, Oryx, Addax gazelles, Striped Hyena, North African Ostriches – in WRWA wildlife reserve and Elephants) stabilized or increased;
- Beneficiaries that feel project investments reflected their needs (percentage), of which percent of female and youth;
- Beneficiaries that feel that project investments have positively contributed to the community's social well-being and resilience to climate change;
- Citizens (disaggregated by gender) who are satisfied with the level of participation with which the investments where made (percentage);

PROJECT CONTEXT

Description

24. The development constraints that the proposed project aims to overcome are connected to pervasive poverty of targeted communities resulting in their absolute reliance on the exploitation of natural resources, leading to degradation of landscapes and ecosystems, further exacerbated by the increasingly insufficient capacity of these communities to withstand climate change impacts. Based on the priorities of the Government, the project design will address the following constraints and issues: (a) lack of sound practices in using natural resources sustainably, (b) limited livelihoods options of the most vulnerable communities, (c) vulnerability of communities to climatic shocks, (d) inadequate management of protected areas, (e) lack of basic services in general, of WSS in particular around the reserve, and (f) low human capital. It will also contribute to G5 Sahel plan to reduce the loss of natural capital, improve resilience and reduce poverty.

25. This project has the potential to become the first phase of a long-term landscape investment program that will require deepening and scaling up within the whole Sahelian-Saharan savannas landscape across the country and region. Chad Local Development and Adaptation to Climate Change project comprises four components:

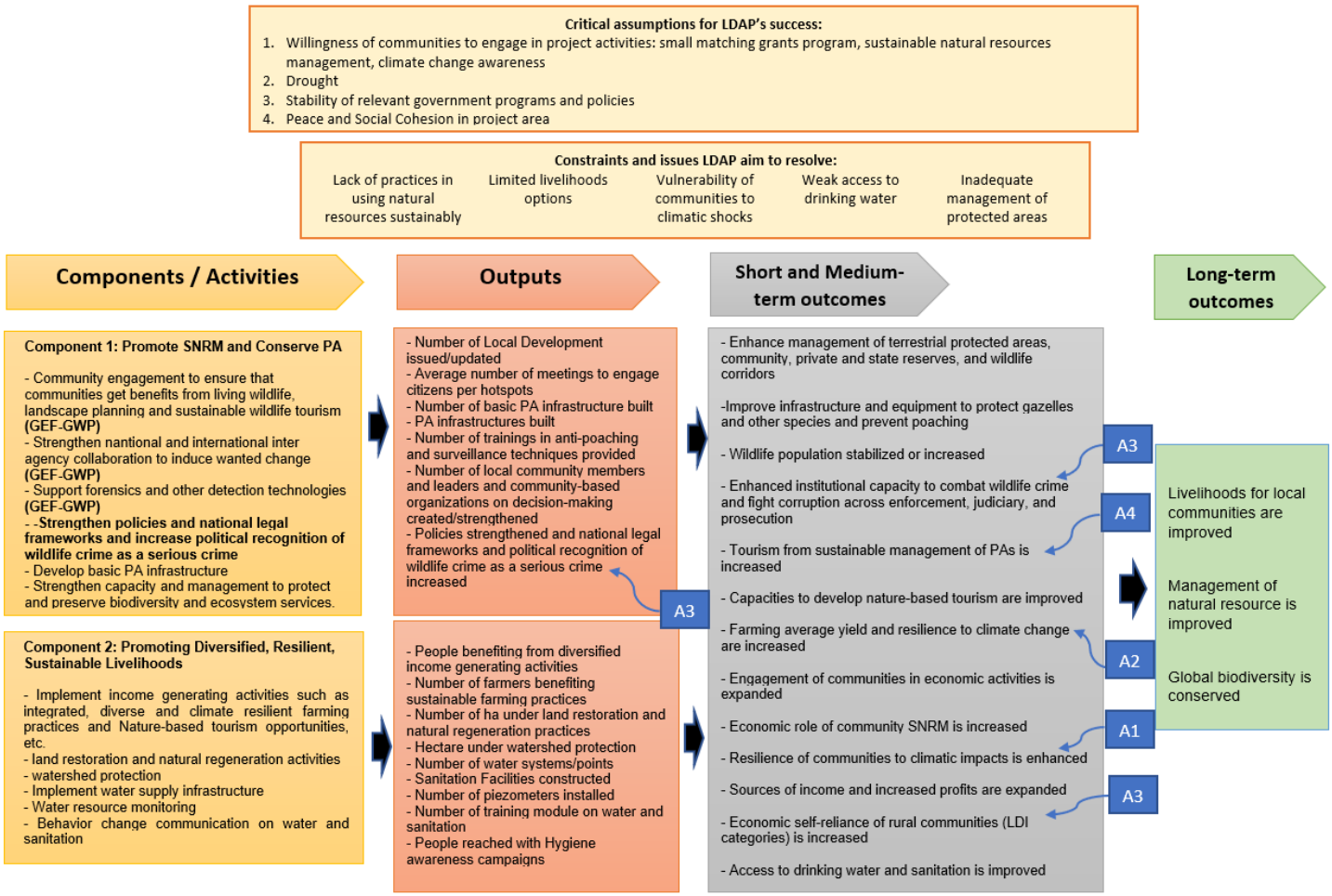
- Promote Sustainable Natural Resources Management and Conserve Protected Areas
- Promoting Diversified, Resilient, Sustainable Livelihoods
- Project Management, Coordination, and Monitoring
- Contingency Emergency Response Component (CERC, Standardized)

