



GLOBAL ENVIRONMENT FACILITY
INVESTING IN OUR PLANET

Naoko Ishii
CEO and Chairperson

March 19, 2018

Dear Council Member:

IUCN as the Implementing Agency for the project entitled: ***Chad: Restoring Ecological Corridors in the Mayo-Kebbi Quest, Chad, to Support Multiple Land and Forests Benefits - RECONNECT***, has submitted the attached proposed project document for CEO endorsement prior to final approval of the project document in accordance with IUCN procedures.

The Secretariat has reviewed the project document. It is consistent with the proposal approved by Council in June 2016 and the proposed project remains consistent with the Instrument and GEF policies and procedures. The attached explanation prepared by IUCN satisfactorily details how Council's comments and those of the STAP have been addressed. I am, therefore, endorsing the project document.

We have today posted the proposed project document on the GEF website at www.TheGEF.org. If you do not have access to the Web, you may request the local field office of UNDP or the World Bank to download the document for you. Alternatively, you may request a copy of the document from the Secretariat. If you make such a request, please confirm for us your current mailing address.

Sincerely,

Naoko Ishii
Chief Executive Officer and Chairperson

Attachment: GEFSEC Project Review Document
Copy to: Country Operational Focal Point, GEF Agencies, STAP, Trustee



GEF-6 REQUEST FOR PROJECT ENDORSEMENT/APPROVAL

PROJECT TYPE: Full-sized Project

TYPE OF TRUST FUND: GEF Trust Fund

For more information about GEF, visit TheGEF.org

PART I: PROJECT INFORMATION

Project Title: Restoring ecological corridors in the Mayo-Kebbi Ouest, Chad, to support multiple land and forests benefits - RECONNECT			
Country(ies):	Chad	GEF Project ID: ¹	9417
GEF Agency(ies):	IUCN (select) (select)	GEF Agency Project ID:	
Other Executing Partner(s):	Ministry of the Environment, Republic of Chad	Submission Date:	
GEF Focal Area (s):	Multi-focal Areas	Project Duration (Months)	60
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. FOCAL AREA STRATEGY FRAMEWORK AND OTHER PROGRAM STRATEGIES²

Focal Area Objectives/Programs	Focal Area Outcomes	Trust Fund	(in \$)	
			GEF Project Financing	Co-financing
(select) CCM-2 Program 4 (select)	Policy, planning and regulatory frameworks foster accelerated low GHG development	GEFTF	2,683,486	4,720,756
LD-3 Program 4 (select) (select)	Integrated landscape management practices adopted by local communities based on gender sensitive needs	GEFTF	894,495	1,645,585
(select) (select) SFM-3	Integrated landscape restoration plans to maintain forest ecosystem services are implemented at appropriate scales by government, private sector and local community actors, both women and men	GEFTF	1,788,991	2,786,366
(select) (select) (select)		(select)		
(select) (select) (select)		(select)		
(select) (select) (select)		(select)		
(select) (select) (select)		(select)		
(select) (select) (select)		(select)		
Total project costs			5,366,972	9,152,707

B. 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/Programs	Financing Type ³	Project Outcomes	Project Outputs	Trust Fund	(in \$)	
					GEF Project Financing	Confirmed Co-financing
Component 1: Local governance and capacity building	TA	Outcome 1.1 Improvement in the commitment and capacity of various stakeholders for the long-term, joint	Output 1.1.1. Capacity of 13 existing orientation and decision-making authorities (ILOD) and 9 existing local development	GEFTF	520,368	0

¹ Project ID number remains the same as the assigned PIF number.

² When completing Table A, refer to the excerpts on [GEF 6 Results Frameworks for GETF, LDCF and SCCF](#) and [CBIT programming directions](#).

³ Financing type can be either investment or technical assistance.

		community-based sustainable management of natural resources.	<p>association (ADC) in the institutional governance of natural resources improved with a view to restoring forest ecosystems in the project area.</p> <p>Output 1.1.2. Capacity for forest restoration and management of 151 community-based organizations improved.</p> <p>Output 1.1.3. Capacity for natural resources management of local MEP services in the project area improved.</p> <p>Output 1.1.4. Transhumant / semi-nomadic pastoralists engaged in the long-term, joint community-based sustainable management of natural resources in the project area</p>			
Component 2: Maintenance of ecological continuities of forest blocks	Inv	Outcome 2.1: Increase in the capacity for CO2 sequestration through the sustainable management of forest ecosystems over 21 600 ha	<p>Output 2.1.1. Critical forest blocks identified</p> <p>Output 2.1.2. Operational and technical means of 151 community-based organizations to implement natural resources management established.</p> <p>Output 2.1.3. Operational and technical means of local MEP to implement natural resources management established.</p> <p>Output 2.1.4. Management documents (Charter, Convention and SAT) for the regulation of forest blocks developed, endorsed, implemented, enforced and monitored.</p>	GEFTF	1,889,778	2,092,000

			Output 2.1.5. Sustainable financing mechanisms for the long-term community-based management of natural resources established, as laid out in the 20 updated Local Development Plans (PDL).			
Component 3: Integrated management and increase in productivity of natural resources	Inv	<p>Outcome 3.1: Sustainable use of natural resources, development of sustainable income-generating activities and strengthening of the communities' overall resilience to climate change.</p> <p>Outcome 3.2: Increase the production of degraded soils.</p>	<p>Output 3.1.1. Techniques for the sustainable use of timber and non-timber forest products developed and implemented.</p> <p>Output 3.1.2. Fishery sustainable management systems strengthened.</p> <p>Output 3.1.3. Human-Wildlife conflicts prevention and mitigation measures implemented.</p> <p>Output 3.1.4. Market chains for natural resources-based products developed.</p> <p>Output 3.2.1. Promotion of agroforestry for the restoration of degraded soils.</p> <p>Output 3.2.2. Promotion of sustainable pasture management measures.</p>	GEFTF	2,267,014	5,723,207
Component 4: Monitoring, evaluation, knowledge management and sharing.	TA	Outcome 4.1: Project implemented based on RBM, and lessons learned/best practices documented and disseminated.	<p>Output 4.1.1. Assessment and Strengthening of the communities' resilience to climate change implemented as a driving principle of the project.</p> <p>Output 4.1.2. A set of 5 manuals or guidelines for use by community-based organizations and other relevant stakeholders that capture and describe improved practices, measures and technologies</p>	GEFTF	434,242	987,500

			Output 4.1.3. A communication strategy is developed and implemented.			
			Output 4.1.4. Project Monitoring & Evaluation Plan and system in place.			
			Output 4.1.5. Mid-term and Final Project Evaluations.			
			Output 4.1.6. The Environmental and Social Management Plan (ESMP) is developed and implemented.			
	(select)			(select)		
	(select)			(select)		
	(select)			(select)		
	(select)			(select)		
Subtotal					5,111,402	8,802,707
Project Management Cost (PMC) ⁴				GEFTF	255,570	350,000
Total project costs					5,366,972	9,152,707

C. CONFIRMED SOURCES OF [CO-FINANCING](#) FOR THE PROJECT BY NAME AND BY TYPE

Please include evidence for [co-financing](#) for the project with this form.

Sources of Co-financing	Name of Co-financier	Type of Cofinancing	Amount (\$)
Donor Agency	BMZ/GIZ Germany	In-kind	2,792,000
Donor Agency	BMZ/EU TFA/GIZ Germany	In-kind	5,584,000
GEF Agency	IUCN/MEP	In-kind	776,707
(select)		(select)	
(select)		(select)	
(select)		(select)	
(select)		(select)	
(select)		(select)	
(select)		(select)	
Total Co-financing			9,152,707

⁴ 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. TRUST FUND RESOURCES REQUESTED BY AGENCY(IES), COUNTRY(IES), FOCAL AREA AND THE PROGRAMMING OF FUNDS

GEF Agency	Trust Fund	Country Name/Global	Focal Area	Programming of Funds	(in \$)		
					GEF Project Financing (a)	Agency Fee ^{a)} (b) ²	Total (c)=a+b
IUCN	GEF TF	Chad	Climate Change	(select as applicable)	2,683,486	241,514	2,925,000
IUCN	GEF TF	Chad	Land Degradation	(select as applicable)	894,495	80,505	975,000
IUCN	GEF TF	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
(select)	(select)		(select)	(select as applicable)			0
(select)	(select)		(select)	(select as applicable)			0
(select)	(select)		(select)	(select as applicable)			0
(select)	(select)		(select)	(select as applicable)			0
(select)	(select)		(select)	(select as applicable)			0
Total Grant Resources					5,366,972	483,028	5,850,000

a) Refer to the Fee Policy for GEF Partner Agencies

E. PROJECT'S TARGET CONTRIBUTIONS TO GLOBAL ENVIRONMENTAL BENEFITS⁵

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>21600 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 _{2e} mitigated (include both direct and indirect)	<i>705,685 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>

F. DOES THE PROJECT INCLUDE A “NON-GRANT” INSTRUMENT? No

(If non-grant instruments are used, provide an indicative calendar of expected reflows to your Agency and to the GEF/LDCF/SCCF/CBIT Trust Fund) in Annex D.

PART II: PROJECT JUSTIFICATION

A. DESCRIBE ANY CHANGES IN ALIGNMENT WITH THE PROJECT DESIGN WITH THE ORIGINAL PIF⁶

⁵ Update the applicable indicators provided at PIF stage. 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.

⁶ For questions A.1 –A.7 in Part II, if there are no changes since PIF, no need to respond, please enter “NA” after the respective question.

A.1. *Project Description*. Elaborate on: 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 area⁷ 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, CBIT and [co-financing](#); 5) [global environmental benefits](#) (GEFTF) and/or [adaptation benefits](#) (LDCF/SCCF); and 6) innovativeness, sustainability and potential for scaling up.

1) Global environmental problems, root causes and barriers identified at PIF stage were confirmed by the field investigations and local and national consultations led during the PPG mission. These sections have been further detailed and illustrated in the Project Document.

2) The baseline scenario and projects remain consistent with the one in the PIF. The only significant addition is the new PRCPT project, funded by the European Union and implemented by GIZ. This project is highly significant to the present RECONNECT project and constitutes a major pillar on which the incremental reasoning is built. See section 3.5 and 4.7 of the Project Document for further details.

3) The proposed alternative scenario and GEF focal areas strategies remain the same than the one proposed at PIF stage. Expected outcomes and outputs have been refined within each components, the latter remaining unchanged compared to the PIF. The changes introduced in the outcomes and outputs aim to match the stakeholder needs identified during the consultations and to adapt to the environmental and socio-economic situation in MKO region, as understood during the field investigations. Please refer to sections 4.1, 4.2 and 4.3 of the Project Document for further details.

4) The incremental reasoning was built based on the updated baseline. It remains globally consistent with the one proposed in the PIF, and it was refined regarding the activities of the baseline and co-financing projects and the value-added of the RECONNECT project. The co-financing are all in-kind. The equivalent amounts were refined directly with the corresponding project team leaders at GIZ, KfW, etc. The equivalent amounts proposed at CEO endorsement stage were reduced because the co-financing project team leaders considered that they should only provide the activities actually implemented in MKO or Chad as a co-financing, and not the activities implemented in Cameroon or in other countries, which may be interested in benefiting from these co-financing for their own national projects.

5) No change introduced.

6) See section 4.8 of the Project Document

A.2. *Child Project?* If this is a child project under a program, describe how the components contribute to the overall program impact.

N/A

A.3. *Stakeholders*. Elaborate on how the key stakeholders engagement, particularly with regard to [civil society organizations](#) and [indigenous peoples](#), is incorporated in the preparation and implementation of the project.

During the PPG mission, community organizations and civil society were extensively consulted on the issue of natural resource management, their perspectives and the design of the project. These included canton development associations (Associations de Développement du Canton - ADC); local associations coordinating natural resource management (Instances Locales d'Orientation et de Décision - ILOD); management committees (Comités de Gestion - CG); village safeguard committees (Comités Villageois de Surveillance - CVS); and community-based organizations. Additional attention was paid on how to integrate vulnerable groups (women and transhumant pastoralist). These considerations were integrated into the project components and are detailed in sections 3.4 and 6 of the Project Document.

A.4. *Gender Equality and Women's Empowerment*. Elaborate on how gender equality and women's empowerment issues are mainstreamed into the project implementation and monitoring, taking into account the differences, needs, roles and priorities of women and men.

The project recognizes that women are under represented in positions of responsibility within civil society organizations and local institutions, including as concerns land planning and natural resource management, and face significant barriers to securing resource rights. Women's groups and vulnerable populations have been involved systematically in discussions linked to the definition of the activities that are to be financed by the project and during the PPG field mission, efforts were made to meet with women. All consultations were required to be done in the presence of men. The activities proposed have been defined taking into account the social and cultural characteristics peculiar to the project

⁷ 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..

intervention area, while bearing in mind the need to involve men and women equally. They include activities to raise awareness on these issues and promote actions that will raise the economic power of women, including potentially activities to enhance their skills and knowledge, promote social organization, the provisioning of equipment, investments in income-generating activities and providing access to credit. Many of the indicators proposed to monitor the impacts of the project are disaggregated between men and women to better track the project's success at addressing the roles and priorities of women. See section 4.9 of the Project Document for further details.

A.5 Risk. Elaborate on indicated risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, the proposed measures that address these risks at the time of project implementation.(table format acceptable):

A comprehensive risk analysis was conducted based on the field visits and the consultations carried out during the PPG mission. A comprehensive risk analysis matrix is provided in section 4.4 of the Project Document. Please also refer to field mission report, attached as Appendix 13 to the ProDoc, for further details.

A.6. Institutional Arrangement and Coordination. Describe the institutional arrangement for project implementation. Elaborate on the planned coordination with other relevant GEF-financed projects and other initiatives. The execution of the project will be under the responsibility of the Ministry of the Environment and Fisheries Resources (MEP), Republic of Chad. The International Union for Conservation of Nature (IUCN) is the project's implementing agency. IUCN will support the MEP to ensure execution of administrative and financial matters and will assist in key technical and scientific issues. A national Steering Committee (SC) in an advisor capacity for implementation activities. The Project Management Unit (PMU) will be responsible for planning operational and day-to-day implementation of the project components. Additional details on the institutional arrangements can be found in Section 5 of the Project Document.

