



# GEF-6 PROJECT IDENTIFICATION FORM (PIF)

PROJECT TYPE: Full-sized Project  
 TYPE OF TRUST FUND: GEF Trust Fund

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## PART I: PROJECT INFORMATION

Project Title:	Restoring ecological corridors in Western Chad for multiple land and forests benefits - RECONNECT		
Country(ies):	Chad	GEF Project ID: <sup>1</sup>	
GEF Agency(ies):	IUCN (select) (select)	GEF Agency Project ID:	
Other Executing Partner(s):	Ministry of the Environment, Republic of Chad	Submission Date:	2016-02-25
GEF Focal Area(s):	Multi-focal Areas	Project Duration (Months)	36
Integrated Approach Pilot	IAP-Cities <input type="checkbox"/> IAP-Commodities <input type="checkbox"/> IAP-Food Security <input type="checkbox"/>	Corporate Program: SGP <input type="checkbox"/>	
Name of parent program:	[if applicable]	Agency Fee (\$)	483,028

## A. INDICATIVE FOCAL AREA STRATEGY FRAMEWORK AND OTHER PROGRAM STRATEGIES<sup>2</sup>

Objectives/Programs (Focal Areas, Integrated Approach Pilot, Corporate Programs)	Trust Fund	(in \$)	
		GEF Project Financing	Co-financing
(select) CCM-2 Program 4 (select)	GEFTF	2,683,486	8,000,000
LD-3 Program 4 (select) (select)	GEFTF	894,495	3,000,000
(select) (select) SFM-3	GEFTF	1,788,991	8,000,000
(select) (select) (select)	(select)		
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(select) (select) (select)	(select)		
(select) (select) (select)	(select)		
(select) (select) (select)	(select)		
(select) (select) (select)	(select)		
<b>Total Project Cost</b>		<b>5,366,972</b>	<b>19,000,000</b>

## B. INDICATIVE PROJECT DESCRIPTION SUMMARY

Project Objective: To improve the sustainable management of natural resources, and forest resources in particular, in order to reduce CO2 emissions and maintain ecosystem services						
Project Components	Financing Type <sup>3</sup>	Project Outcomes	Project Outputs	Trust Fund	(in \$)	
					GEF Project Financing	Co-financing
1. Local governance and capacity building.	TA	1.1 Improvement of the various stakeholders' commitment to the joint, community, sustainable management of natural resources.	1.1.1. The 10 existing orientation and decision-making authorities (ILOD) in the project area benefit from capacity building in the governance of natural resources with a view to restoring ecological connectivity in the area.	GEFTF	520,000	2,400,000

<sup>1</sup> Project ID number will be assigned by GEFSEC and to be entered by Agency in subsequent document submissions.

<sup>2</sup> When completing Table A, refer to the excerpts on [GEF 6 Results Frameworks for GETF, LDCF and SCCF](#).

<sup>3</sup> Financing type can be either investment or technical assistance.

			<p>1.1.2. Technical training of 20 community groups (particularly in techniques for the restoration of ecological connections).</p> <p>1.1.3. Connection of 10 Local Development Plans (PDL) and Charters for the management of forest resources after updating.</p>			
2. Maintenance of the ecological functionalities of forest massifs.	Inv	<p>2.1 Sustainably managed forest corridors and gallery forests.</p> <p>2.2 Increase in the CO2 sequestration capacity through the management of 70,000 hectares of forest areas (1,300,000 t CO2 equivalent).</p>	<p>2.1.1 Identification of forest corridors linking the main forest massifs in the area.</p> <p>2.2.1 Investment plans with the experimental regulation of forest corridors developed and implemented.</p>	GEFTF	1,800,000	10,000,000
3. Integrated management and increase in productivity of natural resources	Inv	<p>3.1. Sustainable use of natural resources and the fulfilment of communities' needs.</p> <p>3.2. Increase in the productivity of degraded soils.</p>	<p>3.1.1. Development and implementation of techniques for the sustainable use of natural resources.</p> <p>3.2.1. Promotion of agroforestry and techniques for the restoration of degraded land.</p>	GEFTF	2,391,402	5,000,000

4. Monitoring, evaluation, knowledge management and sharing.	TA	4.1. Project implementation based on RBM and lessons learned/best practices documented and disseminated.	4.1.1. A set of 5 manuals or guidelines, for use by forestry managers and technicians, which capture and describe the improved practices, measures and technologies.  4.1.2. Project Monitoring & Evaluation Plan and system, in place  4.1.3. Mid-term and Final Project Evaluations  4.1.4. A communication strategy is developed and implemented	GEFTF	400,000	1,000,000	
	(select)			(select)			
	(select)			(select)			
	(select)			(select)			
	(select)			(select)			
	(select)			(select)			
Subtotal						5,111,402	18,400,000
Project Management Cost (PMC) <sup>4</sup>				GEFTF	255,570	600,000	
<b>Total Project Cost</b>					<b>5,366,972</b>	<b>19,000,000</b>	

For multi-trust fund projects, provide the total amount of PMC in Table B, and indicate the split of PMC among the different trust funds here: ( )

**C. INDICATIVE SOURCES OF CO-FINANCING FOR THE PROJECT BY NAME AND BY TYPE, IF AVAILABLE**

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Amount (\$)
Donor Agency	BMZ/GIZ (Germany)	Grants	18,000,000
Donor Agency	JICA (Japan)	Grants	1,000,000
(select)		(select)	
<b>Total Co-financing</b>			<b>19,000,000</b>

<sup>4</sup> For GEF Project Financing up to \$2 million, PMC could be up to 10% of the subtotal; above \$2 million, PMC could be up to 5% of the subtotal. PMC should be charged proportionately to focal areas based on focal area project financing amount in Table D below.

**D. INDICATIVE TRUST FUND RESOURCES REQUESTED BY AGENCY(IES), COUNTRY(IES) AND THE PROGRAMMING OF FUNDS <sup>a)</sup>**

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	(in \$)		
					GEF Project Financing (a)	Agency Fee (b) <sup>b)</sup>	Total (c)=a+b
IUCN	GEFTF	Chad	Climate Change	(select as applicable)	2,683,486	241,514	2,925,000
IUCN	GEFTF	Chad	Land Degradation	(select as applicable)	894,495	80,505	975,000
IUCN	GEFTF	Chad	(select)	SFM	1,788,991	161,009	1,950,000
(select)	(select)		(select)	(select as applicable)			0
(select)	(select)		(select)	(select as applicable)			0
<b>Total GEF Resources</b>					<b>5,366,972</b>	<b>483,028</b>	<b>5,850,000</b>

a) Refer to the [Fee Policy for GEF Partner Agencies](#).

**E. PROJECT PREPARATION GRANT (PPG)<sup>5</sup>**

Is Project Preparation Grant requested? Yes  No  If no, skip item E.

**PPG AMOUNT REQUESTED BY AGENCY(IES), TRUST FUND, COUNTRY(IES) AND THE PROGRAMMING OF FUNDS**

Project Preparation Grant amount requested: \$137,615					PPG Agency Fee: 12,385		
GEF Agency	Trust Fund	Country/ Regional/Global	Focal Area	Programming of Funds	(in \$)		
					PPG (a)	Agency Fee <sup>6</sup> (b)	Total c = a + b
IUCN	GEF TF	Chad	Climate Change	(select as applicable)	68,807	6,193	75,000
IUCN	GEF TF	Chad	Land Degradation	(select as applicable)	22,936	2,064	25,000
IUCN	GEF TF	Chad	(select)	SFM	45,872	4,128	50,000
<b>Total PPG Amount</b>					<b>137,615</b>	<b>12,385</b>	<b>150,000</b>

<sup>5</sup> PPG requested amount is determined by the size of the GEF Project Financing (PF) as follows: Up to \$50k for PF up to \$2m (for MSP); up to \$100k for PF up to \$3m; \$150k for PF up to \$6m; \$200k for PF up to \$10m; and \$300k for PF above \$10m. On an exceptional basis, PPG amount may differ upon detailed discussion and justification with the GEFSEC.

<sup>6</sup> PPG fee percentage follows the percentage of the Agency fee over the GEF Project Financing amount requested.

## F. PROJECT'S TARGET CONTRIBUTIONS TO GLOBAL ENVIRONMENTAL BENEFITS<sup>7</sup>

Provide the expected project targets as appropriate.