26. The project design is based on a community-led landscape approach, that is, an integrated approach to sustainably manage land, Wadis[5] and water resources for multiple purposes and functions. All the project activities, that is, livelihoods, community sustainable natural resources management groups, natural assisted regeneration (NAR), and resilience infrastructures are community driven and will be carried out on lands belonging to and owned by communities.

27. The activities in all project components are interconnected and mutually complementary and reinforcing. The project will, however, use a geograpically adapted approach which will adapt the set of activities to be implemented in a target zone according to the communes' geographic location (inside the reserve or outside) and the activities' potential for sustainability and development benefit maximization in the selected communes.The livelihoods activities are designed to increase the sustainability of rural livelihoods. They are integral to the efforts to facilitate community sustainable

5 Arabic name for water course, including its whole ecosystem – flora and fauna

natural resources management practices through the creation of community-managed landscapes, alleviate the pressure on PAs and Wadis, and strengthen PAs. Please refer below to the Theory of Change.



28. The protection of biodiversity, restoration of ecosystems degradation and sustainable use of existing natural resources in the project's intervention areas will be carried out through key stakeholders that include among others:

Players	Roles/responsibilities
State (line ministries and their provincial and departmental representation)	➢ Mentoring, information, awareness, training of communities (CBOs) and commune council members; ➢ Monitoring, evaluation, control of compliance to the applicable law (law enforcement regarding natural resources management); ➢ Technical advice and updates; ➢ Support investment financing (National budget and donors).
Decentralized communities (communes, cantons)	➢ Promote partnership with CBOs, Private sector, provincial and departmental actors; ➢ Promote good communication; ➢ Support local planning and resources mobilization.

Private sector, NGOs, and others	➢ Play the role of interface between CBOs and all other actors; ➢ Promote behavior change for good practice to communities; ➢ Contract with communes to deliver service to CBOs of local communities; ➢ Help implement commune-department-province action plan.
Communities/Users/clients through CBOs[6] or social structures	➢ Ensure effective and equitable representation of all users in decision making; ➢ Promote mass mobilization when required; ➢ Actively participate in activities implementation; ➢ Adoption of principles and behaviors (have a code of conduct) ➢ Adapt and enact consensual rules for all users.

Description of the Project Area[7]

29. **The Sahelian-Saharan savannas landscape encompasses 6 provinces of Chad:** Kanem, Batha, Wadi fira, Borkou, Ennedi West and Barh El Gazal which cover 636 173 km2.8 The Sahelo-Saharan savannas are composed of arid and semi-arid grasslands interspersed with large wooded wadis. These areas are of primary global importance as they provide natural habitat for many endangered animal species such as the Oryx, Dama and Dorcas gazelles. It is also a refuge for a whole series of key species for the Sahelo-Saharan zone, such as the great bustards, vultures and a very diverse range of birds and small and medium-sized carnivores. It is the last bulwark against the progression of the desert towards South.