The project is structured to align with and reinforce the practices for local governance of natural resources implemented by the Government of Chad in partnership with GIZ via the PRODALKA project and the European Union via PADLGRN and PRCPT, as well as numerous other past and ongoing initiatives. Additional details on these projects can be found in Sections 3.5.1 and 3.5.2 of the Project Document.

The proposed project is consistent with GEF-6 focal area strategies for land degradation (LD), climate change mitigation (CCM) and sustainable forest management (SFM) and will be implemented in close coordination with multiple current and past GEF interventions related to these three targeted focal area strategies in Chad. A full list of these initiatives is provided in Section 3.5.3 of the Project Document..

Additional Information not well elaborated at PIF Stage:

A.7 Benefits. Describe the socioeconomic benefits to be delivered by the project at the national and local levels. How do these benefits translate in supporting the achievement of global environment benefits (GEF Trust Fund) or adaptation benefits (LDCAF/SCCF)?

The project will focus on the adoption of best practices in forestry and the management of agro-sylvo-pastoral systems. These systems are the foundation of local communities' survival and livelihoods. In establishing best practices, the project will deliver a multiplication of sustainable co-benefits. These include benefits associated with production and yield, as well as maintaining the ecosystems' capacity to provision non-timber forest products, fodder and building material. Many of these co-benefits have the potential to increase food security and support livelihoods.

A.8 Knowledge Management. Elaborate on the knowledge management approach for the project, including, if any, plans for the project to learn from other relevant projects and initiatives (e.g. participate in trainings, conferences, stakeholder exchanges, virtual networks, project twinning) and plans for the project to assess and document in a user-friendly form (e.g. lessons learned briefs, engaging websites, guidebooks based on experience) and share these experiences and expertise (e.g. participate in community of practices, organize seminars, trainings and conferences) with relevant stakeholders.

Knowledge management is an integral part of the project design (see Component 4). As stated above, the project also builds heavily on previous initiatives and projects implemented in the MKO, as detailed in Section 3.5.1. Consequently, during the PPG mission, particular attention was paid to assessing the outcomes of these projects. Initiatives, actions

and activities that did not produce the desired results have been analysed to avoid repeating mistakes, and project managers of these past or on-going initiatives were extensively consulted during the scoping and the field missions of the PPG phase.

B. DESCRIPTION OF THE CONSISTENCY OF THE PROJECT WITH:

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


See section 4.5 of the Project Document.

C. DESCRIBE THE BUDGETED M & E PLAN: See section 7. of the Project Document.

PART III: CERTIFICATION BY GEF PARTNER AGENCY(IES)

A. GEF Agency(ies) certification

This request has been prepared in accordance with GEF policies⁸ and procedures and meets the GEF criteria for CEO endorsement under GEF-6.

Agency Coordinator, Agency Name	Signature	Date (MM/dd/yyyy)	Project Contact Person	Telephone	Email Address
Jean-Yves PIROT		09/28/2017	Jacques SOMDA		jacques.somda@iucn.org

⁸ GEF policies encompass all managed trust funds, namely: GEFTF, LDCF, SCCF and CBIT
GEF6 CEO Endorsement /Approval Template-August2016

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

See Section 2. in the Project Document

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

See Annex B in a separate Word Document.

ANNEX C: STATUS OF IMPLEMENTATION OF PROJECT PREPARATION ACTIVITIES AND THE USE OF FUNDS⁹

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

PPG Grant Approved at PIF: USD 150,000			
<i>Project Preparation Activities Implemented</i>	<i>GETF/LDCF/SCCF/CBIT Amount (\$)</i>		
	<i>Budgeted Amount</i>	<i>Amount Spent To date</i>	<i>Amount Committed</i>
Firm contract (incl. ESMS, Travels, Meeting cost, Translation)	117,615	82,060	29,285
IUCN missions	15,000	8,462	
Workshops	5,000	9,478	
Agency fee	12,385	9,309	3,075
Total	150,000	109,309	32,360

⁹ If at CEO Endorsement, the PPG activities have not been completed and there is a balance of unspent fund, Agencies can continue to undertake the activities up to one year of project start. No later than one year from start of project implementation, Agencies should report this table to the GEF Secretariat on the completion of PPG activities and the amount spent for the activities. Agencies should also report closing of PPG to Trustee in its Quarterly Report.

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

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

N/A



no

International Union for Conservation of Nature

Country: Chad

PROJECT DOCUMENT

Final version

Restoring ecological corridors in the Mayo-Kebbi Ouest, Chad, to support multiple land and forests benefits - RECONNECT

Brief Description of the project

The proposed GEF-funded project “Restoring ecological corridors in the Mayo-Kebbi Ouest, Chad, to support multiple land and forests benefits (RECONNECT)” will be implemented by the International Union for Conservation of Nature (IUCN). This project will support the adoption of best-practices in forestry and the management of agro-sylvo-pastoral systems in the Mayo-Kebbi Ouest Region (MKO) of Chad.

The MKO is one of the two most densely inhabited regions of the country. Most of its primarily rural population lives below the poverty line and relies on farming and livestock for their survival and livelihoods. The natural environment of the MKO is continuing to be negatively affected by a combination of natural factors and human practices, including overexploitation. This has resulted in significant increases in the loss, degradation and fragmentation of natural forest areas. Current land use practices are some of the primary sources of greenhouse gas emissions in the MKO. In addition, unsustainable practices have contributed to a decrease in the productivity of land and the disappearance of large mammals over much of the area. These natural factors and the evolving socio-ecological context in the MKO are resulting in increased competition and confrontations over the region's natural resources.

The proposed project aims to improve sustainability and expand positive impacts of natural resource management techniques by providing existing local structures and systems the skills, knowledge and means to operate and establish or strengthen best-practices in the management of the MKO's natural forested areas and agro-sylvo-pastoral systems.

The project is structured to align with and reinforce the practices for local governance of natural resources implemented by the Government of Chad in partnership with GIZ and the European Union. This project is highly consistent with the Government of Chad's national priorities, plans, and policies and is consistent with GEF-6 focal area strategies for land degradation (LD), climate change mitigation (CCM) and sustainable forest management (SFM).

Given the high proportion of the population of the MKO that is dependent on local natural resources for their livelihoods and other ecological services, the project will engage the diverse set of social groups in the MKO to address these trends and adopt more sustainable natural resources management systems. Adopting best-practices in forestry (including soil and forest restoration) and the management of agro-sylvo-pastoral systems will provide an important means for the MKO and Chad more broadly to maintain and increase their carbon stocks, thereby reducing greenhouse gas emissions and increasing carbon sequestration. It will also offer additional co-benefits by minimizing the negative environmental impacts of these systems.

List of Acronyms

BMZ	Federal Ministry for Economic Cooperation and Development, Germany
CCD	Comité Cantonal de Développement / Canton Development Committee
CBD	Convention on Biological Diversity
CTD	Collectivité Territoriale Décentralisée / Local territorial community
CVS	Comité Villageois de Surveillance / Safeguard Village Committee
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and Social Management Plan
ESMS	Environmental and Social Management System
EU	European Union
EX-ACT	Ex-Ante Carbon-balance Tool – FAO
FAO	Food and Agriculture Organization
FPIC	Free prior informed consent
GEF	Global Environment Facility
GGO	IUCN's Global Gender Office
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit / German technical cooperation
IFC	International Finance Corporation
ILOD	Instances Locales d'Orientation et de Décision / Local Decision and Orientation Authorities
IUCN	International Union for Conservation of Nature
JICA	Japan International Cooperation
KfW	Kreditanstalt für Wiederaufbau / German financial cooperation
MKO	Mayo-Kebbi Region
MEP	Ministère de l'Environnement et des Pêches / Ministry of the Environment and Fisheries Resources
NGO	Non-governmental organization
PAAS	Project Appraisal and Approval System
PADL-GRN	Programme d'Appui au Développement Local et à la Gestion des Ressources Naturelles / Support to Local Development and Natural Resource Management
PARCC	Projet « Aires Protégées Résilientes au Changement Climatique » / « Protected Areas Resilient to Climate Change » Project
PCGRN	Projet Conservation et Gestion des Ressources Naturelles / Natural resource conservation and management project

PCMS	Project Complaints Management System
PDL	Plan de Développement Local / Local Development Plan
PFO	Point Focal Opérationnel / Operational Focal Point
PGS	Project Guidelines and Standards
PIF	Project Identification Form
PPG	Projet Preparation Grant
PRCPT	Projet de Renforcement de la Résilience et de la Cohabitation Pacifique au Tchad / Strengthening resilience and peaceful cohabitation in Chad
PRODALKA	Programme de Développement Rural Décentralisé du Mayo Dallah, du Lac Léré et de la Kabbia / Decentralized rural development in Mayo Dallah, Léré Lake and Kabbia Region
PRODOC	Project Document
RAPTA	Resilience Adaptation Pathways and Transformation Assessment Framework
RBA	Rights-based approach
SABV	Schéma d'Aménagement de Bassin Versant / River Basin Master Plan
SAT	Schéma d'Aménagement de Territoire / Land Planning Document
SSD	Schéma Directeur de la Décentralisation / Decentralization Planning Document
STAP	Scientific and Technical Advisory Panel
ToR	Terms of references
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change

Table of contents

1	Project Profile	6
1.1	Project title	6
1.2	Project Number (GEF ID / IUCN ID)	6
1.3	Project type (FSP or MSP).....	6
1.4	Trust Fund	6
1.5	GEF strategic objectives and focal areas.....	6
1.6	IUCN programme priority	6
1.7	Geographical scope	6
1.8	Project executing agency/ies	6
1.9	Duration of project (including expected start and end dates)	6
1.10	Project cost (Summary)	6
2	Project Results Framework.....	7
3	Background and situation analysis (Baseline course of action)	15
3.1	Background and context	15
3.1.1	Environmental and Socio-economic context	15
3.1.2	Institutional, sectoral and policy context.....	18
3.2	Global environment problem	22
3.3	Threats, roots causes and barriers analysis.....	23
3.3.1	Threats.....	23
3.3.2	Root causes	26
3.3.3	Barrier analysis	28
3.3.5	Summary of the threats, root causes and barriers.....	29
3.4	Stakeholder analysis.....	29
3.5	Baseline analysis and gaps	38
3.5.1	Past and planned national actions and projects	38
3.5.2	Past and planned regional actions and projects.....	41
3.5.3	GEF interventions	42
3.5.4	Gaps to be filled	43

3.5.5	Identified co-financing	44
4	Intervention strategy (alternative)	45
4.1	Project rationale and expected global environmental benefits	45
4.2	Project goal and expected impact	45
4.3	Project components, their expected outcomes and outputs and planned activities	46
4.4	Risk analysis and risk management measures	58
4.5	Consistency with national priorities and plans	58
4.6	Project alignment with IUCN Programme	59
4.7	Incremental cost reasoning (for GEF projects)	61
4.8	Sustainability	67
4.8.1	Financial and economic sustainability	68
4.8.2	Institutional sustainability	68
4.8.3	Resilience strengthening	68
4.9	Gender equality and inequality issues	69
4.10	Replication	69
4.11	Communication and knowledge management	70
4.12	Environmental and social safeguards	71
5	Institutional framework and implementation arrangements	74
5.1	National and local decision making and planning	74
5.2	Project coordination and management	74
5.3	Procurement procedures and plan	76
6	Stakeholder engagement and participation	77
7	Monitoring and evaluation plan	79
8	Project financing and budget	81
9	Appendices	88

1 Project Profile

- 1.1 Project title** Restoring ecological corridors in Mayo-Kebbi Ouest, Chad, for multiple land and forests benefits - RECONNECT
- 1.2 Project Number (GEF ID / IUCN ID)** GEF ID: 9417
- 1.3 Project type (FSP or MSP)** Full-sized Project (FSP)
- 1.4 Trust Fund** GEF Trust Fund
- 1.5 GEF strategic objectives and focal areas** GEF Strategic Objectives
Multi-focal Areas (Climate Change Mitigation, Land Degradation and Sustainable Forest Management).
- 1.6 IUCN programme priority** (1) valuing and conserving nature (2) effective and equitable governance of nature's use, and (3) Deploying nature-based solutions to societal challenges to tackling problems of sustainable development, particularly in climate change, food security and social and economic development.
- 1.7 Geographical scope** Mayo-Kebbi Ouest Region, Chad
- 1.8 Project executing agency/ies** **Implementing Agency:** International Union for Conservation of Nature (IUCN)
Executing Agency: Ministry of the Environment and Fisheries Resources, Republic of Chad. Forestry and Fight against Desertification Directorate.
- 1.9 Duration of project (including expected start and end dates)** 5 years (2018-2023)
Expected start date: first semester 2018.