Corporate Results	Replenishment Targets	Project Targets
1. Maintain globally significant biodiversity and the ecosystem goods and services that it provides to society	Improved management of landscapes and seascapes covering 300 million hectares	<i>Hectares</i>
2. Sustainable land management in production systems (agriculture, rangelands, and forest landscapes)	120 million hectares under sustainable land management	<i>100,000 Hectares</i>
3. Promotion of collective management of transboundary water systems and implementation of the full range of policy, legal, and institutional reforms and investments contributing to sustainable use and maintenance of ecosystem services	Water-food-ecosystems security and conjunctive management of surface and groundwater in at least 10 freshwater basins;	<i>Number of freshwater basins</i>
	20% of globally over-exploited fisheries (by volume) moved to more sustainable levels	<i>Percent of fisheries, by volume</i>
4. Support to transformational shifts towards a low-emission and resilient development path	750 million tons of CO <sub>2e</sub> mitigated (include both direct and indirect)	<i>1,300,000 metric tons</i>
5. Increase in phase-out, disposal and reduction of releases of POPs, ODS, mercury and other chemicals of global concern	Disposal of 80,000 tons of POPs (PCB, obsolete pesticides)	<i>metric tons</i>
	Reduction of 1000 tons of Mercury	<i>metric tons</i>
	Phase-out of 303.44 tons of ODP (HCFC)	<i>ODP tons</i>
6. Enhance capacity of countries to implement MEAs (multilateral environmental agreements) and mainstream into national and sub-national policy, planning financial and legal frameworks	Development and sectoral planning frameworks integrate measurable targets drawn from the MEAs in at least 10 countries	<i>Number of Countries:</i>
	Functional environmental information systems are established to support decision-making in at least 10 countries	<i>Number of Countries:</i>

## **PART II: PROJECT JUSTIFICATION**

1. *Project Description.* Briefly describe: 1) the global environmental and/or adaptation problems, root causes and barriers that need to be addressed; 2) the baseline scenario or any associated baseline projects, 3) the proposed alternative scenario, GEF focal area<sup>8</sup> strategies, with a brief description of expected outcomes and components of the project, 4) [incremental/additional cost reasoning](#) and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and [co-financing](#); 5) [global environmental benefits](#) (GEFTF) and/or [adaptation benefits](#) (LDCF/SCCF); and 6) innovation, sustainability and potential for scaling up.

### **1) The global environmental and/or adaptation problems, root causes and barriers that need to be addressed**

#### **1.1. The global environmental problems**

Chad is a landlocked country in Central Africa covering a total of 1,284,000 km<sup>2</sup>. It is bordered by Libya to the north, by Sudan to the east, by the Central African Republic to the south, Cameroon and Nigeria to the southwest and Niger to the west. The country is made up of two main natural regions: the desert and sub-desert zone (Sahelo-Saharan) covers the north of the country, whilst the south is composed of Sahelo-Sudanian savanna. Chad's population, estimated at 13.5 million people in 2014 (3.3% annual growth rate) is mainly rural with a rural economy, essentially based on an agro-silvo-pastoral system, which accounted for 53% of the country's GDP in 2014 (32% for

<sup>7</sup> Provide those indicator values in this table to the extent applicable to your proposed project. Progress in programming against these targets for the projects per the *Corporate Results Framework* in the [GEF-6 Programming Directions](#), will be aggregated and reported during mid-term and at the conclusion of the replenishment period. There is no need to complete this table for climate adaptation projects financed solely through LDCF and/or SCCF.

<sup>8</sup> For biodiversity projects, in addition to explaining the project's consistency with the biodiversity focal area strategy, objectives and programs, please also describe which [Aichi Target\(s\)](#) the project will directly contribute to achieving.

services and 15% for industry). Around 47% of the population live below the poverty line and Chad has the fourth lowest Human Development Index value in the world (185<sup>th</sup> country out of 188). Part of the reason for this situation of poverty is that the country has undergone a very long period of political instability characterized by a series of armed conflicts both within Chad itself and with neighbouring countries (Libya, Sudan).

Due to its mainly rural character, Chad's population is heavily dependent on natural resources to meet its basic needs. The maintenance of soil fertility, the availability of timber and non-timber forest products and the access to water resources (for domestic, agricultural and pastoral uses) constitute three major challenges in rural environments. Moreover, the high dependence on subsistence agriculture and/or cash crops (notably cotton) on rainfall patterns underlines just how vulnerable the rural economy is to climate change.

Whilst Chad's rural areas are vulnerable to climate change, the land use practices (agriculture, forest management) are nevertheless one of the main sources of greenhouse gas emissions, as mentioned in the Government of Chad's second nation communication to the United Nations Framework Convention on Climate Change. Therefore, reversing the trend in terms of soil and forest degradation would give Chad the potential to sequester of greenhouse gases, notably CO<sub>2</sub>, which is essential for the mitigation of climate change. This is what this project plans to carry out in the Mayo-Kebbi Ouest Region.

Due to relatively high rainfall (800-1,200 mm/year), a relatively dense traffic network and the proximity of medium-sized urban centres, the Mayo-Kebbi Ouest Region (15,950 km<sup>2</sup>) is one of the two most densely inhabited regions in Chad (36.4 inhabitants/km<sup>2</sup>). Made up of three departments (Mayo-Dallah, Lake Léré and Mayo-Binder), 13 sub-prefectures and 20 cantons, this region contains 516 villages and is bordered by Cameroon to the west. In terms of land cover, agricultural zones occupied 59% of the country in 2006, whilst forested and open areas (grass and shrub savannas) accounted for 34% and 5% of the Mayo-Kebbi Ouest Region respectively. In terms of land use, it is important to note that there are three protected areas in the Region, which occupy almost 18% of its surface area: the Yamba Berté Forest Reserve (654 km<sup>2</sup>), the Binder Léré Wildlife Reserve (created in 1974; 1,350 km<sup>2</sup>) and the Sena-Oura National Park (2009; 798 km<sup>2</sup>), the latter bordering on the Bouba Ndjida National Park in Cameroon, with which it has a bilateral cooperation agreement.

Agriculture, which employs 80% of the population, is characterized by a predominance of cereal subsistence crops (sorghum, pearl millet, rice and maize), traditional cash crops, cotton, which seems to be in decline (30% reduction in land used for this purpose between 2008 and 2010) and the development of new cash crops (peanut, cowpea, sesame). Livestock rearing has been carried out for many years by transhumant pastoralists who recently, due to several factors (environmental, social and economic) have started to adopt a sedentary lifestyle. In this region, we can find both sedentary agro-pastoralists (who have small herds) and pastoralists (with large herds) who practise transhumance. On the basis of the flow of transhumant livestock it registers, the Mayo-Kebbi Ouest Region can be considered a place of departure, passage and arrival for transhumant herds. There are both external and internal flows of transhumant herds. Most of the livestock's food comes from natural pastures.

In the Mayo-Kebbi Ouest Region in general, the problem of the management of natural resources is acute, despite the efforts that have been made for several years by a series of projects and structures responsible for their management. The natural environment is becoming degraded due to a combination of natural factors and poor human practices (cf. details in Section 1.2). There is competition for the ecosystems and their resources and they are overexploited by all kinds of users. Basically, the main problems recorded are:

- **The disappearance of forested natural areas:** thus, between 1986 and 2006, the surface area of the Mayo-Kebbi Ouest Region covered in natural forest dropped from 1.03 million hectares to 658,737 hectares, in other words a 36% reduction in 20 years (annual deforestation rate = 1.8%). This loss has basically occurred to the benefit of farmland, since the area covered by the latter has increased from 771,000 hectares to 1.14 millions hectares (+48%). Deforestation does not spare protected areas: thus, in 2001, the actual area of the Yamba Berté Forest Reserve (654 km<sup>2</sup>) covered in forest was only 432 km<sup>2</sup> (a 33% reduction) and farmland accounted for approximately 50% of the surface area of the Binder Léré Wildlife Reserve.