Poverty and local development

30. Poverty in Chad is overwhelmingly a rural, agricultural and informal phenomenon. In 2011, 52 percent of rural households were estimated to be poor, versus just 21 percent of urban households. Human development indicators for women are much lower than those for men9. In general, the regions that form part of the Sahelian belt are among the richer regions in Chad, but significant regional and communal differences exist. Kanem and Borkou rank significantly lower than national average in terms of Human Capital Index points, but also in child mortality, school education, low access to water[10] and access to health. Poverty is the main reason for resource users in the Sahelian-Saharan savannas landscape to embark on short-term coping strategies rather than long-term investment in land and resources. In addition, rapid population growth is forcing land and ecosystem users to continuously increase pressure on local resources at the expense of the regenerative capacities of vegetation and land resources. Because of poverty, many resource users do not have the means to investing in enhancing their natural resource base and increasing their income in a sustainable manner. A recent computed local development index (LDI) – based on two main dimensions: administrative development and availability of delivery of services – indicates which regions and communes in Chad are deprived in both the administrative and services components of development. As a result, the communes that are among those ranking the lowest should be prioritized for development assistance. Across the regions, the most vulnerable communes in the Sahelian-Saharan savannas landscape are (i) Mandjoura (in Barh El Gazal), (ii) Mondo (in Kanem), and (iii) Am-Zoer, Tine and Iriba (in Wadi Fira).

6 CBOs: Community Base Organizations
7 See map in Annex 2
8 www.populationdata.net/pays/tchad/
9 e.g. The adult literacy rate was 22 percent, and the literacy rate for men was twice that of women.
10 See figure 6 of World Bank Chad Water Supply and Sanitation Sector Note

Water access and quality

31. Chad is facing important challenges in access to sanitation and potable water, particularly in rural areas (78% of population living in rural areas). According to the joint monitoring program (JMP-2019), the basic access to drinking water service is 38.7 in 2017 while the limited access is 55.7%. According to national data (MEEP-2018), the access to drinking water (basic and limited) is estimated to 61.8%. For sanitation, this access is even lower with high rate of open defecation. Access to basic sanitation service is estimated 15% while the open defecation is 67% in 2017 (JMP-2019). These data hide the urban-rural disparity. In urban area access to basic sanitation is 30.1% while in rural area this access is 1.9% in 2017.

In the Sahelian-Saharan savannas landscape, the following table provide access to drinking water.

Provinces	Access reference	Access numbers
BARH EL GAZEL	National	69%
BATHA	National	66%
BORKOU	National	19%
KANEM	National	80%
WADI FIRA	National	13%
ENNEDI WEST	National	8%

Table 1. Access to drinking water, source: MEEP (Ministerial Order No 22)

32. These data show that the provinces of Ennedi West, Wadi Fira and Borkou are lagging behind. The water quality is not monitored in all provinces and the interaction of the communities during the field visit shows that the water is not treated at home with chlorine and is not boiled neither. The water infrastructures are merely managed, and the national strategy is very poor to handle sustainability of service provision impacting the level of access to drinking water. It is now important to assess the needs of large villages/small towns with 10 000 inhabitants or more to allow the rehabilitation/realization of small piped water supply systems to increase the level of access considering the issue of water quality and sustainable management of the systems.

33. For other use, this area is endowed with surface water (during rainy season) and underground water (Western part of the project area). Water resources monitoring is not a systematic behavior within the Directorate of Water Resources. This results in a poor knowledge of water resources – mainly ground water – to ensure the necessary arbitrage for water uses. Good knowledge of the water resources will help decision making on the type of water use (agriculture, livestock, reforestation, etc.) in the project activities which aim to promote resilience and the preservation and consolidation of the ecosystem.

Wadi Rime Wadi Achim Wildlife Reserve (WRWA)

34. Until the late 1970s, the scimitar-horned oryx and other desert animals such as the Dama gazelle, ostrich and Addax antelope, thrived in Chad's Wadi Rimé-Wadi Achim Game Reserve, one of the world's largest protected areas. However, in the early 1980s there was a period of extended civil unrest, leading to a devastating decline of many species, particularly the oryx and the addax from overhunting. By the late 1990s, the species was believed to have gone extinct in the wild after the last remaining individuals in Chad and neighbouring Niger died out. Since then, the species has only

existed in captivity, with over 220 zoological institutions contributing to a global captive breeding program, and other collections being held in UAE and other Gulf states.

35. Between 2009 and 2013, the Zoological Society of London (ZSL) worked closely with Sahara Conservation Fund (SCF) and government partners on the Pan Sahara Wildlife Survey to collect updated information on the status of wildlife and land use in several regions where oryx were once found. The Wadi Rimé-Wadi Achim Game Reserve in central Chad emerged as the place with the highest potential for a successful reintroduction after surveys revealed that the Reserve, which supports large numbers of nomadic pastoralists and their livestock, still holds the world's largest remaining Dorcas gazelle population as well as healthy populations of bustards and most notably, a small population of the critically endangered Dama gazelle.