1.10 Project cost (Summary)

Item	USD
A. GEF financing	5,366,972
B. Co-financing	
- BMZ/GIZ (BSB Yamoussa)	2,792,000 (33% of 8,374,000)
- BMZ/EU Trust Fund AFRICA/GIZ	5,584,000 (33% of 13,780,000)
- International Union for Conservation of Nature (IUCN) - Implementing Agency/ Ministry of the Environment and Fisheries Resources, Republic of Chad – Executing Agency	776,707
C. Sub-total co-financing	9,152,707
D. Total (A+C)	14,519,679

2 Project Results Framework

Objective/Outcome/Output	Indicators	Baseline	End of project targets	Source of verification	Assumptions / Risks
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					
Outcome 1.1. Improvement in the commitment and capacity of various stakeholders for the long-term, joint community-based sustainable management of natural resources	1.1.a. Number of organizations / institutions (disaggregated by category) adopting and implementing best practice techniques for natural resource management as a result of project assistance	1.1.a: TBD	1.1.a: 173		<u>Assumptions:</u> ADC (or ILOD) involved and committed.
<i>Output 1.1.1.</i> Capacity of 13 existing orientation and decision-making authorities (ILOD) and 9 existing local development association (ADC) in the institutional governance of natural resources improved with a view to restoring forest ecosystems in the project area	<p>1.1.b: Number of organizations (category disaggregated) assessed and with capacity building plans implemented</p> <p>1.1.c: Number of individuals (gender disaggregated) with improved capacity in project management</p> <p>1.1.d: Number of ILOD and ADC (category disaggregated) equipped to adequately monitor PDL implementation</p> <p>1.1.e: Number of organizations (category disaggregated) holding annual governance meeting</p> <p>1.1.f: Number of exchange visits organized</p> <p>1.1.g: Number of annual</p>	<p>1.1.b: 0</p> <p>1.1.c: 0</p> <p>1.1.d: 0</p> <p>1.1.e: 9</p> <p>1.1.f: 0</p>	<p>1.1.b: 22 (13 + 9)</p> <p>1.1.c :198 (9 per organization)</p> <p>1.1.d: 22 (13 + 9)</p> <p>1.1.e: 22 (13 + 9) (1 per year per organization)</p> <p>1.1.f: 12 (3 per year)</p>	<p>Annual project progress reports</p> <p>Capacity-building plan and associated material</p> <p>Training workshop reports</p> <p>Minutes of meetings</p> <p>Study tour reports</p>	

Restoring ecological corridors in the Mayo-Kebbi Ouest, Chad, to support multiple land and forests benefits - (RECONNECT) – Project Document

	meetings (category disaggregated) with CRA and CDA organized	1.1.g: 1	1.1.g: 4		
<i>Output 1.1.2.</i> Capacity for forest restoration and management of 151 community-based organizations improved	<p>1.1.h: Number of community-based organizations (category disaggregated) trained on forest restoration and management</p> <p>1.1.i: Number of members of community-based organization (gender disaggregated) trained on forest restoration and management</p>	<p>1.1.h: 0</p> <p>1.1.i: 0</p>	<p>1.1.h: 151</p> <p>1.1.i: 604 (4 persons per organization)</p>	<p>Annual project progress reports</p> <p>Training program and training material</p> <p>Training workshop reports</p> <p>Field mission reports</p>	<p><u>Assumption:</u></p> <p>The assessment of the number of Safeguard Village Committees involved in management tools other than Land Management Plan (SAT) has to be refined.</p>
<i>Output 1.1.3.</i> Capacity for natural resources management of MEP extension services in the project area improved	<p>1.1.j: Number of MEP extension services (category disaggregated) trained on management of natural resources</p> <p>1.1.k: Number of MEP staff (gender disaggregated and category disaggregated) trained in management of natural resources</p>	<p>1.1.j: 0</p> <p>1.1.k: 0</p>	<p>1.1.j: 30</p> <p>1.1.k: 60 (2 persons per extension service)</p>	<p>Annual project progress reports</p> <p>Training program and training material</p> <p>Training workshop reports</p> <p>Field mission reports</p>	<p><u>Assumption:</u></p> <p>Trained local MEP staff do not leave their position/sector once they acquire skills and equipment</p>
<i>Output 1.1.4.</i> Transhumant / semi-nomadic pastoralists engaged in the long-term, joint community-based sustainable management of natural resources in the project area	<p>1.1.l: Number of events held to raise awareness of transhumant / semi-nomadic pastoralists on land use and natural resource management</p> <p>1.1.m: Number of transhumant / semi-nomadic pastoralists (disaggregated by gender)</p>	<p>1.1.l: 0</p> <p>1.1.m: 0</p>	<p>1.1.l: 50</p> <p>1.1.m: TBD</p>		

Restoring ecological corridors in the Mayo-Kebbi Ouest, Chad, to support multiple land and forests benefits - (RECONNECT) – Project Document

	that participated in events to raise awareness on land use and natural resource management as a result of project assistance 1.1.n: Number of MEP staff (disaggregated by gender) with increased capacity (i.e., skills and knowledge) to engage with transhumant / semi-nomadic pastoralists on land use and natural resource management	1.1.n: 0	1.1.n: 45		
Outcome 2.1. Increase in the capacity for CO2 sequestration through the sustainable management of forest ecosystems over 21 600 ha	2.1.a: Number of hectares benefiting from restoration interventions (natural regeneration, sustainable forest management) 2.1.b: Number of hectares with reduced rate loss of carbon 2.1.c.: Number of hectares with increased carbon stock 2.1.d: Quantity of emissions measured in t CO2 equivalent reduced and sequestered. 2.1.e: Number of formally endorsed Local Development Plans (PDL)	2.1.a: 0 2.1.b: <i>TBD</i> 2.1.c: <i>TBD</i> 2.1.d: <i>TBD</i> 2.1.e: 0	2.1.a: 21 600 ha 2.1.b: +1,710 ha 2.1.c: +7,200 ha 2.1.d: -705,685t CO2eq 2.1.e: 20	Annual project progress reports Project database Final evaluation Local Development plans available	<u>Assumptions:</u>
<i>Output 2.1.1.</i> Critical forest blocks identified	2.1.f: Number of forest blocks mapped and assessed 2.1.g: Number of selected forest blocks	2.1.f: 0 2.1.g: 0	2.1.f: 67 2.1.g: 51	Annual project progress reports Survey reports Project database	<u>Assumption:</u> Deforestation dynamic doesn't not prevent the selection of forest blocks

Restoring ecological corridors in the Mayo-Kebbi Ouest, Chad, to support multiple land and forests benefits - (RECONNECT) – Project Document

<i>Output 2.1.2.</i> Operational and technical means of 151 community-based organizations to implement natural resources management established	2.1.h: Number of community-based organizations operational over the selected forest blocks 2.1.i: Number of monthly field missions led by community-based organizations	2.1.h: 0 2.1.i: <i>TBD</i>	2.1.h: 151 2.1.i: 604 (4 per month per organization)	Annual project progress reports	<u>Assumption:</u> ADC (or ILOD) involved and committed.
<i>Output 2.1.3.</i> Operational and technical means of MEP extension services to implement natural resources management established	2.1.j: Number of MEP extension services operational over the selected forest blocks 2.1.k: Number of monthly field missions led by MEP extension services implemented	2.1.j: 0 2.1.k: <i>TBD</i>	2.1.j: 30 2.1.k: 90 (3 per month per services)	Annual project progress reports	<u>Assumption:</u> MEP extension services involved and committed.
<i>Output 2.1.4.</i> Management documents (Charter, Convention and SAT) for the regulation of forest blocks developed, endorsed, implemented, enforced and monitored	2.1.l: Number of forest management documents developed, endorsed, implemented and enforced	2.1.l: 0	2.1.l: 51	Annual project progress reports Endorsed management documents available Field reports Project database	<u>Assumption:</u> Continued commitment of all stakeholders to collaborate;
<i>Output 2.1.5.</i> Sustainable financing mechanisms for the long-term community-based management of natural resources established, as laid out in the 20 updated Local Development Plans (PDL)	2.1.m: Number of sustainable financing mechanisms piloted	2.1.m: 0	2.1.m: 20 (1 per canton)	Annual project progress reports Endorsed management documents available	<u>Assumption:</u> Continued commitment of all stakeholders to collaborate;

Restoring ecological corridors in the Mayo-Kebbi Ouest, Chad, to support multiple land and forests benefits - (RECONNECT) – Project Document

Outcome 3.1: Sustainable use of natural resources, including development of sustainable income-generating activities and strengthening of the communities' overall resilience to climate change	3.1.a: Number of communities where improved techniques for natural resources management are integrated and implemented in sustainable development strategies.	3.1.a: 0	3.1.a: 36	Annual project progress reports Interviews of local community organizations	<u>Assumption / Risk:</u> Changes in economic conditions that may derail communities' commitment
	3.1.b. Number of communities' members (disaggregated into gender and social differentiation) using improved techniques for natural resources management	3.1.b. <i>TBD</i>	3.1.b. 10% increase from baseline	Annual project progress reports Interviews of local communities members	
	3.1.c: Percentage of women using improved techniques for natural resources management	3.1.c: <i>TBD</i>	3.1.c: 20% increase from baseline		
<i>Output 3.1.1.</i> Techniques for the sustainable use of timber and non-timber forest products developed and implemented.	3.1.d: Number of sustainable harvest guidelines for the key timber and non-timber forest products developed	3.1.d: 0	3.1.d: 5	Guidelines available Endorsed management documents available	
	3.1.e: Number of forest blocks where sustainable harvest guidelines for key timber and non-timber forest products are implemented through their management document	3.1.e: 0	3.1.e: 36		
	3.1.f. Number of community members using sustainable harvest guidelines for key timber and non-timber products	3.1.f: <i>TBD</i>	3.1.f: 10% increase from baseline	Annual project progress reports Interviews of local communities members	
<i>Output 3.1.2.</i> Fishery sustainable management systems strengthened.	3.1.g: Number of sustainable fishery management plans developed, endorsed, implemented and enforced	3.1.g: 0	3.1.g: 2 (1 per lake)	Endorsed fishery management plans available	

Restoring ecological corridors in the Mayo-Kebbi Ouest, Chad, to support multiple land and forests benefits - (RECONNECT) – Project Document

<i>Output 3.1.3.</i> Human-Wildlife conflicts prevention and mitigation measures implemented.	3.1.h: Percentage decrease of elephant and hippopotamus generated-conflicts	3.1.h: <i>TBD</i>	3.1.h: 50%	Field reports Interviews of local community organizations	
<i>Output 3.1.4.</i> Market chains for natural resources-based products developed.	3.1.i: Number of market chains for natural resources-based products developed 3.1.j: Percentage increase in income from natural resources-based products (disaggregated by gender)	3.1.i: 0 3.1.j: <i>TBD</i>	3.1.i: 20 (1 per canton) 3.1.j: 15% increase from baseline		
Outcome 3.2: Increase the production of degraded soils.	3.2.a: Number of hectares being managed using improved practices including agroforestry and pasture management measures	3.2.a: 0	3.2.a: 7 200 ha	Annual project progress reports Project database	
<i>Output 3.2.1.</i> Promotion of agroforestry for the restoration of degraded soils.	3.2.b: Number of communities to which best practices are promoted	3.2.b: 0	3.2.b: 36	Interviews of local community organizations	
<i>Output 3.2.2.</i> Promotion of sustainable pasture management measures.	3.2.c: Number of communities to which best practices are promoted 3.2.d: Number of livestock farmers engaged in sustainable pasture management practices	3.2.c: 0 3.2.d: <i>TBD</i>	3.2.c: 36 3.2.d: 10% increase from baseline	Interviews of local community organizations	
Outcome 4.1. Project implemented based on RBM, and lessons learned/best practices documented and disseminated.					
<i>Output 4.1.1.</i> Assessment and Strengthening of the communities' resilience to climate change implemented as a driving principle of the project.	4.1.a: Number of the steps of the RAPTA methodology implemented 4.1.b: Number of communities involved in RAPTA process	4.1.a: 0 4.1.b: 0	4.1.a: 7 4.1.b: 36		

Restoring ecological corridors in the Mayo-Kebbi Ouest, Chad, to support multiple land and forests benefits - (RECONNECT) – Project Document

<i>Output 4.1.2.</i> A set of 5 manuals or guidelines for use by community-based organizations and other relevant stakeholders that capture and describe improved practices, measures and technologies.	4.1.c: Number of guidelines available	4.1.c: 0	4.1.c: 5	Guideline documents disseminated	
<i>Output 4.1.3.</i> A communication strategy is developed and implemented.	4.1.d: Number of communication tools developed and implemented 4.1.e: Number of annual communication events developed and implemented	4.1.d: 0 4.1.e: 0	4.1.d: 2 4.1.e: 20 (1 per canton)	Annual project progress reports Communications tools Communication event report	
<i>Output 4.1.4.</i> Project Monitoring & Evaluation Plan and system developed and implemented.	4.1.e: Project M&E plan developed and validated 4.1.f: Number of annual progress reports produced	4.1.e: 0 4.1.f: 0	4.1.e: 1 4.1.f: 4	Annual project progress reports	
<i>Output 4.1.5.</i> Mid-term and Final Project Evaluations.	4.1.g: Number of evaluation report produced	4.1.g: 0	4.1.g: 2	Mid-term and Final evaluations	
Outcome 5.1: The project is effectively and efficiently managed.					
<i>Output 5.1.1:</i> Project management team established and functional	5.1.a: Number of project management unit established 5.1.b: Number of local project coordination unit established 5.1.c: Number of the project steering committee reports	5.1.a: 0 5.1.b: 0 5.1.c: 0	5.1.a: 1 5.1.b: 1 5.1.c: 4	Mid-term and Final evaluations	

3 Background and situation analysis (Baseline course of action)

3.1 Background and context

3.1.1 Environmental and Socio-economic context

Chad is a landlocked country in Central Africa covering 1,284,000 km². It is bordered by Libya to the north, Sudan to the east, the Central African Republic to the south, Cameroon and Nigeria to the southwest and Niger to the west. The country comprises two principal natural regions: the desert and sub-desert zone (Sahelo-Saharan) in the north and the savanna zone (Sahelo-Sudanian) in the south. Chad's population, estimated at 13.5 million people in 2014 (3.3% annual growth rate), is primarily rural and relies on a rural economy centered on agro-sylvo-pastoral systems. These systems accounted for 53% of the country's GDP in 2014 (32% for services and 15% for industry). Approximately 47% of the population lives below the poverty line and Chad has the fourth lowest Human Development Index value in the world (185th country out of 188). A long period of political instability characterized by a series of armed conflicts both within Chad itself and with neighboring countries (Libya, Sudan), have contributed to the current situation.

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. The high dependence of subsistence agriculture and/or cash crops (notably cotton) on rainfall patterns underscores how vulnerable the rural economy is to climate change.

Current land use practices (forestry, agro-sylvo-pastoralism) are some of the main sources of greenhouse gas emissions, as detailed in official communications between the Government of Chad and the United Nations Framework Convention on Climate Change. Adopting best-practices in forestry and the management of agro-sylvo-pastoral systems (including soil and forest restoration) provides an important means for Chad to maintain and increase their carbon stocks, thereby reducing greenhouse gas emissions and increasing carbon sequestration. Applying best practices will offer additional co-benefits by minimizing the negative environmental impacts of these systems.