- **The degradation of forested natural areas:** most of the forested areas that remain in the Mayo-Kebbi Ouest Region are degraded due to misuse (cf. details in Section 1.2). This degradation is characterized by an impoverishment in the composition of forest stands, a modification in their physical structure, a fragmentation in the forest continuum and a drastic decrease in the biological diversity (disappearance of large and medium-sized animals). Consequently, the ecological functioning of these areas has been highly modified and the ecosystem services provided, notably in terms of the goods and services supplied, have been degraded. Timber and non-timber forest products (plants and wildlife), which constitute important natural resources, are becoming depleted.
- **A decrease in the productivity of pastoral and agricultural areas:** as a result of inappropriate practices, the productivity of grass and shrub savannas traditionally used as pastureland is declining regularly: thus, the number of species and the biomass produced are decreasing and, in some extreme cases, the soils are becoming sterile. The fertility of agricultural soils is also rapidly declining as a result of insufficient cultural practices, leading to new clearings being made for agricultural purposes.
- **A decrease in natural fisheries resources:** the Mayo-Kebbi Ouest Region contains two natural lakes, Lake Léré (45 km<sup>2</sup>) and Lake Tréné (12 km<sup>2</sup>), whose fisheries resources are being exploited intensely. Around 1,500 tonnes of fish are caught each year and exported to the large towns and cities in Chad and Cameroon. As a result of inappropriate fishing techniques and excessive fishing pressure, for several years now a drop in the average weight of the fish caught has been noted, which constitutes an indicator of overfishing. Overfishing has also caused a dramatic reduction in the population of African Manatee (*Trichechus senegalensis*), an emblematic species for local people.
- **An increase in conflicts of use:** as a result of the disappearance and degradation of natural resources in the Mayo-Kebbi Ouest Region, there has been an increase in the conflicts between different socioeconomic groups, notably between farmers and transhumant pastoralists. The growing scarcity of resources increases competition over access to resources.

All these different types of degradation lead to a loss of CO<sub>2</sub> sequestration potential through the soil and above all the forest cover.

It should be noted that from 1994 to 2012 a vast natural resources programme was carried out in the Mayo-Kebbi Ouest Region, based on the local governance funded by the German Corporation for International Cooperation (GIZ). This programme, first called PCGRN, and then PRODALKA (cf. details in Section 1.3), had a significant impact on the structure of rural communities and the creation of land use planning and development tools. PRODELKA thus developed the local orientation and decision-making authority (Instances Locales d'Orientation et de Développement, ILOD), which are multi-stakeholder consultation and cooperation structures, and supported the creation of local development plans (Plans de Développement Locaux, PDL) in each of the cantons in the Mayo-Kebbi Ouest Region. Using a “*land-use planning*” approach, these documents plan the material goods and services required in order to improve local living conditions. In addition to the multisectoral PDL, Local Charters and Agreements have been developed to ensure the rational use of natural resources. The Charters provide general guidelines for the management of natural resources in large areas, whilst the Local Agreements provide for more local regulations for the different sub-zones or else for specific resources. Furthermore, there are conflict resolution mechanisms and sanctions, which can be applied if the established rules are broken. Village Monitoring Committees (Comités Villageois, CVS) are responsible for applying the rules. PRODALKA had set up a decentralized development fund to finance the infrastructures mentioned in the PDL.

## 1.2. The causes

In order to facilitate analysis, we shall differentiate between the two types of cause at the origin of the problems described in the previous section: direct causes, factors that have an immediate impact on the state of the environment; and indirect causes, which are at the origin of or give rise to the direct causes.

The main direct causes of the degradation of the environment are:

- An increase in the harvesting of natural resources by human populations and the livestock density;
- The use of inappropriate exploitation methods (in other words those that do not allow for the maintenance and/or renewal of the resource).

The main indirect causes are:

- An increase in the human population (natural growth and immigration);
- An increase in the domestic livestock population;
- An increase in climate variability;
- Lack of respect for contractual mechanisms for the planning and management of natural resources (PDL, charters, etc.) by all stakeholders;
- Low uptake of methods, techniques and tools for the sustainable use of natural resources;
- Incorrect implementation of legal tools for the protection of natural resources.

The situation regarding the degradation of natural resources in the Mayo-Kebbi Ouest Region is linked to a combination of factors including a slow modification in climatic conditions (reduction in rainfall) and the difficulties rural populations experience developing strategies and techniques to prevent the increase of pressure on the environment. The increased pressure is due to an increase in the population (which rose from 19.4 to 34.7 inhabitants/km<sup>2</sup> between 1993 and 2009) and an increase in the livestock density, which is itself partly linked to an increase in the human population and to livestock management techniques. Indeed, in pastoral populations as well as those who practise an agro-silvo-pastoral production system, livestock represents the central element for accumulating financial resources. Therefore, a significant percentage of the financial revenue generated by the economic activity is reinvested in the livestock. Thus, an increase in financial income leads, indirectly, to an increase in the livestock density. The fragile balance between the possibilities of exploiting the natural environment and the populations' needs is no longer maintained by the traditional production systems.

The growth in the population leads to competition over access to resources and to land, and raises the problem of the coexistence of specific activities: agriculture, livestock rearing, and the protection of wildlife. This competition, coupled with a lack of cooperation between users, leads to conflicts, which are sometimes violent.

The management of natural resources follows a "mining" approach, sometimes causing severe environmental degradation that is hard to reverse (erosion, lack of soil fertility, invasion of weeds, degradation of pastures, deforestation) and a disappearance of wild animal and plant species. In populated areas, this situation could lead to the impoverishment of rural populations and to migration to towns or towards pioneer fronts.

### **1.3. The obstacles encountered to the resolution of these problems**

There are two main types of obstacle to the resolution of problems leading to the environmental degradation of the region: social and cultural obstacles on the one hand, and organizational and technical barriers on the other. The sticking points include:

- Social and cultural barriers:
  - A lack of awareness by part of the population (migrants in particular) of the notion of sustainable resources;
  - The complexity of social relations and the interplay between the different stakeholders;
  - A weak structuring and social cohesion of the different groups of stakeholders;
  - The reticence of some social groups (or individuals) to respect the commitments made by their representatives;
  - The lack of recognition by all the stakeholders of the legitimacy of local authorities in charge of the management of natural resources.
- Technical and organizational barriers:
  - Technical, organizational and material weaknesses of local authorities responsible for the management of natural resources (ILOD, village monitoring committees, etc.);

- Technical, organizational and material weaknesses in the State's technical services;
- Lack of synergy between the actions undertaken by local authorities responsible for the management of natural resources and the State's technical services;
- Insufficient delimitation of the various natural resource management zones in the field;
- Low dissemination of tools for the sustainable management of natural resources;
- Insufficient technical supervision of target groups;
- Complexity of land issues (overlapping of traditional land laws and modern land laws).

Globally, the social groups found in the Mayo-Kebbi Ouest Region display poor social cohesion and a weak level of organization. The exploitation of natural resources is essentially carried out on an individual or family level, and competition is the main means of access to resources. There is no spontaneous grouping of the users of a given resource to create a collective approach and ensure sustainable use. It is on the basis of this contact that PRODALKA set up the local resource management authorities (ILOD, village monitoring committees) grouping together the stakeholders in a given geographical area. However, not all the inhabitants covered by an ILOD feel bound to respect the decisions made by this body and the latter does not have any coercive means. In fact, these young authorities have difficulties in finding their place in the interaction between all the players and their decisions do not necessarily appear legitimate to all stakeholders. Furthermore, certain planning documents are no longer valid and do not take into account recent socio-economic changes.

Simultaneously, the devolved State administration's technical services have great difficulties in implementing national sectoral policies in the agricultural, pastoral and forestry spheres. This is partially linked to sectoral compartmentalization, as well as to a lack of resources (material, financial and human) in the field. Despite the existence of a national land-use development and natural resource protection policy, the State has very little control over the major structuring processes concerning the use of land and natural resources by local populations. Due to its low capacity for intervention at a local stakeholder level, its levers for action are very limited.

#### **1.4. The baseline scenario or any associated baseline projects**

Recently, in the Mayo-Kebbi Ouest Region a certain number of structuring projects were carried out, whose past and recent actions constitute the baseline scenario. The two most significant projects were:

- The Conservation and Management of Natural Resources Project (*Conservation et gestion des ressources naturelles, PCGRN*) financed by GTZ between 1994 and 2003) with a budget of Euros 7 million.  
Its main achievements were:
  - The establishment of local orientation and decision-making authorities (ILOD);
  - The delimitation of ILOD areas;
  - The development of ponds, plant production and reforestation;
  - The preparation of land-use maps and cartography for the entire Mayo-Kebbi Ouest Region;
  - The preparation of the first local resource management agreements;
  - Studies on fisheries.
- The Programme for the Decentralized Rural Development of Mayo Dallay, Lake Léré and the Kabbia (*Programme de Développement Rural Décentralisé du Mayo Dallah, du Lac Léré et de la Kabbia, PRODALKA*) financed by a cooperation agreement between the German Government and the Government of Chad (2004-2011) with a global budget of XAF 4 billion.