Selection criteria

36. Project intervention area will focus on hotspots identified during project preparation based on sectoral studies that allow synergy of actions. There will be at least one hotspot per province (at least 6 hotspots). Hotspots will be identified based on a nexus of (i) high density of population, (ii) high level of degradation of land and pressure on natural resources, (iii) low access to water and sanitation services, (iv) poor resilience of agricultural production to climate change, and (v) high unemployment rate (with specific focus on women and youth).

Project's Components

Component 1. Promote Sustainable Natural Resources Management and Conserve Protected Areas – USD 13 million (of which 2,814,353 $ from GEF)

Subcomponent 1.1. Improved Management of Protected Areas (PAs) (GEF+IDA[11]) – USD 8 million

37. The objective of this sub-component is to conserve biodiversity and improve the capacity of key conservation institutions. Main activities include developing basic infrastructure and strengthening capacity and management to protect and preserve biodiversity and ecosystem services. It will be divided in 3 building investments:

(i) **Protect wildlife and natural habitat by investing in:** (a) priority park infrastructure such as staff offices and housing nearer to the park, outposts, and rehabilitation and maintenance of roads, support to the process of reserve's management plan's development including delimitation of external limits of the reserve and sensitive zones[12] inside the reserve ; (b) equipment including vehicles, a small plane for surveillance, GPS, radio equipment, and disruptive technology for monitoring animal populations; and (c) training in anti-poaching and surveillance techniques, use of disruptive technology, bush fire management, and community extension.

(i) **Combat Wildlife Crime by:** (a) Revising the existing environmental legal corpus and recommend implementing legislation to obtain substantial minimum sentences against illegal hunting and the possession or trade of elephant products and from other species; (b) Strengthening and operationalizing the Directorate of business litigation of the Ministry in charge of the environment for better coordination with courts; (c) Providing to all members of the national judicial system information to raise awareness about the protection of the fauna and

[11] GEF funding: USD 2,119,085 and IDA funding: USD 10,183,647

12 High ecological value areas like wadis, Dama gazelles' habitats and reintroduction areas for Oryx gazelles

flora; (d) Promoting regular dialogue with Country neighboring organizations that combat illicit trafficking and trade issues to harmonize their position in relation to the debates on the shops and sales of products of wild faunas as well as the policies and legislation around wildlife trade and crime. This will include drawing on tools developed by the International Consortium to Combat Wildlife Crime (ICCWC)[13] and rely on cooperation with ICCWC partners. To this end, the project will also cooperate closely with a UE-led complementary initiatives that will work in WRWA but also two other protected areas (Zakouma and Ennedi natural and cultural reserve), while also addressing national wildlife crime priorities; (e) Working with the international CITES community, on a continued moratorium of ivory trade; f) collaborate with NGO initiatives such as EAGLE to combat illegal ivory trade; (f) Conducting an outreach program on crimes and laws in key provinces; and (g) Conducting an environmental education program in schools for the protection and conservation of wildlife and flora in general; (h) Reviewing Human-Elephant-Conflicts (HEC) efforts, actions and effectiveness in Chad, and investigate more sustainable approaches such as environmental risk insurance schemes, locally based community reserves compensation schemes

Subcomponent 1.2. Community-based Natural Resources Management (GEF+IDA[14]) – USD 5 million

38. This subcomponent will support the establishment of the enabling conditions for the sustainable management of natural resources by local communities though the following three types of interventions in the project target areas:

(i) Support for the clarification of land tenure and the adoption of sustainable land management practices. The approach adopted will be defined during preparation. One possibility that is being explored would consist of supporting the establishment local land management committees, the participatory preparation of rural land plans and the establishment of land information systems. This approach was piloted with the support of the French Development Agency under the Bahr Linia Hydro-agricultural Development Project.

(ii) Development/ updating and implementation of local development plans. This types of interventions will deal with technical advisory services, equipment to conduct community land zoning, land tenure, natural resource mappings, carrying out of training and capacity building of local community members and leaders and community-based organizations on decision-making, accountability, transparency, local governance, business planning and management, use and management of funds, partnerships with the private sector, use of information technology and scoping and feasibility studies on nature-based tourism and other wildlife-based economies that generate additional livelihoods.