Made up of three departments (Mayo-Dallah, Lake Léré and Mayo-Binder), 13 sub-prefectures and 20 cantons, the MKO contains 516 villages and is bordered by Cameroon to the west. Figure 1 provides a detailed map of the project area. A land cover assessment in 2006 reported that agriculture covered 59% of the surface area of the MKO, while natural forested areas (forests and woodlands) and open areas (grass and shrub savannas) accounted for 34% and 5% respectively. There are three protected areas in the region, which occupy almost 18% of its surface area: the Yamba Berté Forest Reserve (654 km²), the Binder Léré Wildlife Reserve (created in 1974; 1,350 km²) and the Sena-Oura National Park (2009; 798 km²). Sena-Oura National Park borders Bouba Ndjida National Park in Cameroon, with which it has a bilateral cooperation agreement.

The rural economy of the MKO is comprised of a diverse set of agro-sylvo-pastoral systems. Agriculture employs 80% of the population and is the predominant economic activity. It is characterized by a predominance of cereal subsistence crops (e.g., sorghum, pearl millet, rice), traditional cash crops (e.g., maize), cotton, which seems to be in decline (land area used for cotton decreased by 30% between 2008 and 2010) and the development of new cash crops (e.g., peanut, cowpea, sesame). The MKO is also an area frequented by transhumant herders. More recently, and for multiple social and environmental reasons, the number of sedentary pastoralists has grown. The area now has significant numbers of sedentary agro-pastoralists (who have small herds) and transhumant pastoralists (with large herds). Livestock inhabiting and travelling through the MKO are primarily fed from natural pastures. Fishing is also a key economic activity in MKO region, especially around Lake Léré and Lake Tréné with around 1500t/year exported towards large cities in Chad and Cameroun. The role of the trade in bushmeat and wildlife poaching in the local economy is marginal.

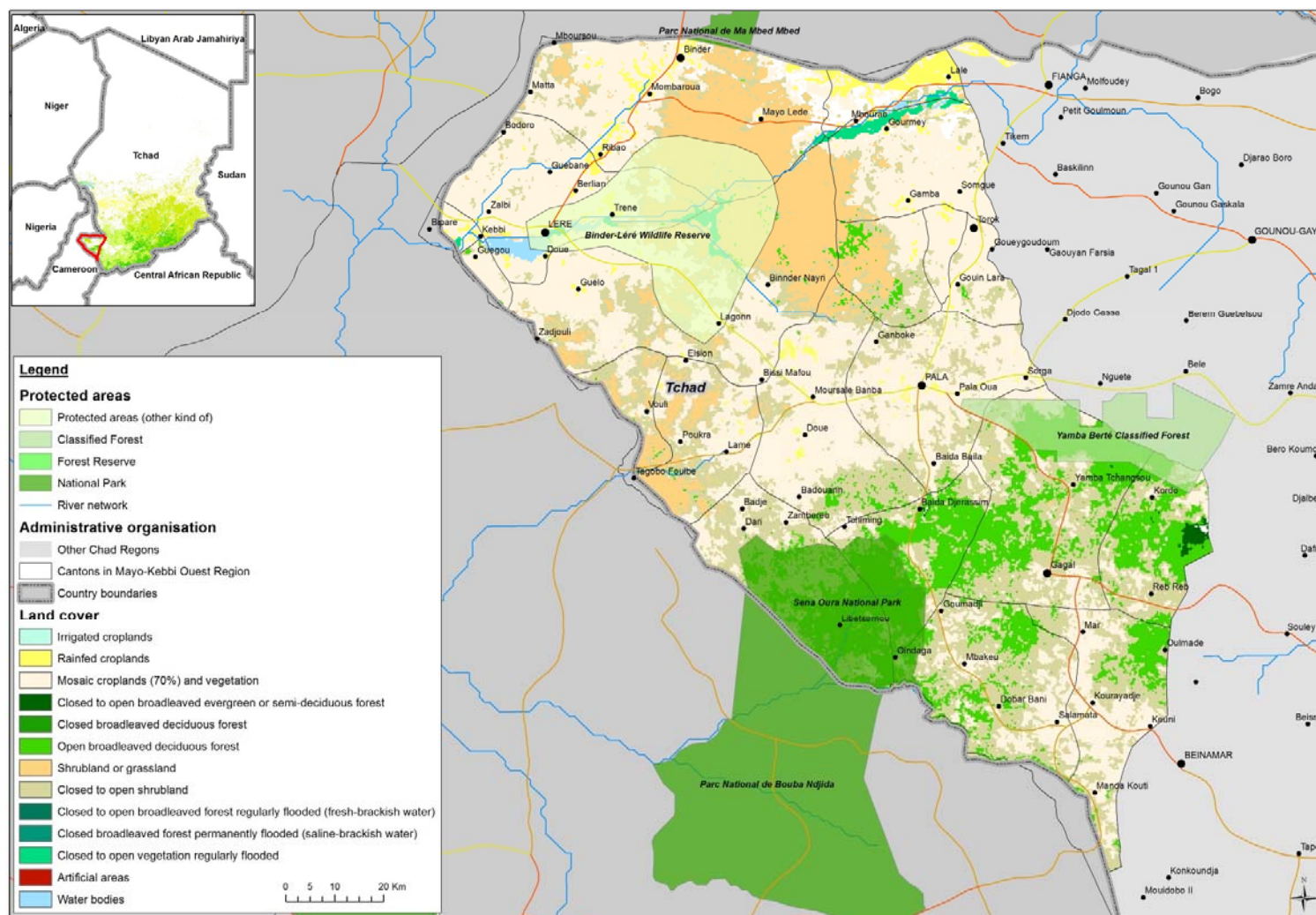
At present, the natural environment in the MKO is becoming degraded due to a combination of natural factors and human practices. Competition and overexploitation of resources are also increasing. The lack of adequate data makes it difficult to quantify these changes or systematically assess the

vulnerability of local populations; however, given the high proportion of the population of the MKO that is dependent on local natural resources for their livelihoods and other ecological services, there is an acute need to engage the diverse set of social groups in the MKO to address these trends and adopt more sustainable natural resources management systems.

Currently, multiple types of social organization exist within the MKO. Within the sector of natural resource management, numerous structures exist at both the level of canton and villages. These structures have different mandates (see Figure 2 and Section 3.4 for a more detailed presentation) and exhibit a wide range of functionality. They include: canton development associations (*Associations de Développement du Canton* - ADC); local associations coordinating natural resource management (*Instances Locales d'Orientation et de Décision* - ILOD); management committees (*Comités de Gestion* - CG); village safeguard committees (*Comités Villageois de Surveillance* - CVS). In addition, the Ministry of the Environment and Fisheries Resources (MEP) is locally present through a network of decentralized services (*Services Techniques* – ST).

Previous projects have dedicated significant capacity to developing these structures to coordinate and implement more sustainable natural resource management in the MKO region, but these structures have not received the continuous support necessary to establish themselves and fulfil their mandates.

Figure 1: Location map. Map of the land cover and protected areas within the Mayo Kebbi Ouest Region. Source: BRLi.



3.1.2 Institutional, sectoral and policy context

Natural resource management

The upper part of the diagram presented in Figure 2 depicts the current institutional set-up related to natural resource management in Chad. The **Ministry of the Environment and Fisheries Resources** (MEP), across its technical directorates and agencies, oversees the national mandates related to natural resource management: forestry, protected areas, wildlife and biodiversity conservation, fisheries resources and bushfire management. The Directorate of Forestry and Fight against Desertification, the Directorate of Wildlife Conservation and Protected Areas, and the Directorate of Climate Change, rely on a small set of policy documents that do not fully cover every sector (e.g., there is no national forestry policy), and include:

- National Bush Fire Management Strategy – Regional Bush Fire Management Strategy in MKO;
- National Strategy for Non-Timber Forest Products development;
- National Strategy and Action Plan for Biological Diversity (within the CBD framework)
- National Strategy for Environmental Education;
- The National Action Plan for Adaptation to Climate Change (NAPA), the First and Second National Communication (UNFCCC, 2012), and the Intended Nationally Determined Contribution (INDC) to the Paris Agreement (2015);
- Regional Action Plan and Local Action Plan (PAR/PAL), implemented by the Region.

The devolved State administration's technical services face significant obstacles to implementing national sectoral policies in the agricultural, pastoral and forestry sectors. This is partially linked to sectoral compartmentalization, as well as to a lack of sufficient resources (i.e., 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 influence over the main systems that control 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.

The MEP also develops projects through a newly created national fund: the “Special Fund for the Environment” (FSE). This fund supports investments in four key areas:

- Biodiversity conservation;
- Combating desertification;
- Fight against climate change (mitigation and adaptation projects);
- Capacity strengthening, pollution reduction, environmental risks.

It is worth noting that the *National Strategy and Action Plan to implement the Great Green Wall in Chad* monitored by the Great Green Wall National Agency does not cover the MKO.

Poverty reduction and national development

The National Development Plan (“*Plan National de Développement*”, PND) (2013-2015) is the primary development policy in Chad. Based on the President of the Republic’s vision, it aims to strengthen the bases of economic and social growth and make Chad an emerging country by 2025. The environmental component, notably the fight against desertification and biodiversity conservation, occupies an important place in this plan, being allocated over XAF 104 billion.

Agriculture / Livestock

Chad agriculture and livestock policy is outlined in the 5-year Plan for Agriculture Development in Chad 2013-2018 (« *Plan Quinquennal de Développement de l’Agriculture au Tchad* ») developed with the support of the FAO and the AFD. This plan aims at increasing cereal production and strengthening the resilience of agriculture to climate change and changing rainfall patterns. The key intervention axes include:

- Agricultural water management;
- Agricultural production intensification and diversification;
- Development of food early warning systems;
- Capacity strengthening of the national extension services and farmer groups;
- Support to high-growth food production sector.

Decentralization

An ambitious decentralization process is currently on-going in Chad.

The decentralization process defines 4 levels of Decentralized Territorial Collectivities, with legal personality:

- Regions;
- Departments;
- Communes (including region capitals, department capitals and sub-prefecture capitals);
- Rural Communes, including cantons, villages and any group of cantons or villages.

Each of these entities has administrative, financial, economic and patrimonial independence. When the decentralization process is fully implemented, they will be administered by regional, departmental and communal councils, elected through direct universal suffrage. A canton, which is the district level of interest for the project, is currently administered by the chief of the canton and the development planning is coordinated by the ADC.

State institutions are represented by two levels of extension services: regional delegations headed by the Governor and Prefects at departmental level.

The competencies split between national institutions and the four layers of Collectivities covers 13 action areas, including land planning and natural resources management. For natural resource management, roles and duties of each layer are the following:

- Region: Design the regional land use master plan in harmony with the national sectoral policies. Ensure consultation and involvement of Departments, Communes and Rural Communes;
- Department: Take part into the elaboration and implementation of the regional land use master plan. Coordinate social and economic development measures.
- Communes: Design and implement communal investment plans and intercommunity development Charters;
- Rural Communes: Design and implement local development plans (PDL) covering the economic, social, health, cultural and scientific sectors.

The Government of Chad strongly supports the establishment and the sustainability of this new institutional framework and promotes capacity building, through its Decentralization Master plan.

Within this new framework, the MKO constitutes a Region, comprising three departments (prefectures), 12 communes and 20 cantons (rural communes).

Land tenure

Several land tenure systems coexist in the MKO:

- **Customary land tenure systems** comprise multiple forms of property right and rely on the principle of the collective property of the social group. The individual belongs to the community. He has no individual property right but rather access rights to use resources. These access rights are awarded on the basis of criteria specific to each ethnicity. Native people have more rights than non-native people. While the rights of transhumant pastoralists have often been recognized, this has not been to the same degree. The land and resources seasonally allocated to these groups have often been located on the periphery. Unmarried

men and women including windowed women have fewer rights. This system prevails in the cantons located in the center and south of the MKO, where customary authorities still play a significant role in land control, planning, rule and management. In localized areas of the MKO region, the customary system has been used by local chiefs to grant settling rights to migrants. This has resulted in some acute land use conflicts.