Its main achievements were:

- The creation and review of the cantons' local development plans;
- The creation and review of village development schemes;
- The creation and review of local agreements for the protection of sites (natural resources, manatees, pastures and transhumance corridors; fisheries protection zones; fauna (manatees, crocodiles, turtles);
- The preparation of the charter (Binder Léré Wildlife Reserve, Lake Léré, Lake Tréné, ponds and rivers);
- Support for the ILOD;

- Support for the agricultural and pastoral sectors;
- Building the stakeholders' capacities in various subjects;
- Studies: Results of monitoring wildlife for the Binder Léré Wildlife Reserve, the zones to the east of the Reserve and the Yapal Game Reserve (Dari) (2003 and 2010); pastoral practices in the north of Kabbia in lacustrine areas, and the Binder Léré Wildlife Reserve (2005).

These two projects have played a key role in the organization of local communities for the sustainable management of natural resources. First of all, they carried out a socio-economic diagnosis of the area before the organization and technical parts of the studied were implemented. They created local bodies designed exclusively to ensure the sustainable management of natural resources at a community level under contracts.

Simultaneously, and following on from these two projects, a certain number of smaller initiatives were launched. In general, these projects tried to reinforce the local bodies created by PCGRN and PRODALKA and to promote the management of natural resources. Example of these projects include:

- Support Project for Local Development (*Projet d'Appui au Développement Local, PROADEL 1*), natural resource management section funded by the World Bank.
  - Protection and revegetation of the shores of Lake Léré;
  - Construction of a wall in Berlian displaying the main wildlife species present in the Binder-Léré Wildlife Reserve (Léré).
- Lake Léré Manatee Protection Project, funded by the Global Environment Facility (2011 to 2012): Budget: XAF 50 million.
- Support Programme for the Development of Fishing (*Programme d'appui au développement de la Pêche, PRODE-Pêche*), funded by the African Development Bank, (2007 to 2013); Budget of XAF 13 billion: funding of fishing infrastructures on Lake Léré.
- Support Project for Local Governance in the Mayo-Kebbi Ouest Region (*Projet d'Appui à la gouvernance locale dans la région du Mayo-Kebbi Ouest*), funded by the EU (2012 to 2014); budget of XAF 190 million; Implemented by Université Populaire (NGO): revision of all local development plans.
- GIZ/PFDL Project (*Projet de facilitation du développement local, 2013-2015*); budget of Euro 2 million.
  - Building the capacities of stakeholders (ILOD);
  - Ecological monitoring;
  - Provision of technical assistance;
  - Supply of various types of equipment (canoes, nets).
- Conflict Prevention and Pacific Cohabitation Project (*Projet de Prévention de conflits et cohabitation pacifique*), funded by GIZ from 2015 - 2016); Budget of XAF 298 million;
  - Preparation and revision of 5 local agreements and reintegration of young people (mechanics, market gardening, etc.) under way;
  - Strengthening the capacities of fishermen;
  - Development of the fishing industry.

The southern part of the Mayo-Kebbi Ouest Region (Dari canton), as well as other parts of the Region, were involved in the projects mentioned below. However, after the creation of the Sena-Oura National Park, it tended to crystallize its own projects aimed at the transboundary biodiversity conservation of the Sena-Oura (Chad) and Bouba Ndjida (Cameroon) national parks. More specifically, the initiatives carried out were:

- The Support for National Parks in the Binational Sena Oura-Bouba Ndjida (BSB Yamoussa) Transboundary Complex Project (*Appui aux parcs nationaux du complexe transfrontalier BSB Yamoussa*), part of the Sustainable Management of Forests in the Congo Basin Programme (*Gestion durable des forêts du bassin du Congo*) carried out by the German Federal Ministry for Economic Cooperation and Development (BMZ). It is a support programme for the Central African Forest Commission (COMIFAC) within the framework of the implementation of its convergence plan. This project, worth USD 8 million (including Euro 1 million provided by the EU) with a duration of four years (2014-2018) aims to consolidate the joint management of the two parks, including the goal of

biodiversity conservation. The actions involve patrolling and monitoring, maintaining security, training, and developing income-generating income activities.

- The Building Biodiversity Conservation Capacities in Transboundary Protected Areas Project (*Renforcement des capacités de conservation de la biodiversité dans les aires protégées transfrontalières*) funded by the Japan International Cooperation Agency (JICA) in 6 sites in Cameroon. The transboundary zone may benefit from a budget of USD 1 million starting in 2017.
- The Biodiversity Conservation in Central Africa / Saving Elephants in Central Africa Project (*Conservation de la biodiversité en Afrique centrale/ Sauvegarde des éléphants de l'Afrique centrale*) implemented by World Wildlife Fund (WWF) in Cameroon and the International Union for Conservation of Nature (IUCN) in Chad.
- Other projects to support transboundary biodiversity are currently being prepared by technical and financial partners (notably the US Fish and Wildlife Service [USFWS], Traffic).

The interzone between the Binder Léré Wildlife Reserve and the Sena-Oura National Park benefits from national agricultural projects (sesame, peanut, maize sectors), which find a local application here. Projects involving the implementation of local development plans in 7 cantons (EU funding) were completed in 2015.

Co-financing supporting the present project will be the funding of projects that mainly focus on biodiversity restoration and conservation issues in the region's protected areas. In particular, this involves the Japan International Cooperation Agency (JICA) project aimed at the Building Biodiversity Conservation Capacities in Transboundary Protected Areas (*Renforcement des capacités de conservation de la biodiversité dans les aires protégées transfrontalières*) (USD 1 million), as well as the Support for National Parks in the Binational Sena Oura-Bouba Ndjida (BSB Yamoussa) Transboundary Complex Project (*Appui aux parcs nationaux du complexe transfrontalier BSB Yamoussa*) (USD 18 million) funded by BMZ/GIZ. The latter project will focus on three main areas:

- a) Supporting the enhancement and development of parks and their environment, with: the promotion of protected areas through different advertising channels; the preparation of a strategy for the enhancement and development of protected areas; plans for the development of resources, including the ecotourism plan, and an increase in the viability of the hunting sector.
- b) Support for coordination, planning and monitoring/assessment, with: the creation and implementation of a knowledge management framework; the revision of land-use development plans and business plans; the organization of multisectoral park management committees and coordination meetings; reinforcement of the monitoring system for wildlife and its habitats.
- c) Support for community conservation, with: the improvement of the involvement of local populations in park management through the establishment of frameworks for collaboration between them and the conservation services; study of the mechanisms for the reduction of human activities and the implementation of local management plans; identification and coordinated planning of income-generating activities for an effective, participatory management of local populations; revitalization of peasant organizations and the establishment of a framework of dialogue between stakeholders for the use of resources and the means they are implemented.
- d) Multifaceted support for the Garoua Wildlife School, in order to build the capacities of the conservation staff (curators, the Ecoguards) and the local operators in game reserves (zones d'intérêt cynégétiques, ZIC).

Regarding past and present initiatives in the Mayo-Kebbi Ouest Region, it would appear that:

- The transboundary zone encompassing the Sena-Oura National Park and the Bouba Ndjida National Park concentrates numerous sources of funding aimed basically at the conservation and promotion of biodiversity;
- Over the last decade, initiatives have been carried out aimed at supporting the structuring of local communities for the improved management of natural resources. These initiatives have finished and the local bodies have not yet reached a sufficient level of maturity to function independently;

- Projects to support agricultural production and the structuring of various sectors are still active in the area;
- Recently, there have been no projects or initiatives aimed at mitigating the effects of climate change through the restoration of forests.

Based on these elements, the baseline scenario would consist of three key elements:

- 1- An improvement in the biodiversity of specific transboundary protected areas (place where numerous projects are concentrated), but a probable degradation in this biodiversity outside of these sites;
- 2- An active natural resource degradation process in the entire area;
- 3- An increase in conflicts over the use of resources and spaces between the various stakeholders in the area.