(iii) Citizen engagement (CE)/ Support to Participatory Adaptation, with the two main objectives to (i) strengthen trust and dialogue between the state and citizens and among and between communities, and (ii) to promote socially inclusive and sustainable participatory adaptation practices. A particular focus will be given to communities which are marked by a chronic lack of basic social services, insufficient economic opportunities and high poverty rates. This will include (a) the strengthening of communication and planning processes between communities and the state, (b) the promotion of civic engagement, cohesion and social inclusion of local communities, women and youth (activities may include trainings for groups and the provision of equipment to support the operations of community groups), and (c) the setting up of grievance redress

13 **ICCWC toolkit:** The Toolkit provides countries with a technical resource to undertake a national assessment of the main issues relating to wildlife and forest offences and to analyze preventive and criminal justice responses at the national level. The Toolkit is designed to assist government officials in forestry and wildlife administration, Customs and other relevant enforcement agencies in conducting a comprehensive analysis of possible means and measures to protect wildlife and forest and monitor products thereof, and thus identify technical assistance needs. https://cites.org/eng/prog/iccwc.php/Tools

14 GEF funding: USD 695,268 and IDA funding: USD 4,304,732

mechanisms to mitigate local tensions with a focus on tensions arising from environmental degradation and climate change impact. The project will also explore the setting up of community level committees to monitor and respond to DRM and climate change risks, and to reduce conflicts around natural resource management. Activities will be defined during project preparation and will draw on lessons learned from a study on CE Mechanisms in Chad that is planned in the context of the project's PPA. The CE activities will be implemented in cooperation and in synergy with other projects that either work in the same area (Regional Sahel Pastoralism Support Project, or that have similar activities, but work in different zones in Chad (e.g., Lake Chad Region Recovery and Development Project).

Component 2. Promoting Diversified, Resilient, Sustainable Livelihoods (GEF + IDA) – USD 36.45 million (of which 1,000,000 $ from GEF)

Subcomponent 2.1 Income Opportunities and Resilient Livelihoods (GEF+IDA)[15] – USD 14.45 million

39. Activities under this subcomponent will be implemented through:

1. Provision of matching grants to demand-driven subprojects. It will provide matching grants to producer organizations (including women's and youth groups) to carry out activities to improve climate-smart agricultural and animal production and marketing throughout the value chain around the wildlife reserve.

   Activities may include support for productive investment through: (i) agroforestry through the use of improved and high-yielding varieties and breeds for key products targeted, adapted to local conditions and resistant to climate variability/change and other stresses;, (ii) restoration of vegetation soils resilient to climate change (supply of wood energy bonuses) such as sustainable soil and water management practices, including increasing soil organic matter, preventing soil erosion, using agricultural rotations and associations, improving fallows, integrated pest and weed management; (iii) apiculture for Human-Wildlife Conflict resolution and income diversification and fish farming to diversify income and (iv) nature-based tourism and wildlife economy.

   The above activities may be implemented through: (a) the introduction, dissemination and development of new climate-smart agricultural production techniques; (b) the production of improved seeds and seedlings for targeted crops and facilitation of access to inputs and mechanization; (c) improved animal breeding to contribute and reduce grazing pressure in the reserve; (d) the creation of input distribution networks.

   The small grants will fund priority adaptation subprojects identified through the process of participatory community natural resource management and climate-resilient planning. Grants will be available at the ward, community/group, and individual innovators (champion) levels and will be disbursed directly to the beneficiaries. Proposals will have to demonstrate clear benefits for increasing value and introducing sustainable management of natural resources within the ecosystem, reducing degradation, strengthening resilience, and achieving adaptation co-benefits. The subprojects will be largely demand driven but will benefit from external expertise. There will be a special grant window reserved for women to ensure that they have guaranteed access to funding opportunities. At the community/group level, the interventions will specifically target at least 50 percent women-headed households, as well as households classified as very or extremely vulnerable.

2. Development of community activities in particular in the field of (i) watershed protection (recovery of degraded soils, stabilization of dunes, etc.), (ii) assisted natural regeneration activities, (iii) creation of integrated community

[15] GEF funding: USD 1,000,000 and IDA funding: USD 35,450,000

spaces (a fenced area including agroforestry, market gardening, storage warehouse and water point) around each target locality or village.

40. The project will use the same implementation modalities as those adopted by the Climate Resilient Agricultural and Productivity Enhancement Project (ProPAD) Project and the Support for the Resilience of the Agricultural System in Chad (PARSAT) Project with the involvement of strategic partners and specialized service providers for the implementation of project activities. In addition, partnership with Private Sector will also be investigated (particularly with Arabic Gum production and potential to sequester Carbon). Eligibility to Carbon funds will also be investigated during project preparation (under sub-component 1.2).