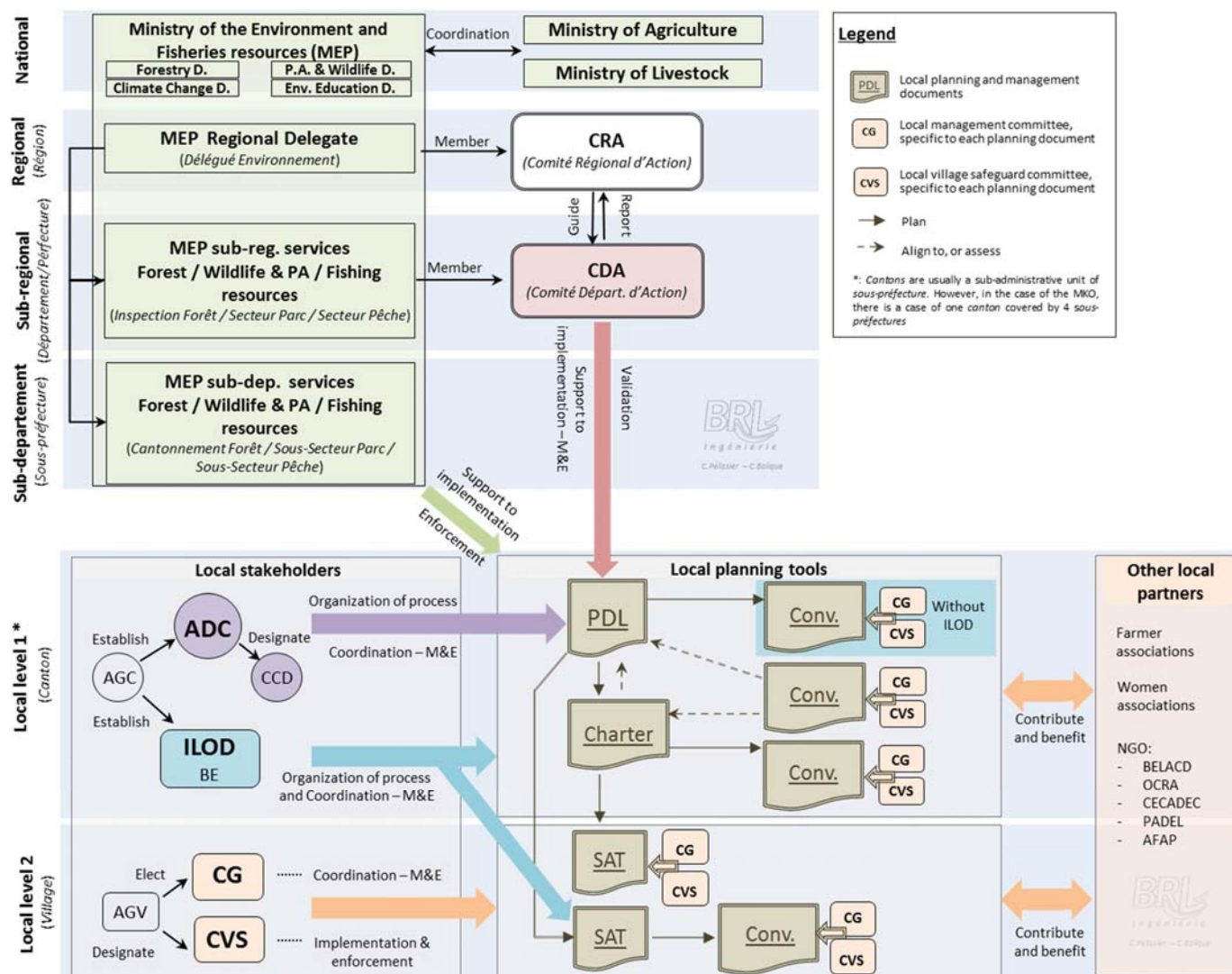
- **Islamic land tenure systems** are predominated by a prohibition to restrict access to natural resources as these are considered a divine gift and therefore cannot be owned. In practice, a tithe often has to be paid to religious leaders in order to acquire access to land or resources. These systems prevail in the cantons located in the north of MKO, where they are operational and provide a reasonable level of control within land tenure dynamics. The resource needs of pastoralist have been recognized to various degrees. Under this system, women have very limited rights.
- **Modern land tenure systems** were inherited from the colonial period and promote a distinction between the notions of private or public property, and depending on how it is implemented can vary significantly in how it recognizes other land and rights systems. The creation of protected areas in the MKO was managed through the modern land tenure system in Chad, and applied different approaches of stakeholder consultation and eventual recognition of the rights of local populations. In practice, the protected areas are not fully respected by local stakeholders for numerous reasons, including the lack of adequate and adaptive management. Under modern land tenure systems, there have been numerous attempts to formalize the rights of transhumant pastoralists, with very varied results. In addition, the notion of gender is increasingly recognized as important, but remains in an early stage of integration.

The juxtaposition of multiple forms of land tenure systems is major constraint to land use planning and management. The absence of a universally recognized system to allocate access to land and natural resources hinder the development of sustainable management tools.

Gender

Gender policy is dealt with in every sectoral strategy, including in the National Development Plan (PND). There is no specific strategy document dedicated to gender equality.

Figure 2: Overview of the institutional context and of the stakeholder landscape at national, regional and local levels. (BRLi)



3.2 Global environment problem

In the MKO, the degradation of natural resources is an acute problem, despite the long-term presence of multiple protected areas (i.e., Yamba Berté Forest Reserve, the Binder Léré Wildlife Reserve and Sena-Oura National Park) and several projects that have worked to establish structures and systems for natural resource management (e.g., ILOD, ADC, CG, CVS).. The natural environment is continuing to be negatively affected by a combination of natural factors and human practices, including overexploitation, and the evolving socio-ecological context in the MKO is resulting in increased competition and confrontations over the region's natural resources.

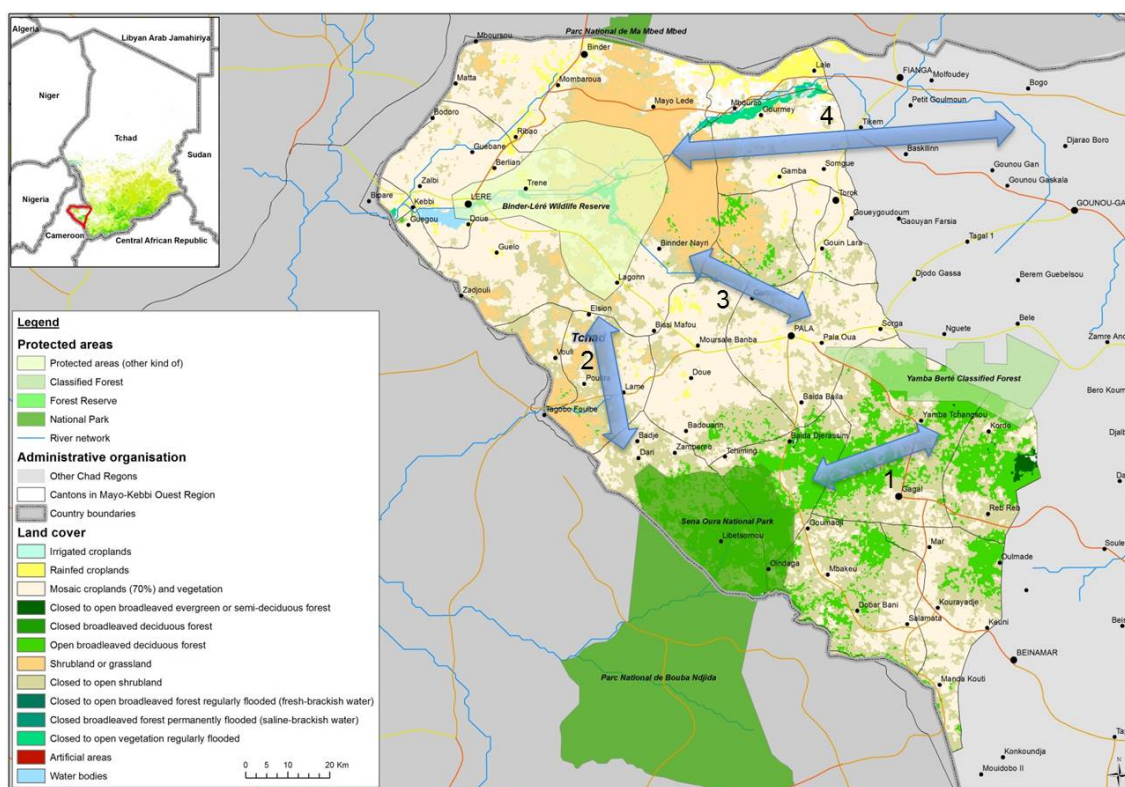
Globally, the principal environmental issues facing the MKO have been identified as the following:

- **Disappearance of natural forest areas (forests and woodlands):** Between 1986 and 2006, the surface area of the MKO 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 dynamic continues and shows no signs of slowing. It is causing a drastic change in the ecological functioning of these areas.
- **Degradation of natural forest areas (forests and woodlands):** the exploitation of forest areas is characterized by an impoverishment in the composition of forest blocks and increased fragmentation of the forest cover. With these changes, come a modification in the physical structure of the forests and a drastic decrease in their biological diversity. This dynamic continues and shows no signs of slowing, and is contributing to significant changes in the ecological functioning of these areas;
- **Land degradation and desertification:** as land use (including agricultural techniques) and climate patterns (including droughts) change, land degradation, and more specifically desertification, is becoming more pronounced;
- **Decrease in the productivity of agricultural and pastoral land:** soil fertility for agriculture purposes is decreasing and the productivity of grass and shrub savannas traditionally used as pastureland is declining;
- **Decline in the productivity of natural fisheries:** with the partial exception of the lakes where management systems have been developed, most permanent water courses are exhibiting a drop in the number and the average weight of fish caught.
- **Increase in Human-Wildlife Conflicts (HWC):** as habitat continues to be lost and fragmented, conflicts between humans and wildlife have been increasingly reported.

All these different types of degradation lead to a loss of CO₂ sequestration potential through the soil and above all the forest cover. Despite local management initiatives, the disappearance and degradation of natural resources in the MKO, is causing the following socio-environmental consequences:

- **Significant increase in competition, confrontations and conflicts** over natural resources between different social groups. Local communities report these issues, which are particularly apparent between sedentary long-term residents and recently installed populations coming from neighboring regions in Chad as well as between sedentary agro-pastoralists and transhumant pastoralists.
- **Forest and woodland corridors between the three protected areas in the region are disappearing** (see Figure 3). The east-west corridor between Sena-Oura National Park and the Yamba Berté Forest Reserve (corridor 1 on map below) still has significant blocks of wooded area (i.e., wooded savannahs and shrubby savannahs), but the other three major corridors (corridor 2, 3 and 4 on map below) are devoid of significant forest cover and are characterized by large tracts of cropland.

Figure 3: Location of the potential corridors in MKO region (Source: BRLi)



3.3 Threats, roots causes and barriers analysis

3.3.1 Threats

The remaining natural forested areas in the MKO are under extreme pressure from uncontrolled and widespread subsistence shifting cultivation, cash crop development, and pastoralism. All of these direct threats are affected by demographic trends and migration, and are contributing to degradation, fragmentation and the complete loss of natural forested areas.

Security concerns in the MKO region remain “moderate”, as confirmed by the field mission (7-14 January 2017) to the area during the PPG mission (see illustrations in Figure 4, and field mission report in Appendix 13). The area is currently outside of Boko Haram’s area of influence.

Human-induced threats

Deforestation

Between 1986 and 2006, the surface area of the MKO 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 million hectares (+48%). Deforestation does not spare protected areas: in 2001, the actual area of the Yamba Berté Forest Reserve (654 km²) covered in forest was only 432 km² (a 33% reduction) and farmland accounted for approximately 50% of the surface area of the Binder Léré Wildlife Reserve. In addition, the natural ecosystem continuum between these protected areas has largely disappeared, especially between Sena-Oura National Park (SONP) and Binder-Léré Wildlife Reserve (BLWB). Remaining forest blocks are severely threatened.

Forest degradation, forest fragmentation and biodiversity loss

Most of the forested areas that remain in the MKO are degraded and increasingly fragmented. Among the sources of these changes are an overall increase in the rate of harvesting of natural resources by human populations, an increase in livestock density, land conversion (see agricultural expansion below), and the application of harvesting techniques that do not allow for the maintenance and/or renewal of resources. Numerous studies provide clear evidence that forest degradation and fragmentation have negative impacts for biodiversity and ecological processes, often reducing species persistence, species richness, nutrient retention, trophic dynamics, and in cases of extreme isolation, movement. The ecological functioning of certain areas of the MKO region have already been highly modified and local stakeholders reported that ecosystem services, particularly supporting and provisioning services, have been significantly degraded. Notably, timber and non-timber forest products (plants and wildlife) are becoming increasingly depleted.

These trends have also contributed to changes in forest composition and structure, as well as a decrease in biological diversity, particularly the disappearance of large and medium-sized animals. The recently established Sena-Oura National Park and the two other protected areas within the MKO have high conservation values and represent core habitat for remaining wildlife and other species. Ensuring their effectiveness in preserving these values depends, in part, on instituting integrated land use planning and management at a broad scale. Participatory planning at this scale is central to help reduce and moderate the adverse effects of anthropogenic degradation and fragmentation of forest habitat, and provides a key means to address the management of peripheral areas and the maintenance or re-establishment of ecological corridors. These corridors are important to maintain the ecological functionality of the natural systems in the MKO and for remaining wildlife with large home ranges or that migrate as part of their natural lifecycle or to meet their resource needs.

Agriculture expansion

Rural communities in the MKO practice small-scale subsistence agriculture. They grow crops such as sorghum, pearl millet, rice with minimal input of fertilizer and no irrigation. They combine this practice with smallholder cultivation of cash crops, such as cotton and maize, which can be accompanied by the widespread use of chemical fertilizer. The fertility of agricultural soils is rapidly declining, resulting in the expansion of new clearings for agricultural purposes. As a result of inappropriate practices, the productivity of grass and shrub savannas traditionally used as pastureland is also declining. The degradation of pasturelands is characterized by a decrease in the number of species present and the biomass produced. In areas of extreme degradation the soils are becoming sterile. The growing demand for new agricultural areas and pasture lands, due in part to the expanding human population is a significant contributor to deforestation, forest degradation, forest fragmentation and biodiversity loss.

Pressure from increasing livestock

The livestock population in MKO is extremely high, growing and exceeds the carrying capacity of local ecosystem. In addition, transhumant pastoralists from Cameroon, Nigeria and Niger are bringing their herds in the MKO more and more frequently. This practice is very difficult to manage and administrate given its political and geopolitical dimension. Transhumance corridors have been implemented with little effectiveness and do not seem to be an appropriate solution to the current situation in the region. This is a major issue in the MKO, highlighted and emphasized by local stakeholders and sedentary pastoralists during consultations. In addition, past transhumant corridors are also increasingly encroached by expanding crop production. Competition, confrontations and conflicts over natural resources between sedentary agro-pastoralists and transhumant pastoralists are increasing in frequency and posing security issues.

Overfishing

The MKO encompasses two natural lakes, Lake Léré (45 km²) and Lake Tréné (12 km²). The fisheries resources of these lakes are being exploited intensely, with approximately 1,500 tonnes of fish caught each year and exported to the large towns and cities in Chad and Cameroon. Despite the successful implementation of two Local Orientation and Decision-making Authorities (ILOD) and some positive outcomes, overfishing and unregulated fishing practices remain a problem and some water courses in

the MKO are still showing a drop in the number and the average weight of fish caught. Overfishing has also caused a dramatic reduction in the population of African Manatee (*Trichechus senegalensis*), an emblematic species for local people.