## 2) **The proposed alternative scenario, GEF focal area strategies, with a brief description of the expected outcomes and components of the project**

Without the intervention of this project, the immense area between the Sena-Oura National Park, the Binder Léré Wildlife Reserve and the Yamba Berté Forest Reserve would continue to see its natural resources and its environment being degraded due to the causes described in 1.2 below. Consequently, the ecological continuity of the area would be destroyed, preventing the ecosystem from playing its role in terms of the sequestration of greenhouse gases. This project will respond to the need to address the main causes of greenhouse gas emissions, namely agriculture and the disappearance of forests.

The project's goal is to maintain and preserve natural resources in the geographical location between the Sena-Oura National Park, the Binder Léré Wildlife Reserve and the Yamba Berté Forest Reserve (which constitute the three protected areas in the Mayo-Kebbi Ouest Region), by reducing human pressure on the environment. This should allow ecological continuity to be maintained between these two sites, thereby ensuring the functioning of the zone's global ecosystem, notably in terms of CO<sub>2</sub> sequestration, and the maintenance of the services provided to local communities. Within the current reference scenario, we find a relatively well-preserved environment in the protected areas (Sena-Oura National Park and Binder Léré Wildlife Reserve), as well as in the Yamba Berté Forest Reserve, but we find very highly degraded ecosystems, habitats and natural resources outside of these sites.

The three main outcomes expected will be:

- A halt to the degradation of the natural environment (through a combination of actions involving the protection, restoration and sustainable management of natural resources) in areas covered by ILOD;
- An increase in the ability to wield influence of the local authorities that manage natural resources;
- The mitigation of the effects of climate change.

The project is to have 4 components;

### **Component 1: Local governance and capacity building**

#### Rationale:

This component will be based on existing local structures in order to implement governance systems involving local communities in the management of natural resources. This will be carried out based on the ILOD (community management structures), which were defined in the baseline scenario framework, but require renewed support. The objective of this component is to build the capacities of these structures in order to:

- make them permanent (continuation of these activities after the project has finished),
- provide them with operational technical tools,
- make them authorities recognized by other local stakeholders.

The main objective of this component is to strengthen the capacities of the ILOD and allow them to achieve new

goals. This component will be based on activities carried out in the region in the past (notably the creation of ILOD via PRODALKA) in order to integrate the notion of ecological connectivity, which will be implemented through investments in component 2 (cf. map 6 in the appendix).

Simultaneously, and in order to facilitate good relations between stakeholders, other stakeholders not represented in the ILOD will also be able to benefit from capacity building. In particular, this involves the devolved State technical services, and non-sedentary groups in the area whose temporary presence has a significant impact on the environment and/or social conflicts.

Outcome 1.1: Improvement of the various stakeholders' commitment to the joint, community, sustainable management of natural resources in order to achieve the ecological reconnection between the various corridors identified.

This component will include the following activities, which will lead to the following outputs:

- Support for the internal organization of the ILOD and other local structures (notably Village Committees),
- Support for the functioning of the ILOD and other structures,
- Preparation and revision of the local development plans (in accordance with the process defined by PRODALKA),
- Preparation and revision of land-use planning tools (local development plans, charters and agreements),
- Technical training in activities related to the management and monitoring of natural resources: forestry, restoration of degraded soils, non-timber forest products, sustainable fishing, pastoralism, etc.
- Raising the awareness of populations and target groups.

One of the key outcomes expected from this component is an increase in the ILOD's capacity for influence on all the stakeholders in the study area (something that is not the case at present). This supposes an improvement in the internal functioning of these structures (with an improved representation of the stakeholders and an appropriate means of governance), as well as improved technical, intervention and support capacities. Eventually, the ILOD should constitute exemplary zones for the management of natural resources causing virtually no degradation to the latter.

It is important to mention that the project will be based on the lessons learned in previous projects regarding the preparation of planning and capacity building documents. In particular, and within the context of the reconnection of the ecological corridors identified, it will be done through adopting a preparatory process that involves all stakeholders, in order to increase the ILOD's influence on all users of natural resources in the zones concerned. Moreover, a strong synergy will be developed between capacity building and the preparation of planning documents in order to increase the operational effectiveness of the latter.

Regarding the capacity building, the environmental and social knowledge provided by the project, the discussion of the management plans and practices that will be implemented, and the medium and long-term strategy planning that take into account the risks associated with the degradation of forests, soils and biodiversity will help raise the awareness of the communities and governmental services to the challenges posed by climate change and the sustainable management of natural resources, as well as the possible options for mitigation and adaptation.

## **Component 2: Maintenance of the ecological functionalities of forest massifs**

### Rationale:

This aim of this component is to preserve the ecological functionalities of the project's forest areas in order to ensure that the services provided by the forest ecosystem are maintained, above all the provisioning and regulating services (concerning the climate in particular).

This objective will involve a series of protection and restoration activities, which must be well coordinated with the sustainable management activities implemented in component 3. One of the major issues in this activity is to stop

(or at least limit) the fragmentation of forest areas and to guarantee an ecological continuity between the three large forest massifs represented by the three protected areas in the Mayo-Kebbi Ouest Region (cf. description above), in order to maintain ecological exchanges (matter, energy, species, etc.) between these zones without which the ecological functionalities will progressively deteriorate.

Restoring ecological continuities so as to guarantee ecological functionalities will allow forest massifs to play their role as CO<sub>2</sub> sinks to the full. Indeed, research into ecosystem fragmentation has shown that a continuous forest area has a higher carbon storage capacity than that of several forest fragments of an equivalent size (notably because the small forest fragments have regressive dynamics). So, it is important to maintain a continuum of natural environments allowing for the continuation of ecological exchanges and the global functioning of the forest ecosystem. These “*forest corridors*” can be exploited for their resources as long as this does not result in a change in the land use. As such, clearings will be prohibited whilst, on the other hand, the sustainable use of non-timber forest products will be actively encouraged to enhance these areas and counterbalance the pressure caused by clearings. Component 2 is implemented at a regional level (macro), whilst component 3 is implemented at a more localized level (micro).

It is thus the forest ecosystem in all its forms that will be targeted by this component and not only the timber resource. We shall therefore be interested in wildlife, plants, the soil and the flow of matter (water, minerals, dispersion of species, etc.). We shall use a “*landscape*” approach, allowing us to obtain a functional ecological network made up of three key elements: i)- biodiversity reservoirs (the existing protected areas), ii)- sustainably managed forest ecological corridors, and iii)- the areas to be restored in order to ensure ecological continuity. The maintenance of the ecological functionalities of the forest massifs in the project area will contribute to carbon storage and thus help stabilize the climate in this zone.

#### Outcome 2.1: Sustainably managed forest corridors and gallery forests

In order to guarantee the maintenance of the ecological functionalities of the forest massifs in the area by using an ecological continuity approach, the following activities will be carried out:

##### Output 2.1.1: Identification of forest corridors:

- Updated cartography of land use in the Mayo-Kebbi Ouest Region;
- Diachronic analysis of changes in land use allowing deforestation hot spots to be identified;
- Preliminary identification of the most appropriate forest corridors allowing the three protected areas to be linked up. The corridors must meet a certain number of key criteria: ecological relevance (as such, particular attention will be paid to gallery forests bordering on watercourses), distance (as far as possible) from deforestation “*hot spots*” and transhumance corridors, the absence of industrial activities, etc. ;
- Field checks of the status of the preselected corridors, and carrying out a census of activities involving the use of natural resources. Identification of the areas that need to be restored.

#### Outcome 2.2: Increase in the CO<sub>2</sub> sequestration capacity through the management of 70,000 hectares of forest areas (1,300,000 t CO<sub>2</sub> equivalent)

The project will involve a total of 75,000 hectares of forest. Within this context, it is estimated that 50,000 hectares of forest will be restored, in other words the estimated CO<sub>2</sub> sequestration potential of 1,000,000 t CO<sub>2</sub> equivalent. The project will also allow for the reforestation of 20,000 hectares of degraded soil, in other words the estimated CO<sub>2</sub> sequestration potential of 300,000 t CO<sub>2</sub> equivalent. Therefore, it is estimated that the project will allow for the sequestration of 1,300,000 t CO<sub>2</sub> equivalent.

The project will also allow 5,000 hectares of forest to be maintained. Furthermore, a maximum of 10,000 hectares of degraded land will be recovered through the implementation of appropriate farming techniques that protect the soil. These estimations are for the time being for information purposes only, and must be confirmed in the project preparation phase during which the data linked to mitigation will be assessed using the FAO EX-ACT system.