Subcomponent 2.2. Rural Water Supply, Sanitation, and Hygiene (IDA) – USD 15 million

41. This sub-component will help increase access to safe and reliable WSS services and promote hygienic practices in selected semi-urban and rural zones that require expansion and improvement of services in communities to achieve universal access. Optimization by using multi-villages water supply systems will be prospected. These activities will be complemented with measures to protect water sources, improve water quality, and increase sustainable water use and systems management, thereby increasing resilience to climate exacerbated droughts and floods in the targeted areas. This sub-component is structured into two main interventions: (i) increasing semi-urban and rural access to WSS services; and (ii) enhancing service delivery management capacity.

42. For water supply infrastructure to be built/rehabilitated the project will build on one hand on the experience of water projects financed by EU, AFD, GIZ and Grand Muraille verte to ensure the sustainability of the service provision. On the other hand, it will prospect how to adapt the West Africa experience of managing water supply systems to context of Chad in order to ensure service expansion and sustainable management of the assets. Water supply infrastructure realization/rehabilitation will also be complemented by realization of piezometer borehole to monitore the underground water variations to inform decision making on the level of the daily water volume to be pumped. The use of solar energy option will be highly explored to reduce the maintenance cost and then increase the sustainability of rural water service.

43. Regarding hygiene and sanitation, the project will mainly focus on awareness and behavior change communication. However, it will also look at the opportunities to build sanitation infrastructure in public services (health centers, schools, etc. Community led total sanitation (CLTS) can be used where applicable to raise awareness and trigger behavior change for hygiene and sanitation. Mass communication can also be used to consolidate the awareness and and the behavior change.

44. This sub-component is structured into two main interventions: (i) increasing semi-urban and rural access to WSS services; and (ii) enhancing service delivery management capacity.

Sub-component 2.3 Climate Resilient Water resources monitoring and service delivery (IDA) – USD 7 million

45. This sub-component will contribute to strengthening the management of water resources for service delivery and to increasing access to WASH services in selected flood- and drought-prone areas. The project area which is mainly the sahelien-saharian band[16] has fragile environment and sensitive to shocks linked to climate variability. To deliver water supply services (drinking, other uses), it is important to bear in mind the issue of managing adequately the water resources.

16 The area between the desertic Sahara (North) and Savana (South)

46. This sub-component will contribute to strengthening the management of water resources for service delivery and to increasing access to WASH services in selected flood- and drought-prone areas. This sub-component is structured into three main interventions: (i) water resource knowledge through hydrographic and hydrogeologic mapping and watershed delimitation, (ii) water resource monitoring and planning; (iii) climate-adaptive service delivery.

Component 3: Project Management, Coordination, and Monitoring (GEF + IDA[17]) – USD 5 million (of which USD 635,817 from GEF)

47. The component would finance the operational costs of Project Implementation Unit. This will carry out all fiduciary aspects of project implementation including financial management, procurement, environmental and social safeguards, M&E, sector coordination of investment targeting and policy harmonization, and donor coordination structures. This will also contribute to build Capacity and Coordination by investing in: (a) support to capacity building workshops for key stakeholders to enhance coordination and cooperation.

Component 4: Contingency Emergency Response Component (CERC, Standardized SDR 0.0 million, US$0.0 million equivalent)

48. The project will operate in a highly complex and volatile environment. This zero-funded component will allow the governments to quickly mobilize funds in the event of an emergency that will require immediate recovery and reconstruction response. In the event of a crisis or disaster caused by a natural hazard, this component enables the Governments to quickly reallocate project funds to disaster response and recovery purposes under streamlined procedures. It will therefore support Chad's emergency preparedness and response capacity to the impact of natural hazards, including financing of post-disaster critical emergency goods or emergency recovery and associated services, as well as targeted provision of post-disaster support to affected households and individuals. Following an adverse natural event, the Government's declaration of disaster in accordance with national law, and subject to the Bank's activation policy, the contingent component would be triggered. The CERC can be triggered individually by country.

Overall Risk and Explanation

Overall Risk Rating

49. Overall, the level of risk is high for two (2) main reasons: (i) the volatile political and security situation in almost all neighboring countries and (ii) high pressure on natural resources (from both climate change and human migrations).

Political and governance - HIGH

50. The political and security context in the sub-region influences the orientations of the government, particularly in the choice of interventions and resource allocations. Thus, the project could suffer from shortcomings of the public structures that intervene in the areas of interventions targeted by the project for lack of means. There is also the risk of interference by elites during the targeting of the area of intervention and beneficiaries, given the size of the area and the

[17] GEF funding: USD 212,000 for PMC and USD 423,817 for Capacity building and Coordination, and IDA funding: USD 4,364,353.

number of provinces involved. To overcome these potential obstacles, the entire process must be clearly defined from the outset and assigned to a neutral technical committee to produce unbiased and objective work.