Competition, confrontations and conflicts over land use

As explained above, pressures on land and competition for resources and access to resources continue to increase within the MKO. In addition, Human-Wildlife conflicts also arise especially with elephants around the Binder Léré Wildlife Reserve and with hippopotamus around Lake Léré and Tréné.

Firewood and charcoal production

Local community forest use, including to harvest fuelwood and to produce charcoal, can be managed sustainably in areas where population density is low and forests are not degraded, however, across the MKO the commercial exploitation of these resources is increasing to meet demand. The cumulative impact of numerous small-scale producers can be very significant. While studies show that the demand for fuelwood is however seldom the primary cause of forest conversion on a large scale, fuelwood is often sourced from areas being cleared for agriculture or close to urban markets (Arnold et al. 2003).

Bushmeat hunting and wild life trade

The harvesting of bushmeat is not a significant commercial activity within the MKO, where wildlife populations have been largely depleted. One exception is some commercial hunting activities targeting large antelopes in the Binder Léré Wildlife Reserve. Harvesting of small mammals and birds does still play a role in the provisioning of some households. Poaching for ivory has been a punctual threat.

Bush Fires

The increasing frequency and expansion of bush fires must be considered as a particular threat.

Climate-induced threats

The human-induced threats described above impact ecological processes, including carbon sequestration.

Changes in water cycle and freshwater systems, including floods and droughts

Chad is an area characterized by unpredictable rains and periodic droughts. Climate change projections provided by Hartmann et al. 2013 predict an increase in frequency and intensity of drought, as well as of floods. These changes will continue to influence multiple aspects of socio-ecological systems in the MKO. In low flow seasons, water scarcity is already a source of conflict. In the high flow season, stronger floods trigger soil erosion. With climate-induced changes, groundwater recharge is likely to further decline. Any groundwater shortages will be exacerbated by an increase in water demand and abstraction, as well as reduced infiltration. Groundwater reserves are not heavily exploited at present, but this exploitation is anticipated to become more technically difficult and will be financially taxing. The salinization of freshwater resources and land is of particular concern, both from natural sources and agricultural practices. Finally, some fish species can be very vulnerable to changes, impacting the production of fisheries in Lake Léré and Lake Tréné.

Changes in seasonal calendars

Changes in seasonal calendars have been observed, and may be related to human-caused climate change. These changes can have an important effect on traditional practices in agriculture (including on crop calendars and production) and grazing, and require communities to rapidly adapt to the changing conditions.

Together these impacts have the potential to seriously impact human well-being and ecosystem function in the MKO.

Figure 4: Images of the MKO during the PPG mission in January 2017. Source: BRLi.



(a) Gallery forest



(b) Forest stand surrounded by pasture land



(c) Sorghum field



(d) Cotton crop



(e) Control of a fisherman during a joint enforcement mission implemented by ILOD, CVS MEP



(f) Non timber forest products sold in a local market

3.3.2 Root causes

The principal underlying causes for the above mentioned threats can be summarized as follows:

- **Poverty:** According to the World Food Programme, approximately 87% of Chad's mainly rural population lives below the poverty line, and primarily rely on farming and livestock for their survival and livelihoods. This extreme poverty, coupled with lack of alternative options, drive communities to use unsustainable practices of resource exploitation, which threaten sites, species and ecosystem integrity.
- **Population growth:** Human population is growing in Chad (from 19.4 to 34.7 inhabitants/km² between 1993 and 2009) due to natural growth and immigration, with an increasing proportion living in urban centers. In rural and transboundary areas like the MKO, increasing populations and inward migration can result in greatly increased demand for land, water and resources. This can, in turn, drive unsustainable resource exploitation practices, conflict over land and resources and direct threats to species and natural ecosystems (including within protected areas). The most fertile and productive areas of land and water (which may also be key areas for biodiversity and ecosystem services conservation) are often those under greatest pressure for unsustainable development. This 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.
- **Increase in the domestic livestock population:** This increase is itself linked to the increase in the human population and to livestock management techniques. In pastoral populations as well as those who practice an agro-sylvo-pastoral production systems, livestock represents the central element for accumulating financial resources. 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 able to be maintained by the traditional production systems.
- **Dependence on natural resources:** Chad's economy is dominated by the primary sector. In the MKO, the primarily rural population is almost exclusively dependent on agriculture, pastoralism, forestry and fishing for their survival and livelihoods.
- **Unsustainable natural resources management.** The management of natural resources follows a "mining" approach, sometimes causing severe environmental degradation (e.g., erosion, lack of soil fertility, invasion of weeds, degradation of pastures, deforestation) that is hard to reverse and leads to a disappearance of wildlife and plant species. In populated areas, this situation can result in the impoverishment of rural populations and to migration to towns or towards pioneer fronts. In addition, the uptake of new techniques and tools for the sustainable use of resources is low. This can be the result of a variety of factors, including a lack of appropriate skills and knowledge, a lack of access to new technologies and a lack of financial means.
- **Transboundary nature of resource:** The transboundary nature of the resources and inequitable systems of land and resource tenure generate uses conflicts.
- **Absence of alternative livelihood opportunities:** communities are often constrained or driven to carry out unsustainable practices of land use or natural resource exploitation by a lack of alternative options. This can be the result of a variety of factors including a lack of appropriate skills and knowledge, a lack of access to new technologies and a lack of financial means, to initiate alternatives.
- **Climate change and/or increased climate variability:** Chad is an area characterized by unpredictable rains and periodic droughts. As described above, climate change can exacerbate the impact of these phenomena and cause other changes that necessitate rapid adaptation.
- **Weak management, implementation and enforcement:** Legal regulations and tools pertaining to the management of natural resources, and management contracts or documents (e.g., PDL, charters) have been developed, but not always fully implemented or respected. The reasons contributing to this reality are multiple (see Section 3.3.3).

3.3.3 Barrier analysis

There are two main types of obstacles to resolution of problems leading to the environmental degradation in the MKO: 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 segments of the population, in particular recent migrants who have moved to the MKO from other areas of Chad, of the notion of sustainable resources and understanding/recognition of the real values of biodiversity and ecosystems;
- Inadequate functionality and cohesion of structures mandated to integrate various stakeholders in the management of natural resources;
- 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 some stakeholders of the legitimacy of local authorities in charge of the management of natural resources.

Technical and organizational barriers

- Lack of capacity at local level: technical, organizational and material weaknesses of local authorities responsible for the management of natural resources (e.g., ILOD, CG, CVS);
- Lack of capacity at national level: 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;
- Low availability of data and information:
 - The lack or the inaccessibility of site specific data and guidelines on basic scientific and practical management issues in the fields of sustainable utilization of timber and non-timber products, biodiversity conservation and particularly integrated approaches of stabilized agricultural and agroforestry systems;
 - The non-availability of long lasting forest cover monitoring data, allowing the comparative analysis in time and /or space of evolutionary trends in the different forested zones in the MKO;
- Insufficient delineation 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)
- Lack of local knowledge of sustainable agricultural systems based on the integration of native forest tree species, which can be summarized as insufficient understanding of adequate agroforestry technologies.

3.3.5 Summary of the threats, root causes and barriers

Threats	Consequences	Root causes	Barriers analysis
<p><u>Climate-induced:</u></p> <ul style="list-style-type: none"> ▪ Bushfires; ▪ Droughts and floods; <p><u>Human-induced:</u></p> <ul style="list-style-type: none"> ▪ Livestock farming ; ▪ Overfishing ; ▪ Agriculture expansion; ▪ Logging; ▪ Firewood and charcoal production; ▪ Human intrusions in protected areas; ▪ Bushmeat hunting and wild life poaching and trade. 	<ul style="list-style-type: none"> ▪ Forest fragmentation and degradation (by farming, livestock, new settlement, roads and skid trails); ▪ Biodiversity loss; ▪ Soil & food pollution; ▪ Large scale ecosystem changes; ▪ Loss of environmental services; ▪ Conflicts. 	<ul style="list-style-type: none"> ▪ Poverty & population growth; ▪ Lack of governance; ▪ Communities dependence on natural resources & Absence of alternative livelihood opportunities; ▪ Unsustainable natural resource management; ▪ Economy of the country based on primary sector; ▪ Inefficient agriculture production system; ▪ Transboundary nature of the resources and inequitable systems of land and resource tenure 	<p><u>Social and cultural barriers:</u></p> <ul style="list-style-type: none"> ▪ Lack of awareness; ▪ Insufficient understanding of adequate agroforestry technologies; ▪ Complexity of social relations and weak social cohesion; ▪ Lack of recognition of local authorities legitimacy; <p><u>Technical and organizational barriers:</u></p> <ul style="list-style-type: none"> ▪ Insufficient demonstration projects; ▪ Insufficient economic incentives; ▪ Inadequate legal/regulatory basis; ▪ lack or the inaccessibility of site specific data; ▪ Lack of capacities; ▪ Lack of synergies between technical services, local authorities, projects, etc.

3.4 Stakeholder analysis

In the context of this project, the term “local communities” refers to sedentary populations in the MKO and the transhumant populations that stay in the area on a temporary basis. These local communities are the primary stakeholders of the project. This project was designed recognizing the pertinence of better integrating these groups and their respective needs in natural resources management. The degree to which each of these groups will be positively impacted will vary across project interventions.

During the project preparation, community structures and civil society were extensively consulted. The list of individuals and organizations consulted is available in the field mission report in Appendix 13. In addition, the mission did a preliminary evaluation of the functionality of existing structures concerned with natural resources management. Based on this consultation a decision was made to focus the project’s engagement with the stakeholders detailed below.

Multiple structures grouping these stakeholders (i.e., community members and their representatives) exist in the MKO. Within the sector of natural resource management, these include local development associations (*Instances Locales d’Orientation et de Décision* - ILOD); canton development associations (*Associations de Développement du Canton* - ADC); management committees (*Comités de Gestion* - CG); village surveillance committees (*Comités Villageois de Surveillance* - CVS). Figure 5 reproduces the overview of local stakeholder presented previously within a broader depiction of structures involved in natural resource management (Figure 2). In addition, and as laid out in the institutional framework presented in Section 3.1.2, the Ministry of the Environment and Fisheries Resources (MEP) is locally present through a network of decentralized services (*Services Techniques* – ST). The project will work to improve the functionality and build the capacity of these structures to support the adoption of best-practices in natural resource management.

Figure 5: Overview of the institutional context at local level. Source: BRLi.

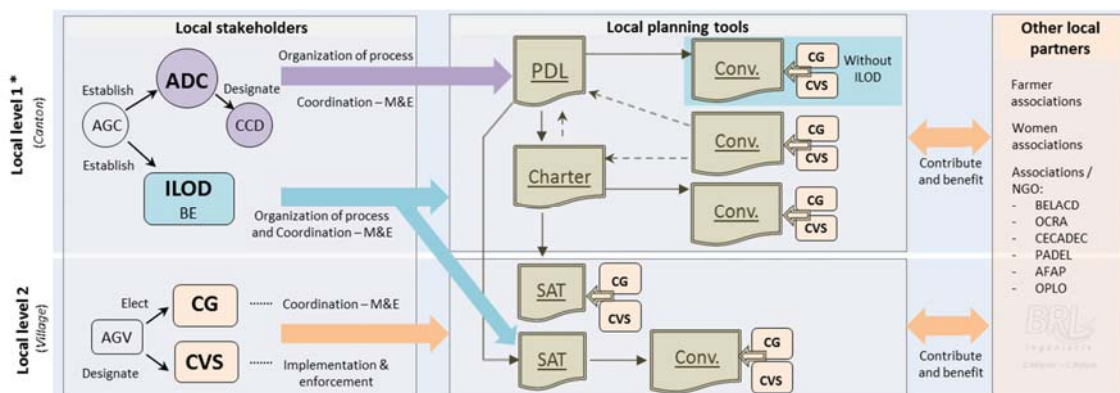


Figure 6: Stakeholders consultation during the PPG mission in January 2017. Source: BRLi.



(a) Sedentary pastoralists



(b) ILOD



(c) Sena-Oura National Park staff



(d) Local state services



(e) Farmers



(f) Management committee

Local authorities

Instances Locales d'Orientation et de Décision - ILOD

In the late nineties and as part of an early innovative approach promoting the decentralization, the Conservation and Management of Natural Resources Project (*Conservation et gestion des ressources naturelles*, **PCGRN**) initiated the development of local decision bodies for the management of natural resources at the district level. The objective was to develop management tools adapted to the spatial repartition of the natural resources in the MKO, and to the local social context. Local authorities, including villages and cantons traditional leaders, and community-based organizations were involved in the diagnosis analysis, in the definition of strategic objectives, in the establishment of the decision-making process, and in the monitoring of collective commitments. Supported by several international projects, this development process gave rise to *Instances Locales d'Orientation et de Décision (ILOD)*.

The ILOD were designed to render decision concerning natural resource management local, sustainable and independent. Their role is to administer natural resource management over their reference area, and more specifically to define conservation and exploitation priorities, to design and to monitor the enforcement of the rules to implement these priorities and to develop resource mobilization strategies.

An ILOD gathers representatives from each village in the reference area, canton authorities, sectoral organizations (e.g., farmers and livestock farmers, fishermen, hunters) and local organizations. It relies on an executive secretariat and a general assembly. The secretariat is elected by the assembly and is in charge of implementing decision taken during assemblies. When functioning fully, the ILOD actively interact and represent an important connection with local authorities and ADC. It is not uncommon for a single active community member to serve in multiple representational functions (e.g., ILOD, ADC, user association) simultaneously.

Twelve ILOD have been formed in the MKO region over the past two decades, primarily in the periphery of the protected areas (see Figure 6). Certain ILOD correspond to single specific canton, while others cover multiple cantons. In addition, some ILOD have decided to bring their efforts together under a coordinating entity. While four of the twelve ILOD formed are not currently active, the project preparation mission found that six ILOD remain to varying degrees of functionality. ILOD that are not currently active will require support to be revitalized. As most ILOD do not generate significant income within the frame of their mandate, lack of resources is major constraint to their sustainability and functionality.