Forest corridor management will be carried out within the framework of the activities described below in order to obtain output 2.2.

**Output 2.2.1: Investment plans with experimental regulations of forest corridors developed and implemented**

- A consensus-building process at a canton level to integrate the corridors into local development plans (consistent with the activities in component 1) as protected zones or, if the use of resources is excessive, forest areas with multiple uses where agricultural clearing is banned;
- For forest zones with multiple uses, the definition of the rules of use for forest resources (consistent with the activities in components 1 and 3);
- The physical delimitation of corridors (in zones with high levels of human pressure);
- The implementation of forest restoration activities in the degraded zones;
- The implementation of a mechanism to monitor the integrity of ecological corridors.

Table 1: Forest management practices for implementation in three categories of forest corridors

Forests types in corridors	Recommended management practices	Area under consideration
Intact forests	Forest management practices will involve fire management and controlled harvesting to stimulate natural regeneration.	5,000 ha
Degraded forests	Forest fire management will restore productivity and lead to restoration; recently harvested areas will qualify for full fire protection until regeneration has been achieved.	50,000 ha
Highly degraded forests	Full fire protection, restrictive use or active protection for restoration through natural regeneration.	20,000 ha
To assist with the restoration of forests and soils, agroforestry will be promoted on nearby lands (Component 3)		

**Component 3: Integrated management and increase in productivity of natural resources**

**Rationale:**

This involves developing a range of sectoral activities aimed at implementing the sustainable management of natural resources linked to the planning tools developed in the first component. The objective is twofold: to help meet the population's needs (reduction of poverty and increase in the productivity of resources) and at the same time to guarantee the permanence of the exploited resources (management of and increase in natural resources).

An improved management of natural resources will lead to the increased productivity of ecosystems and thus higher CO<sub>2</sub> storage. In return, we should achieve the local mitigation of the effects of climate change.

**Outcome 3.1: Sustainable use of natural resources and the fulfilment of communities' needs**

It is basically a question of stopping the continuous degradation resulting from the use of non-sustainable practices in the project's study area. The landscape around the villages is made up of an agro-silvo-pastoral mosaic (including fallow land), with a strong interaction between the different production units. Agricultural aspects will also be studied. Sustainable agriculture will be promoted (minimum ploughing, maintenance of plant cover, planned rotation, progressive phasing out of chemicals in favour of organic techniques). With regard to fisheries resources, restoration plans will be established for shores and shallow areas as well as protected zones.

**Output 3.1.1: Development and implementation of techniques for the sustainable use of natural resources**

In collaboration with the communities in the project area, it will involve developing a baseline technique allowing for the local management of resources, such as for example technical manuals aimed at local users and describing the sustainable use and management practices concerning (for example) sustainable pruning, the harvesting of gum

arabic, and the selective fishing of target species. Inspiration will be provided by the guidebooks on sustainable exploitation practices drawn up by FAO, and TOP-SECAC<sup>9</sup> for the integration of climate change into developing planning. In addition to providing simple training, these methodological manuals written in local languages will be designed to serve as a reference for users and their representatives on a daily basis.

The preparatory phase of the project will define precisely the areas of intervention of this component and the geographical areas involved. Based on the information available at this stage, the areas covered are likely to be:

Timber resources:

- The supply of timber and non-timber forest products. Special emphasis will be placed on the issue of fuelwood;
- Restoration through enrichment;
- Restoration through protection.

Productivity of pastures and pastoralism.

- Identification and delimitation of transhumance corridors;
- Maintenance of the productivity of pasture zones;
- Management of bush fires.

Fisheries resources

- Sustainable management and harvesting of fish
- Protection of spawning grounds
- Restoration/protection of the shores of Lake Léré

Cohabitation between humans and wildlife

- Techniques for preventing and scaring away pest species that cause damage to agriculture

Outcome 3.2: Increase in the productivity of degraded soils

In the Mayo-Kebbi Ouest Region, the surface area of sterile soil is increasing. This is particularly the case of areas of wooded savanna, which have become degraded due to the repeated and combined effect of late dry season fires, intensive grazing and tree felling. Since the soil is no longer protected by vegetation, the rain (and wind) cause a process of erosion, which in the end leads to the appearance of virtually sterile lateritic cuirasse. These soils can be restored, but it requires the use of techniques that are quite intensive in terms of labour and monitoring. Good soil management is a priority before the degradation-sterilization cycle is initiated.

Output 3.2.1: Promotion of agroforestry and techniques for the restoration of degraded soil

In this area it will involve technical interventions aimed at preserving the soil, through the active management of bush fires, the restoration and management of tree species of economic interest in the areas surrounding the villages, the creation and management of nurseries, school arboreta, etc. The project will use the existing agroforestry manuals designed for the villages / families of small producers in the Sahelo-Sudanian area. The project will produce recommendations and guidelines in local languages, which will serve as reference material for users and their representatives involved in this component. The main outcomes expected are:

- The implementation of anti-erosion mechanisms in sensitive areas (river sources / headwaters, slopes, fluvial terraces, etc.);
- The adoption of techniques to maintain soil fertility in agricultural areas (linked to agroforestry);
- The restoration of lacustrine areas that are of key importance for the water cycle and populations.

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<sup>9</sup> Toolkit for the planning, monitoring and evaluation of climate change adaptive capacities (Trousse à Outils de Planification, de Suivi-Evaluation des Capacité d'Adaptation au Changement Climatique)

One key outcome expected of the technical training that will be provided will be that the beneficiaries will know how to adjust the harvesting of the resource in accordance with the state of the resource. Simple indicators (for example the size of fish) will thus be developed allowing for the identification of abstraction thresholds outside of which the use is unsustainable.

#### **Component 4: Monitoring/assessment, communication and knowledge management**

This component will help increase knowledge of the management of natural resources in the Mayo-Kebbi Ouest Region through three sub-components:

Firstly, this component will fund the establishment of a monitoring/assessment system for the project itself. This system will be defined on the basis of GEF prerequisites via the tracking tools for activities related to climate change, soil degradation and sustainable forest management. Moreover, these indicators will be completed by the requirements of the monitoring/assessment system applied to each project. Through the definition of the appropriate indicators during the project preparation phase, the project will be able to supply quantitative and qualitative data on the evolution of natural resources in the area covered by the project. The aim of the project will be to generate global environmental benefits. However, as mentioned above, the degradation of natural resources is also linked to conflicts between humans and nature. Thus, in addition to showing the evolution in natural resources and the corresponding actions, the system will take into account indicators linked to human activities (agricultural, commercial, income-generating) and will attempt to establish correlations with the indicators linked to the management of natural resources.

A budget of USD 150,000 will be allocated to the monitoring/assessment system. The main outputs that this monitoring/assessment system will produce will be: the definition and setting up of the system, the production of annual implementation reports, a mid-term assessment report, and a final report at the end of the project summarizing the main activities carried out and the results obtained.

Secondly, and building on the data collected by the monitoring/assessment system defined above, the project will contribute to the financing and the dissemination of messages on requirements regarding the management of natural resources, their evolution in the project area as well as the best practices aimed at their conservation and protection. Once again, the accent will be placed on conflicts between humans and nature and the best practices for the management of this issue. This information will be disseminated through several appropriate channels and will be defined during the project preparation phase (e.g. radio, Internet, messages in schools).

Finally, IUCN will take advantage of its experience in the preparation and dissemination of manuals linked to best practices in the management of environmental resources. The audiences these manuals will be aimed at will be defined during the project preparation phase.

### **3) Incremental / additional cost reasoning and expected contributions from the baseline, the GEF TF and co-financing**

The additionality of this project is very high inasmuch as:

- The project will reinforce and reactivate the local authorities responsible for the management of natural resources by giving them new objectives linked to the ecological continuity of forest ecosystems.
- The project will update and develop the tools for land-use planning and the management of natural resources used by local communities.
- In an innovative manner, and at the same based on the existing authorities and natural resource management tools, the project will engage the local communities by developing a “*landscape and ecological continuity*” approach, which will guarantee the ecological functionality of the forest massifs in the area and the maintenance of ecosystem services.

The interventions that form part of the baseline in the Mayo-Kebbi Ouest Region during the implementation of the GEF project are focused on the protected areas (Sena-Oura National Park and the Binder Léré Wildlife Reserve). Being carried out **in protected areas**, these interventions focus on biodiversity conservation and the efficient management of the Sena-Oura National Park and the Binder Léré Wildlife Reserve.