Macroeconomic - HIGH

51. The political and security situation in the sub-region further weakens the country's economic situation. Chad is trying to get out of the crisis caused by the drop in the oil price but unfortunately, the instability in the Lake Chad Region with the Boko Haram, the civil wars in Libya and CAR and the ongoing crisis in Sudan make the situation unpredictable and confirm the high-risk rating.

Sector Strategies and Policies - HIGH:

52. The multitude of sectoral strategies and policies and the lack of coherence between them can negatively impact the implementation of the project. Despite the creation of the National Agency for Rural Development which mission is to coordinate sectoral ministries including their common strategies hardly start for lack of means.

Technical Design project- HIGH

53. Although the stakeholders (client, Bank and GEF) are experienced in the design of projects, the risk remains high for the case of this project, because it requires specific experience which vary from previous projects. Therefore, for the design phase and even for the implementation, the call for specialists in the field outside the state structure is necessary.

Institutional capacity for implementation and sustainability - SUBSTANTIAL

54. The risk is substantial during implementation, especially when processing the procurement of goods and services because the complexity of procurement system. There is also uncertainty regarding the appropriation and accompaniment of the client during the implementation due to a lack of human, material and financial means. Therefore, it is important to accompany the client from the outset in strengthening their capacities and the transfer of skills.

Fiduciary - SUBSTANTIAL:

55. The overall fiduciary environment is characterized by a significant weakness in the integrity of the financial management and procurement system. A detailed plan of action to reduce this risk will be prepared and a fiduciary team will be recruited and trained to support the project during the preparation and implementation phases.

Environment and Social - MODERATE:

56. The project activities themselves are designed to strengthen the environmental and social sector. These activities are expected to have very limited environmental and social impacts. However, it is important to take all the necessary precautions to put certain provisions in place to mitigate any type of impact might occurred. Careful consideration of the environmental and social risks related to the implementation of project activities will therefore inform the preparation of safeguard instruments and mitigation measures as necessary.

57. In addition, a GBV risk assessment will be undertaken as part of a planned gender assessment in the target zone in order to provide recommendations for how to mainstream mitigation measures appropriate for the country context and project activities.

Stakeholders - MODERATE

58. To avoid any obstacle, the involvement of all the stakeholders is essential at the beginning of the assembly of the project. For this purpose, the technical committee in charge of project preparation will identify and involve all stakeholders.

Risk Category	Rating
1. Political and Governance	High
2. Macroeconomic	High
3. Sector Strategies and Policies	High
4. Technical Design of Project or Program	High
5. Institutional Capacity for Implementation and Sustainability	Substantial
6. Fiduciary	Moderate
7. Environment and Social	Moderate
8. Stakeholders	Moderate
9. Other	Substantial
OVERALL	High

Economic Analysis

59. Due to the environmental nature of the project, the analysis would focus on readily quantifiable benefit streams. Benefits from improved water management include increased soil moisture and reduced variability in terms of flood/drought conditions. Soil retention provides benefits both on site in terms of soil quality and off site in terms of reduced erosion and can be measured in terms of land savings or erosion prevention. Carbon sequestration in soil can be estimated from measures provided through the use of appropriate geo-spatial tools. Increased vegetation cover also helps to prevent erosion and improves downstream water quality and would be measured as NDVI.

60. Farmer incomes and livelihoods represent a major category of direct benefits which would be the result of the improved soil and water management at the landscape level combined with the introduction of resilient climate-smart crop and livestock production practices. As such, benefits to rural households would be measured through yield increase and stability in agricultural areas within the intervention landscapes.

61. Additional benefits expected to be included in the analysis include increased access to water supply and to sanitation – and hygiene; water quality and water quantity originating in the target watersheds, conservation of biodiversity and other environmental services. These categories contribute to the overall assessment of positive economic benefits, though some of them may be more difficult to quantify.

62. Many social benefits which are non-quantifiable benefits are also expected through this project, as for example in terms of (i) empowerment and strengthening of communities, especially women and vulnerable households, (ii) citizen engagement and community participation in planning processes, and (iii) local risk mitigation of conflicts through a grievance redress mechanism.