Associations de Développement du Canton - ADC

Over the last ten years and as part of the decentralization process, development associations (*Associations de Développement du Canton – ADC*), and their executive committee (*Comité Cantonal de Développement - CCD*), are legal entities that have been created at the level of the canton. The ADC are in charge of coordinating multi-sectoral planning at the level of the canton, and supervise the development and monitoring of local development plans (*Plan de Développement Local - PDL*). In cantons where both ILOD and ADC are present, these structures work with each other to coordinate the management of natural resources. In cantons without ILOD, it is the ADC that assures the coordination and supervision of natural resource management in accordance with the canton's PDL. Similar to the ILOD, many ADC lack the necessary resources to fulfill their mandate sustainably.

Both ILOD and ADC rely on the local technical services of sector ministries to carry out their work. They also collaborate with multiple community-based organizations, including CVS, user associations, and management committees that are involved in land use planning and the management of resources and/or special sites.

The project will work directly with 13 ILOD from 11 cantons in the MKO region. In the nine cantons without ILOD, the project will work directly with the ADC. The project aims to positively impact these structures by building their capacity to perform their mandates, including working to build their skills and knowledge and supplying them the necessary means to function.

Management committees and surveillance committees – CG & CVS

Simultaneous to the creation of the ILOD, and the ADC later, community-based organizations were formed to coordinate implementation and monitoring of measures agreed upon by management authorities and laid out in management documents (see below). In each village located in the reference area, two executing bodies were envisioned.

Management committees (*Comité de Gestion* – CG) were designed to coordinate contract-based interventions aiming at mobilizing stakeholders to implement measures laid out in management documents. Theoretically the committee's lifespan is dependent on the duration of the management document; however, many endorse their role indefinitely. As such, they often become preferred contacts for any ILOD-supported actions in the village.

Village safeguard committees (*Comité Villageois de Surveillance* – CVS) are in charge of monitoring the implementation of the management regulations decided by authorities or during ILOD meetings. This work involves information sharing and deterrence. The CVS fall under the authority of the village traditional leader.

Similar to the ILOD, the current functionality of CG and CVS varies considerably. The project aims to positively impact these structures by building their capacity to perform their mandates, including working to build their skills and knowledge and supplying them the necessary means to function. This work will be coordinated in close conjunction with ILOD and ADC.

Box 1: Planning and management tools designed and implemented by local stakeholders. Srce: BRLi.

Plan de Développement Local - PDL

The PDL is the primary tool that comprises natural resources management and land planning at the level of the canton. Initially introduced by the PCGRN project, PDL aim to:

- Provide local communities with a shared vision for development priorities in the canton;
- Develop participation, involvement and negotiation mechanisms for the different social groups established in the canton;
- Harmonize the planning process at the canton level with other planning documents established at departmental, regional and national levels.

Each of the current PDL is organized around four main areas of intervention:

- Natural resources management and sustainable agriculture;
- Access to water, sanitation, hygiene and education;
- Social and cultural development;
- Local economic development.

The development of a PDL is done following a participatory process.

In the MKO, the first PDL were developed in the early 2000s, with the support of the PRODALKA project, and covered four years. These PDL were recently revised with the support of the PADL-GRN project, taking into consideration the more recently created ADC and CDC. Nineteen of the twenty cantons in the MKO region have a revised PDL covering the period 2014 to 2018. The one exception is Goumadji, which has a plan running from 2015 to 2019). An assessment of existing PDL and consultations with local stakeholders during the PPG mission resulted in the following observations:

- Very significant investment was made in the planning process that led to the elaboration of the PDL; however, very few of the planned actions are currently being implemented.
- Local stakeholders openly express their despondency in supporting the implementation of PDL.

Across PDL the degradation of natural resources has been identified as the highest priority issue requiring action. The primary actions laid out within PDL to address this issue are:

- Awareness arising, education and capacity building;
- Reforestation;
- Development of local conventions;
- Establishment and equipping of tree nurseries;
- Development of water ponds;
- Fencing orchards;
- Building micro-dams;
- Development of tourist sites;
- Building of stone barriers.

The overall projected budget for actions related to natural resource management laid out in the 19 PDL with implementation periods running from 2014 through 2018 is 1,630,300,000 FCFA.

In supporting the adoption of best-practices in forest and agro-sylvo-pastoral system, this project responds directly to the acute need to address the degradation of natural resources (including low production yields), as reflected in the PDL. Multiple actions planned in the PDL within the area of natural resource management and sustainable agriculture have been taken into consideration in the design of this project. These include activities in the areas of awareness raising, education and capacity building; reforestation; the development of local conventions; and establishing trees nurseries.

Note: a European Union-funded project (PRCPT, 2017-2020), implemented by GIZ, aims at simultaneously supporting the implementation of measures in the other three action areas. A revision the PDL sections tackling these 3 action areas is planned in the second half of 2018.

Natural resource management and land planning tools

ILOD and local authorities rely on three different types of natural resources management and land planning tools to refine and implement areas of work and orientations laid out in the PDL:

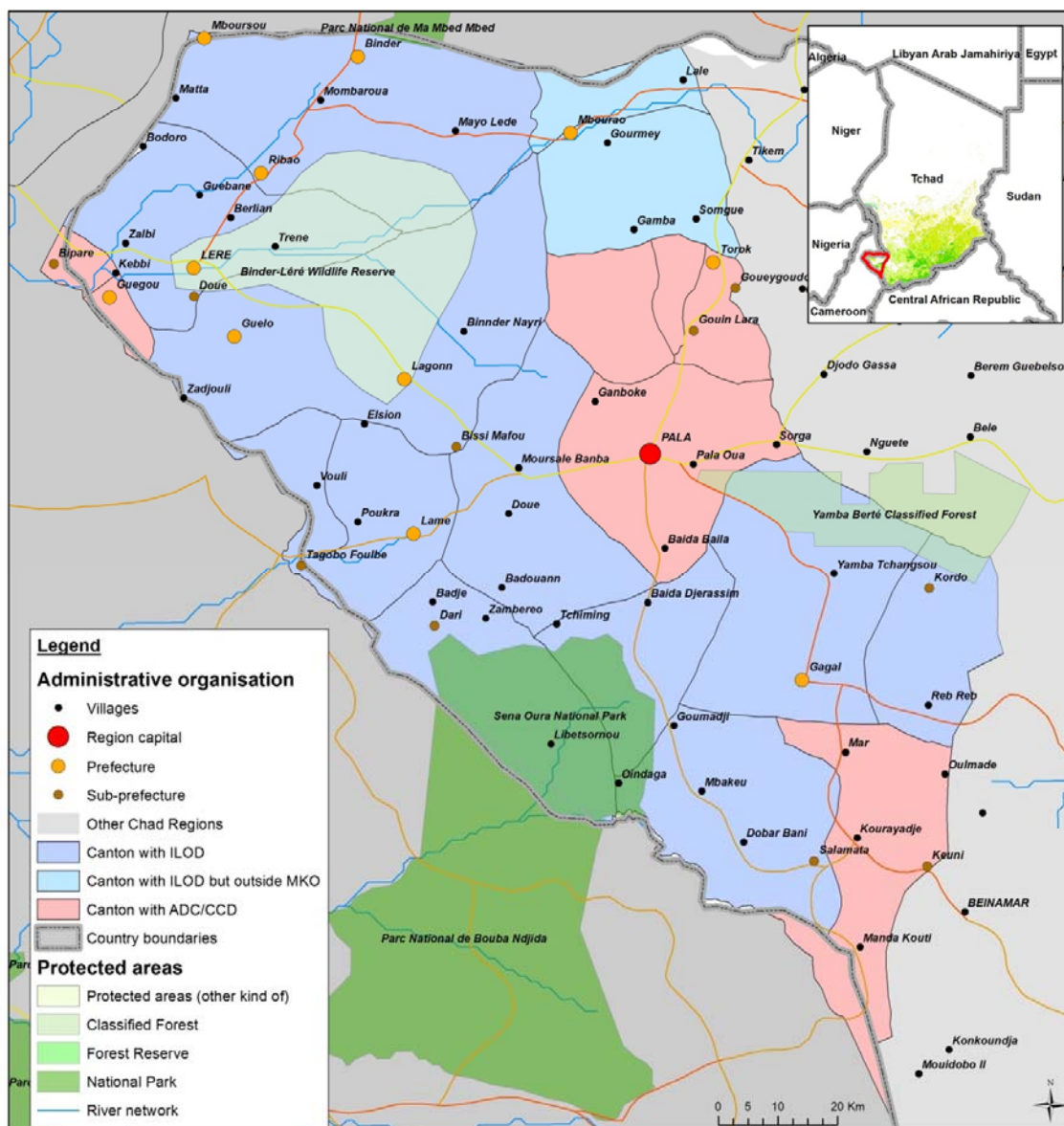
- **Charter:** This is a 5-year planning document aimed at managing natural resources in large areas covering multiple communities. Its elaboration relies on a participative process involving the members of the general assemblies of the ILOD. Objectives, strategies and measures are defined based on a diagnosis analysis and a resource mobilization process is proposed. The ILOD Executive Secretariat is responsible for endorsing the document. The CG is responsible for its implementation and the CSV for its monitoring. Five charters have been identified within the MKO.
- **Local Convention:** Very similar to the Charter, this 5-year planning document is developed for smaller areas or for specific natural resources under the leadership and coordination of the ILOD. A Local Convention aims at defining and implementing rules for a sustainable and concerted use of natural resources for the users of a specific area within the canton. The CVS is in charge of its implementation and enforcement. Twenty-one Local Conventions have been identified in the MKO.
- **Land Planning Scheme:** This is a 3-year planning document aimed at implementing an action plan defined in a Charter and specific to a village territory. Its implementation is monitored by a specific management committee (CG) and the local CVS. Seven Land Planning Schemes have been identified in the MKO.

An in-depth analysis of the Charters, Conventions and Land Planning Schemes existing in the MKO was conducted during the PPG mission. For each of them, when data and information were available, the reference territory, its area, and the related forest management measures were assessed and identified. The absence of data and consolidated statistics rendered this exercise very difficult and the resulting figures are only estimative (see Appendix 13).

In summary, a diverse set of natural resource management and land planning tools have been developed for the MKO. This diversity sometimes leaves local stakeholders unclear on the appropriate use or objective of each tool; however, in combination, they represent a robust resource for local stakeholders and will provide an important framework for the implementation of this project. They are also recognized by administrative and judiciary authorities.

The processes to elaborate these tools, including the identification of areas for restricted use, aimed to be participative and inclusive, and the tools generally do a good job of clarifying and recognizing the roles and responsibilities of many stakeholders in natural resource management. A notable and important exception is the poor consideration and inclusion of transhumant herders. In addition, the rights and roles of women remain marginalized: a situation which should be addressed.

Figure 7: Presence of ILOD and ADC in the MKO. Source: BRLi.



Local community-based organizations

Under the legal system in Chad, community-based organizations are classified differently depending on their objectives, their number of members and registration:

- **Cooperatives:** small-sized organizations (less than seven members) registered at the subprefecture level, and with a productive objective (product transformation and sale);
- **Groups:** small-sized organizations (less than seven members) registered at subprefecture level, and with a social or cultural objective;
- **Associations:** medium-sized organizations (more than seven members) registered at the prefecture level, and subject to morality assessment;
- **Non-Governmental Organization (NGO):** large size organizations (more than seven members) registered at national level, and subject to a detailed reporting to the sectoral ministry.

A number of local community-based organizations are active in agriculture, environment or natural resource management sectors in MKO. These organizations have been extensively involved in the

implementation in previous complementary projects and represents an important opportunity for this project to capitalize on existing capacity. They are briefly presented in the table below:

Name of the organization	Focal area	Number of employees	Capacity / Functionality (*)
BELACD (<i>Bureau d'Etudes de Liaison et d'Action Caritative pour le Développement</i>)	Agriculture, environment, bushfires management, livestock, education, health, product transformation	~100	+++
OCRA (<i>Organisation pour l'Autopromotion des Communautés Rurales à Pala</i>)	Capacity strengthening, reforestation, forest management, agroforestry.	<10	+
CECADEC (<i>Centre Chrétien d'Appui au Développement Communautaire à Pala</i>)	Agriculture, environment, bushfires management, livestock, education, health, product transformation, seed production, capacity strengthening	~50	++
PADEL (<i>Pôle d'Appui au Développement Local</i>)	Social, environment, economy, culture, institutional support, reforestation, plantations, fight against erosion	~15 30 groups of around 30 to 40 members	+++
AFAP. (<i>Association des Femmes pour l'Auto-Promotion</i>)	Environment, forest management tools, income generating activities, agriculture, product transformation and commercialization	~20	+++
OPLO. (<i>Organisation des Paysans de Léré Ouest</i>)	Environment, fight against erosion, agriculture, livestock, forest management, organizational strengthening	~15	+++
(*): +: weak capacity/functionality; ++: moderate capacity/functionality; and +++: strong capacity/functionality			

The potential to engage national and regional level civil society organizations in the implementation of this project will be further assessed, including for example AEN (*Association des Eleveurs du Tchad*), AFPAT (*Association des Femmes Peuls Autochtones du Tchad*), CONFENET (*Confédération Nationale des Eleveurs du Tchad*), RBM (*Réseau Billital Maroobe*, a West African network of pastoralist).

Women

Women in rural Chad play a relatively more important role than men when it comes to agricultural production and food security. Despite this fact, they have been found to be more vulnerable than men when it comes to food shortages and are subject to gross inequalities when it comes to work, income, education, access to ownership, access to credit and access to responsibilities. They are underrepresented in positions of responsibility within civil society organizations and local institutions, including those related to land planning and natural resource management, and face significant barriers to securing resource rights. During the project preparation mission, efforts were made to meet with women. All consultations were required to be done in the presence of men.

Recognizing the direct role they play in the management of natural resources, this project will work to raise awareness on these issues and promote actions that will raise the economic power of women, including potentially activities to enhance their skills and knowledge, promote social organization, the provisioning of equipment, investments in income-generating activities (e.g. the collection, transformation and marketing of non-timber forest products) and providing access to credit.

Vulnerable groups

Indigenous people

First, it should be noted that Chad does not recognize the concept of indigenous people on its territory.