Carried out **outside the protected area**, the GEF project will constitute an additional aspect by guaranteeing the ecological continuity of the zone by providing a “*humans-environment*” relations management perspective (natural resource management, agriculture, agroforestry, etc.).

#### **4) Global environmental benefits (GEFTF)**

The project is going to focus on the sustainable management, restoration, protection and maintenance of ecological functionalities of natural environments and notably forest areas. By re-establishing the ecological corridors in the Mayo-Kebbi Ouest Region, notably through reforestation and soil conservation activities, the project will regenerate carbon sinks. As described above, this will help reverse the trend in terms of CO<sub>2</sub> emissions. As such, the global environmental benefits of this project will be:

- Reduction of greenhouse gas emissions (notably through the increase in the capacity for CO<sub>2</sub> sequestration due to reforestation and soil conservation). The volume of CO<sub>2</sub> sequestered thanks to the activities implemented by the project is a total of 1,300,000 t CO<sub>2</sub> equivalent;
- The sustainable management of soil and forests over a total of 100,000 hectares;
- The project will provide multiple environment benefits. The restoration of corridors will extend the home range of species and strengthen genetic diversity of flora and fauna. Through reforestation and maintenance of forest ecosystems, the project will enhance the water cycle in corridors and managed areas to support livelihoods through increasing food security, the provision non-timber forest products, fodder and building material.
- A halt in the desertification process through the constitution of ecological corridors, essentially made up of forests;
- Conservation of water resources and maintenance of the water cycle;
- Stabilization of the local climate.

#### **5) Innovation, sustainability and potential for scaling up**

##### Innovation:

This project is innovative inasmuch as it will promote the notion of ecological continuity in regional planning. The project allows for the matching of the ecological corridor restoration objectives with the objective of mitigating climate change through an increase in the sequestration of CO<sub>2</sub> by forest massifs. Moreover, this project is innovative due to the fact that it involves local communities in regional planning linked to the restoration of the connectivity of these ecological corridors.

##### Sustainability:

The sustainability of the project will be assured by the implementation of local governance mechanisms allowing for the long-term management of conflicts between humans and the environment. Following on from previous interventions in the region, the project will help increase respect for regional and local contractual, planning and management mechanisms, which were established recently but need to be greatly reinforced.

##### Potential for scaling up:

The project's main goal of restoring ecological corridors through reforestation and soil conservation in order to reduce the effects of climate change could be replicated at a national level, notably on the land encompassed by the Great Green Wall Initiative. Notably, the techniques allowing local communities to be involved in order to achieve good governance of natural resources could serve as examples in other regions, at both national and regional levels. Indeed, the conflicts between humans and the environment are common and this project will help show that their resolution allows for the generation of profits at both a local level (increased income and improved standard of

living for the population) and a global level with the significant sequestration of CO<sub>2</sub> in order to mitigate the effects of climate change.

2. *Stakeholders*. Will project design include the participation of relevant stakeholders from [civil society organizations](#) (yes  /no ) and [indigenous peoples](#) (yes  /no )? If yes, identify key stakeholders and briefly describe how they will be engaged in project preparation.

The project is based on the building of the capacities of local communities so as to improve the management of natural resources. These communities are therefore at the very heart of the project. For local communities, we mean the sedentary populations in the Mayo-Kebbi Ouest Region, and the transhumant populations that stay in the area on a temporary basis (there is not necessarily a separation between these two groups, a same family can be made up of both sedentary and mobile members).

The local communities and their representatives are currently grouped together in authorities known as ILOD, which are responsible for the management of natural resources. The project will attempt to improve the functioning and build the technical capacities of these structures.

During the project preparation phase, these communities, including civil society, will be consulted intensively. Initially, a diagnosis of how the ILOD are functioning will be carried out. After this, the plan is to identify the actions that should be carried out in order to improve the functioning and influence of these structures.

(NB: Chad does not recognize the concept of indigenous people on its territory).

3. *Gender Equality and Women's Empowerment*. Are issues on [gender equality](#) and women's empowerment taken into account? (yes  /no ). If yes, briefly describe how it will be mainstreamed into project preparation (e.g. gender analysis), taking into account the differences, needs, roles and priorities of women and men.

The project will adopt an approach aimed at establishing practices that promote equality between men and women in the activities proposed. Women's groups and vulnerable populations will first of all be involved systematically in the discussions linked to the definition of the activities that are to be financed by the project. Next, the activities will be defined taking into account the social and cultural characteristics peculiar to the project intervention area, whilst bearing in mind the need to involve men and women equally. Women have a particular role to play in community and village activities, notably those linked to agriculture.

In Sub-Saharan Africa, women are at the very heart of the management of natural resources. Whilst men and women participate relatively equally in agricultural work, the harvesting of timber and non-timber forest products is generally carried out by women. Since the project concerns the management of natural resources, women will constitute an important target group.

During the preparation of the project, a gender analysis will be carried out in order to identify precisely women's roles in natural resource management activities. The analysis will assess whether women's activities are carried out individually or collectively. In the case of the latter, analyses will be carried out to assess the level of structuring and organization of the collective activities.

The analysis will also attempt to measure the influence of women in collective decision-making in villages. If it turns out that their influence is significant at this level, the project will develop activities that specifically target women's groups.

4 *Risks*. Indicate risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, propose measures that address these risks to be further developed during the project design (table format acceptable).

<b>Risks</b>	<b>Level</b>	<b>Mitigation measures</b>
Political instability	Moderate	None (beyond the scope of the project)
Terrorism	Moderate, the Mayo-Kebbi Ouest Region being for the moment outside of Boko Haram's area of influence	The project will be implemented by local stakeholders who are generally not the terrorists' main target. Moreover, these local stakeholders have perfect knowledge of the land and will be able to anticipate the risks.
Rapid and sustained degradation of the climate (prolonged drought)	Unknown	To define as far as possible activities resilient to climate change.
ILOD established by previous projects are totally dysfunctional	Weak	The ILOD were supported by different projects up to 2014 and are thus still in place
The ILOD's low capacity for influencing the management of natural resources	Moderate	This project is precisely designed to increase that capacity for influence of structures established several years ago
Very weak social cohesion in communities in this area, preventing the community adopting the management of natural resources	Currently unknown	One of the key elements in the preparation of the project will be to assess the level of social cohesion in the communities and to adapt the project's activities to the social context. After several projects working on these cohesion aspects, we can expect the social cohesion will be strengthened.
Very strong deforestation dynamic preventing the establishment of forest corridors	Moderate	The aim of the project is to establish the sustainable, community management of forest areas in order to counteract deforestation processes
Conflicts in the State and local community services	Moderate	Within the context of previous projects, the State services were stakeholders and are now used to working with local populations
Low uptake of methods, techniques and tools for the management of natural resources;	Moderate	An important element in component 4 is the production of manuals and guidelines for the local managers and technicians in relation with local non-governmental organizations.

5. *Coordination*. Outline the coordination with other relevant GEF-financed and other initiatives.

The execution of the project will be the responsibility of Chad's Ministry of the Environment, supported by IUCN.

The project will have a Project Management Unit (PMU) and a Steering Committee. The latter will be made up of representatives of the different ministries and partners involved in the project area. This structure will be defined in greater detail (composition, roles and responsibilities) during the project preparation phase (CEO endorsement).

Inter-project coordination meetings can be organized regularly in the project area. Their aim will be to ensure proper coordination of the interventions of all the stakeholders in the area and to check the compatibility of the different actions planned. Insofar as this project adopts a “landscape” approach, it is necessary to have good knowledge of all the local activities that have an impact on land use and on the use of natural resources, and to be capable of influencing the major initiatives in this sphere.

The initiatives involved will be those that are carried out in the Mayo-Kebbi Ouest Region, namely the interventions by German cooperation (GIZ) and its partners within the context of the protection of natural resources. The project will be coordinated with the GEF projects already underway in Chad, which are related to the project’s sector of activity. Close coordination will be ensured with the following GEF projects:

- Building Resilience for Food Security and Nutrition in Chad Rural Areas Communities (AfDB);
- Promoting energy efficient cook stoves in micro and small-scale food processing industries (UNIDO);
- Agricultural Production Support Project (with sustainable land and water management), World Bank, in the context of the Great Green Wall.