63. *GEF incremental reasoning*: Under the business as usual scenario, the government will continue to improve Chad's ability to prevent, combat and investigate wildlife trafficking in silos i.e. when government departments do not share information, goals, tools, priorities and processes with other departments. This project will build on the collective efforts of the different government institutions and counterpart civil society organizations and supplement the considerable level of baseline domestic resources and philanthropic and business investments already committed, to combat illegal wildlife crime. The project will specifically assist the Government of the Republic of Chad in addressing key resource and capacity constraints to the effective implementation of three secondary objectives: The protection of biodiversity, restoration of ecosystems degradation and sustainable use of existing natural resources. Furthermore, for the GEF, ONUDI project (USD 7.2 million), Environmental Agency of Abu Dhabi (USD 8million), European Union ECOFAC-6 (USD 3 million) and Sahara Conservation Fund (USD 0.6 million) will leverage complementary associated financing for additional activities within the components.

Rationale for public sector provisioning/financing, if applicable

64. The public sector plays a vital role in a number of aspects to support the smallholder sector, through the provision of public goods, such as better environmental conditions, legal mapping of land parcels and issuance of legal land tenure certificates to smallholders, reduced and better managed climate and disaster risks, provision of improved biophysical information to manage natural resources, infrastructure including main irrigation structures and canals, feeder roads, and correcting market failures, for instance in the generation and dissemination of new technologies. Taken together, these interventions restore watershed function that benefits a wide range of on-site and off-site stakeholders and private economic activity. Carbon storage in particular contributes to global climate stability.

Value added of the Bank's support

65. The World Bank would add value in two main ways: First, the Bank would convene global experience, financing, sectors, and financiers to support the client to build critical mass at scale that would transform rural production landscapes. Second, the Bank provides operational supervision and technical assistance to the client to implement the operation.

66. Enhanced implementation support would focus on fiduciary aspects including social and environmental risks, results monitoring, capacity development of the client, strategic communications, knowledge development, and impact evaluation. Third, through the support of IDA additional resources can be leveraged from development partners.

Brief description of methodology/scope and next steps

67. The project will explore (i) synergies with other partners and seek to scale-up successful initiatives so as to be part of an integrated investment approach and (ii) eligibility to climate funding and other innovative financing.

68. The next phase will be a mission aimed at acquiring further insight into project interventions and goals in terms of indicators. This will be used to perform an economic and financial analysis in order to estimate project costs and benefits.

Implementing Agency Assessment

69. The Ministry of the Environment, Water and Fisheries will be the technical lead for the project. The Ministry is the institution responsible for the quality of the environment, access to water and sanitation, and for the design and implementation of strategies, policies and programs that ensure the sustainable use of natural resources, the protection of the environment and basic access to water and sanitation as well as caracterisation and monitoring of water resources. It includes technical directorates and specialized agencies to combat desertification, conserve biodiversity, enforcing environmental regulations, preventing pollution and nuisances, the fight against wildlife poaching. The ministry works with specialized agencies such as the Agency of the great green wall (ANGV), the Agency for domestic energy and the environment (AEDE), the special Environment Fund (FSE), the national the national technical Committee for monitoring and control of environmental aspects (CTNSC), the General Technical Direction, the Direction of AEP, the Direction of Monitoring of Water Infrastructures, and the Direction of Sanitation.

70. Project activities will be implemented by specialized agencies (to be confirmed during project preparation). To maximize development benefits through synergies, the activities will be prepared and implemented in partnership with European Union, CARE, GIZ, OXFAM, AFD and others who already have social and environmental/climate change adaptation activities in the project area.

Legal Operational Policies	Triggered?
Projects on International Waterways OP 7.50	No
Projects in Disputed Areas OP 7.60	No

Summary of Screening of Environmental and Social Risks and Impacts

The environmental and social risk rating is Moderate. Impacts associated with the implementation of activities financed by this project are expected to be site specific, primarily associated with the construction/rehabilitation of small infrastructure in the protected areas, water access and sanitation infrastructure as well as income generating activities such as agrosylvopastoral activities.

CONTACT POINT

World Bank

Aurelie Marie Simone Monique Rossignol, Taibou Adamou Maiga
Environmental Specialist

Borrower/Client/Recipient

Republic of Chad

Implementing Agencies

Ministry of Envrionment, Water and Fisheries
Abdoulwahab Andi Bechir Andi Bechir Andi
GEF Focal point and Head of Project Preparation Committee
andifils2@gmail.com

FOR MORE INFORMATION CONTACT

The World Bank
1818 H Street, NW
Washington, D.C. 20433
Telephone: (202) 473-1000
Web: http://www.worldbank.org/projects

APPROVAL

Task Team Leader(s):	Aurelie Marie Simone Monique Rossignol, Taibou Adamou Maiga

Approved By

Environmental and Social Standards Advisor:		
Practice Manager/Manager:		
Country Director:		