In addition, the project will liaise closely with other agencies involved in climate change mitigation through forest and land restoration projects, such as the French Agency for Development (AFD) and the European Union, which will provide substantial funding for the management of natural resources in Chad, through its eleventh European Development Fund. The project will be coordinated with the activities implemented via the "*Support Programme for Local Development and the Sustainable Management of Natural Resources*", which was funded by the European Union and has capitalized upon the wealth of experience in the funding of climate change mitigation and natural resource management projects.

At a national level, the project will be coordinated with the Special Fund for the Environment (Fonds Spécial en faveur de l’Environnement, FSE) in order to favour synergies.

The project will closely monitor the activities of the technical and financial partners involved in the natural resource management sector in general, taking part in coordination meetings. The relationship with the technical and financial partners will be clarified during the project preparation phase (CEO endorsement).

6. *Consistency with National Priorities.* Is the project consistent with the National strategies and plans or reports and assessments under relevant conventions? (yes  /no  ). If yes, which ones and how: NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, etc.

The project is consistent with the national strategies that the areas of activity in this project are dependent on.

First of all, the project is linked to the “Report on Land Degradation Neutrality” prepared by the Government of Chad within the framework of the United Nations Convention to Combat Desertification. As defined in this strategy, the project aims to i)- improve public interventions on soil management, ii)- get grassroots communities more involved and, iii)- have a specific component linked to soil management. And, as mentioned within the framework of this strategy, the project will help find an answer to some of the main causes of soil degradation identified in Chad, namely: overgrazing, water erosion and deforestation. More specifically, the project is totally aligned with this strategy’s recommendations in the Mayo-Kebbi Ouest Region and in the area surrounding Sena-Oura. Indeed, in this region it is recommended that action should be taken in terms of stabilizing the banks of watercourses, reforestation, the intensification and improvement of practices linked to livestock rearing, and the restoration of barren land.

The second “National Communication by the Government of Chad to the United Nations Framework Convention on Climate Change” (2012) underlined the fact that the main greenhouse gas emissions are linked to agriculture and

land use, and the change in the use of land and forests. In order to limit the country's greenhouse gas emissions, it is thus essential to work on the sectors that produce the most emissions. This project is thus directly aligned with this strategy, since it proposes reforestation activities, in agriculture (agricultural methods), livestock rearing and the recovery of soils in order to sequester CO<sub>2</sub>.

Through component 3, the project will implement the National Bush Fire Management Strategy directly.

Finally, all the project's actions, in particular those aimed at developing the local communities' management and governance capacities, as well as the activities that will help increase the populations' income (agroforestry, activities linked to livestock rearing, agriculture) are included in the National Development Plan (Plan National de Développement, PND) (2013-2015) in order to strengthen the bases of economic and social growth, aimed at making Chad an emerging country by 2025, in line with the President of the Republic's vision. The environmental component, notably the fight against desertification and biodiversity conservation, occupies an important place in this plan, being allocated over XAF 104 billion.

*7. Knowledge Management.* Outline the knowledge management approach for the project, including, if any, plans for the project to learn from other relevant projects and initiatives, to assess and document in a user-friendly form, and share these experiences and expertise with relevant stakeholders.

This project is to a considerable extent based on previous initiatives and projects implemented in the Mayo-Kebbi Ouest Region. Consequently, during the project preparation phase, particular attention will be paid to the outcomes of these projects and, even more so, to their assessment. Indeed, the aim will be to identify the initiatives, actions and activities that did not produce the desired results and to understand the reasons why. This should be done in order to avoid repeating the same mistakes. Meetings with managers of these old projects will be organized in order to learn more about the contexts and the difficulties encountered.

The project is thus defined on the basis of previous interventions in the Mayo-Kebbi Ouest Region, most of which were listed in the section above linked to the description of the baseline. The project will notably be based on the best practices for the local governance of natural resources implemented in particular by the Government of Chad in partnership with GIZ via the PRODALKA project.

Component 4 of the project will allow for the preparation and dissemination of knowledge products based on the best practices that emerge from the project's implementation. As stated above, the exact audiences for these knowledge products will be defined during the project preparation phase. The knowledge capitalization strategy for this project will focus on two main areas:

- Conflicts between humans and nature. Through several appropriate publications, the project will disseminate in a didactic, appropriate manner the best practices for reducing these conflicts and allowing for cohabitation between humans and nature for the management of natural resources, more particularly in line with the anticipated objectives through the mobilization of funding linked to the areas of activity covered in this project (climate change, soil degradation and the sustainable management of forests).
- The management of natural resources in the buffer zones of these protected areas. The specific nature of this project is that the GEF funding will be invested outside of two protected areas (the transboundary complex of the Sena-Oura and Bouba Ndjida National Parks, and the Binder Léré Wildlife Reserve). Consequently, the strategy in terms of the knowledge capitalization in this project will focus on this subject for the purpose of the dissemination and replication of best practices at national and regional scales in the same type of context.

**PART III: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT(S) AND GEF AGENCY(IES)**

**A. RECORD OF ENDORSEMENT<sup>10</sup> OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S):**

(Please attach the [Operational Focal Point endorsement letter](#)(s) with this template. For SGP, use this [SGP OFP endorsement letter](#)).

NAME	POSITION	MINISTRY	DATE (MM/dd/yyyy)
Mr. Hakim Djibril	Director and GEF operational focal point	<b>MINISTRY OF THE ENVIRONMENT</b>	<b>12/03/2015</b>

**B. GEF AGENCY(IES) CERTIFICATION**

**This request has been prepared in accordance with GEF policies<sup>11</sup> and procedures and meets the GEF criteria for project identification and preparation under GEF-6.**

Agency Coordinator, Agency name	Signature	Date (MM/dd/yyyy)	Project Contact Person	Telephone	Email
Jean-Yves Pirot		02/25/2016	Jacques Somda		jacques.somda@iucn.org

<sup>10</sup> For regional and/or global projects in which participating countries are identified, OFP endorsement letters from these countries are required even though there may not be a STAR allocation associated with the project.

<sup>11</sup> GEF policies encompass all managed trust funds, namely: GEFTF, LDCF, and SCCF

**C. ADDITIONAL GEF PROJECT AGENCY CERTIFICATION (APPLICABLE ONLY TO NEWLY ACCREDITED GEF PROJECT AGENCIES)**

For newly accredited GEF Project Agencies, please download and fill up the required [GEF Project Agency Certification of Ceiling Information Template](#) to be attached as an annex to the PIF.

Date: 25 February 2016

To: The GEF Secretariat  
Washington, DC 20433

**Subject: GEF Project Agency Certification of Ceiling Information**

Per Council requirement for GEF Project Agencies, I am pleased to inform you that:

- (a) the value of the largest project implemented (or executed) by IUCN to date is USD 27.4 million<sup>12</sup>; and
- (b) the total value of all projects under implementation by IUCN as of the end of FY 2015 was USD 366 million.<sup>13</sup>

I certify that the GEF financing currently being requested by IUCN for the project, “Restoring ecological corridors in Western Chad to mitigate climate change - RECONNECT”, in the amount of 5,366,972 USD, is lower than the largest project that IUCN has implemented (or executed) to date.

I further certify that the total amount of GEF financing currently under implementation by IUCN plus the requested GEF financing for the above mentioned project does not exceed 20 percent of the total amount of all projects that IUCN had under implementation as of the end of FY 2015.

Sincerely,



Jean-Yves Pirot  
GEF Coordinator  
IUCN

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<sup>12</sup> This amount excludes co-financing.

<sup>13</sup> In support of these statements, a copy of (a) the signed loan/grant agreement for the largest project implemented (or executed), and (b) a list of all projects (together with their amounts in US dollars) need to be sent via email, under a separate cover, to the GEF Secretariat at [Project\\_Agency@theGEF.org](mailto:Project_Agency@theGEF.org). These supporting documents will be treated as confidential and will not be shared with any parties external to the Secretariat. The PIF will not be approved in the absence of these supporting documents.

**Appendix A: Thematic maps (see separate file)**

Map 1: Location of the Mayo-Kebbi Ouest Region in Chad

Map 2: Administrative division of the Mayo-Kebbi Ouest Region

Map 3: Agro-ecological units in the Mayo-Kebbi Ouest Region

Map 4: Managed areas (protected areas and ILOD)

Map 5: Land use in the Mayo-Kebbi Ouest Region in 2006

Map 6: Use of land and forest corridors