The MKO presents a large ethnic diversity, as depicted in Table 1. These groups are involved in a variety of socio-economic activities related to natural resources (see Table 2). Due to the very long-standing contacts and relations between the different social groups, many of the most relevant or efficient techniques employed in these activities, which used to be group-specific, have been shared across social groups and are now commonly applied. However, there are still some important specificities that remain between the different groups and contribute to the social diversity and evolution of the region. These specificities can be largely associated with differences in the landscape and the natural environment: flood plains in the north-east, Koros in the south, and granitic basement in the west. While agriculture remains a prominent activity across the board, the agricultural practices are different between areas. These different natural environments are also suited to support different combinations of activities (e.g., agriculture, pastoralism, fishing and hunting) and social groups have tailored the diversity of their activities and their specific management techniques to their environment.

Table 1: Ethnic groups in the Mayo-Kebbi Ouest region. (adapted from J. Cabot, 1966, updated by F. Hautcoeur, 2000)

Group	Family	Ethnicity
Logone group	Massa, Mandar Kebi Logone	Mousseye, Djimé, Toubouri, Kera, Moundang, Guidar, Pévé (Lamé Dari)
Chari group	-	Gambaye, Laka, Sara
Other groups	-	Foulbé (Peul), Haoussa

Table 2: Ethnic groups, socio-economic activities and natural activities. (adapted from Hautcoeur, 2001)

Ethnicity	Socio-economic activities related to natural resources				Observations
	Agriculture	Livestock farming	Fishing	Hunting	
Pévé	x			x	Large clearing landscape, specific to a wandering rainfall multiple crop agriculture, with long fallow land, on koros
Djimé	x			x	
Mousseye	x	x	x		Mixed semi-developed landscapes, Permanent crops in every season, in hut croplands or in river-bed crop areas.
Toupouri	x	x	x		
Kera	x	x	x		
Moundang	x	x	x		
Foulbé (Peul)	x	x			

In addition to the groups presented above, the presence in the region of transhumant herders is of particular importance. Transhumant herders, who move their livestock in a variety of seasonal patterns according to ecological and rainfall conditions, represent an important component of the overall population of Chad and make a significant contribution to the country's GDP. Their social organization and way of life fulfill the IUCN definition of "indigenous people". These indigenous pastoralists are largely marginalized within the legislative and political context. Because of their mobility, they have very limited access to basic social services, including health care, education, safe water sources or sanitation services.

Their marginalization is further evident when it comes to the governance of natural resources. In Chad, indigenous populations do not have explicit rights of access to land or natural resources. Much of the remote area used by indigenous peoples is governed by customary law; however, the land, all natural resources and the subsoil are officially owned by the state. The accounting for the interests of transhumant herders in high level decisions concerning the governance of land and natural resources is further affected by their weak representation within high-level institutions.

The MKO region, characterized by relatively high annual levels of rainfall and tracks of arable land and natural grazing areas, has been long frequented by transhumant herders, although according to a 2009 census they make up only a small percentage of the population of the MKO. The most prominent group of herders is the Mbororo Peul (or Wodaabe); the Ouddah are also present. These transhumant pastoralists traditionally drove livestock into the region starting in January and kept their livestock in the area until May, when the Sahel zone starts its dry season and water and pasture start to become scarcer.

As in other areas of Chad, the pressure for land in the MKO is growing and conflicts between sedentary agro-pastoralists and transhumant herders are increasing. Numerous social-ecological factors are contributing to this increase. First, the area of the MKO occupied by agriculture is increasing. Factors contributing to this trend include demographic growth, cash crop development and lower yields. At the same time the size of livestock herds is growing and the number of sedentary pastoralists is growing. Finally, the number of nomadic herders frequenting the MKO has gone up due to increasing aridity in other regions of the country, which is forcing pastoralists south, and the insecurity caused by Boko-Haram in the neighboring countries of Nigeria, Cameroon and Niger.

Multiple efforts have been made to try and reduce these conflicts in the MKO. They have included efforts to secure transhumance routes, build relationships between stakeholders and set aside specific areas of land for grazing. These efforts have been accompanied by the development of management tools and stakeholder agreements. Unfortunately, the efforts-to-date have had limited results due in part to the difficulties associated with securing the sustained engagement of stakeholders, overcoming antagonism between stakeholders and sustaining management costs. Finally, according to many stakeholders, the overall numbers of livestock present in the MKO, both from sedentary and transhumant pastoralists, largely exceed the carrying capacity of pastures.

The PRCPT/EU-GIZ project is currently developing a forum and an observatory to address conflicts in the MKO, particularly between transhumant and sedentary agro-pastoralist. This project will also work to raise awareness on the importance of engaging these stakeholders more directly in the process of natural resource management and will work to provide opportunities for them to engage.

Figure 8: Consultation of groups during the PPG mission in January 2017. Source: BRLi.



a) Meeting with women



(b) Herd of a Mbororo group

3.5 Baseline analysis and gaps

The NGO and international donor community have provided technical and financial support to the national and local authorities in charge of natural resource management in the MKO for several decades. This has included support targeting the protected areas, as well as the management of natural resources in their peripheral zones.

The section below provides a summary of past, current and planned projects promoting similar approaches and/or intervening in the MKO. Together, they constitute the baseline scenario. They have been organized according to their primary technical focus. Consideration of and coordination with these projects will be crucial to make sure the present project capitalizes on the results achieved by past projects and take advantage of synergies with existing and planned projects to maximize impacts.

3.5.1 Past and planned national actions and projects

Local development projects

This project will build upon investments made as part of a vast natural resources program that was carried out from 1994 to 2012 in the MKO region with the support of the German technical cooperation (GIZ). This program, first called PCGRN, and then PRODALKA, focused on local governance and has played a key role in the organization and structuration of local stakeholders and had a significant impact on the structure of natural resource management systems in rural communities. It was also the original source of many of the land use planning and development tools applied in the region.

PCGRN and PRODALKA

The Conservation and Management of Natural Resources Project (*Conservation et gestion des ressources naturelles*, **PCGRN**) operated between 1994 and 2003 was financed by GTZ and had a total budget of seven million Euros.

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**) operated from 2004-2011 and was financed by a cooperation agreement between the governments of Germany and Chad and had a total budget of four billion XAF.

Together these projects provided the institutional, technical and financial support to achieve the following results:

- a) A socio-economic diagnosis of the MKO region;
- b) The preparation of land-use maps and other cartography of the MKO region, including the delimitation of areas for local resource governance;
- c) Development and support of *Instances Locales d'Orientation et de Développement* (ILOD) as local structures for multi-stakeholder consultation and cooperation ILOD;
- d) The establishment of *Comités de gestion* and *Comités Villageois de Surveillance* (CVS);
- e) The elaboration and review of *Plans de Développement Locaux* (PDL) in each of the cantons in the MKO region;
- f) The development of local agreements for the protection of sites (i.e., natural resources, manatees, pastures and transhumance corridors), fisheries protection zones, fauna (i.e., manatees, crocodiles and turtles);
- g) The development of charters on rational use for the Binder Léré Wildlife Reserve, Lake Léré, Lake Tréné, ponds and rivers;
- h) The establishment of mechanisms for conflict resolution and the imposition of sanctions associated with management documents;
- i) A decentralized development fund to finance infrastructure planned in the PDL;
- j) Studies to improve understanding on fisheries;
- k) Studies to improve understanding on wildlife in the Binder Léré Wildlife Reserve, the zones to the east of the reserve and the Yapal Game Reserve (2003 and 2010);
- l) Studies to improve understanding of pastoral practices in lacustrine areas north of Kabbia and the Binder Léré Wildlife Reserve (2005);
- m) Support for activities related to the establishment of ponds, plant production and reforestation; and
- n) Improved stakeholder capacity in multiple subjects.

In congruence with these programs, a series of smaller initiatives were launched to reinforce the natural resource management systems and promote more sustainable use. These included the following:

- a) The natural resource management component of the *Projet d'Appui au Développement Local* (PROADEL 1) funded by the World Bank;
- b) A project for protection and revegetation of the shores of Lake Léré;
- c) A project for construction of a wall in Berlian displaying the main wildlife species present in the Binder-Léré Wildlife Reserve;
- d) The Lake Léré Manatee Protection Project funded by the Global Environment Facility from 2011 to 2012 with a total budget of fifty million XAF.
- e) The *Programme d'appui au développement de la Pêche* (PRODE-Pêche) funded by the African Development Bank from 2007 to 2013 with a total budget of thirteen billion XAF to support fishing infrastructure on Lake Léré;
- f) The *Projet d'Appui à la gouvernance locale dans la région du Mayo-Kebbi Ouest* funded by the European Union from 2012 to 2014 with a total budget of 190 million XAF and implemented by the NGO *Université Populaire* to revise local development plans;
- g) The *Projet de facilitation du développement local* (PDFL) funded by GIZ from 2013 to 2015 with a total budget of two million Euros to build the capacity of stakeholders, undertake ecological monitoring, provide technical assistance and supply equipment; and
- h) The *Projet de Prévention de conflits et cohabitation pacifique* funded by GIZ from 2015 to 2016 with a total budget of 298 million XAF to prepare and revise five local agreements, support the reintegration of youth, strengthen the capacity of fishermen and develop the fishing industry.

PADLGRN

The Support Programme for Local Development and the Sustainable Management of Natural Resources was funded by the European Union from 2010 to 2016) through its tenth European

Development Fund. It capitalized upon a wealth of experience in the funding of climate change mitigation and natural resource management projects to support the revision of PDL.

PRCPT

In alignment with the aforementioned projects, the European Union has just launched the 3-year Programme to strengthen resilience and peaceful coexistence in Chad (PRCPT) through the EU Emergency Trust Fund for Africa. Co-funded and implemented by the GIZ for a total of 23 million Euros from 2017 to 2020, the main objective of the project is to increase resilience and improve economic opportunities in Chad in order to reduce factors of cross-border destabilisation. The program will target the Western corridor on border with Cameroon and including the MKO as well as the Eastern corridor on the border with Sudan.

Planned activities will contribute to improving the living conditions of local populations, refugees and returnees and create employment opportunities, increase economic opportunities and strengthen the resilience of the people by implementing PDL, and consolidate peace and prevent religious and community conflict in Chad.

As a result, local governance structures will be strengthened and emerging local planning efforts will be supported to improve local governance. The priority actions in the PDL in the field of job creation and socio-economic integration of youth, women and refugees/returnees will be implemented. Finally, local initiatives in favour of intercommunity, intra- and interreligious dialogue and promotion of a culture of peace, tolerance and civic education will be promoted.

Participative and sustainable Management of Sena Oura National Park (PNSO) and its peripheries-IUCN/RAPAC/EU

This project implemented by UICN, RAPAC and ECOFAC-V in the Sena Oura national Park from 2013-2014, supported actions aiming at the conservation of natural resources and contribution to environmentally sound socio-economic development. Specifically, the objective was to improve the management efficiency of the National Park and its peripheral zones by concerted actions with the riparian communities. Major activities included:

- Supporting assessments for adaptive management of conservation values and ecological processes;
- Support LAB operations in collaboration with other stakeholders;
- Conduct an inventory and sensitize the populations on the phenomenon of poisoning ponds and saline
- Support the development and implementation of contractual management frameworks at the periphery of the PNSO
- Support the realization of a zoning of the *terroir* in some targeted communities
- Develop appropriate information material for an environmental education program in the peripheral districts of the PNSO
- Support the implementation of micro-projects or alternative income-generating activities Promote appropriate management of bushfires,
- Make an inventory and promote tourism and eco-tourism sites on the periphery of the PNSO

Improved information, education and communication of rural and peri-urban populations to adaptation to climate change-IUCN/MEP-Chad

IUCN recently launched this project to cover the whole country with emphasis in rural areas and peripheral regions of the Am Timan, Moundou and Pala Sudan), Mao and Lake Chad (Saharan zone) and Mongo & Ati (Sahelian zone).

It aims at improving the process of information, education and Communication of rural and peri-urban populations to adaptation Climate change for better decision-making. From 2017 to 2019, three outcomes are sought: (i) local and peri-urban rural populations are informed and sensitized on climate

risks; (ii) rural and peri-urban populations are informed and sensitized on adaptation mechanisms to climate change; and (iii) national institutions take the issue of climate change into account in their strategies.

Target beneficiaries include: Farmers; agropastoral and pastoralists, Fishermen, Resource users and managers; Media; Training centers; Authorities Traditional; Decentralized administrative authorities and technical officers; National and international non-governmental and Local authorities.

Other development projects in the agricultural sector

The inter-zone between the Binder Léré Wildlife Reserve and the Sena-Oura National Park has benefited from national agricultural projects (i.e., projects involving sesame, peanut and maize). Projects were effected to implement PDL in seven cantons were carried out with support from the EU and finished in 2015.

3.5.2 Past and planned regional actions and projects

Associated regional baseline projects

Several regional initiatives targeting transboundary protected areas and biodiversity conservation in Central Africa, including the binational Sena-Oura Bouba Ndjida protected area complex, are implemented. The Dari and Goumadji cantons of the MKO are at the heart of the promoted activities.

BSB Yamoussa

The *Appui aux parcs nationaux du complexe transfrontalier BSB Yamoussa* project is part of the Sustainable Management of Forests in the Congo Basin Programme (*Gestion durable des forêts du bassin du Congo*) being carried out by the German Federal Ministry for Economic Cooperation and Development (BMZ) with the support of the technical cooperation (KfW and GIZ). It is a program to support the Central African Forest Commission (COMIFAC) within the framework of the implementation of its convergence plan. The program is divided into two projects. A first project, with a budget of 13,000,000 EUR is implemented by KfW and focuses on National Parks infrastructure, fight against poaching and surveillance. A second project, with a budget of 7,900,000 EUR, with one million provided by the European Union, is implemented by GIZ and focuses on National Park management and activity planning, community socio-economic development, awareness raising, communication, etc. The overall program will run for four years from 2014 to 2018 and aims to consolidate the joint management of the two parks for the overarching goal of conserving biodiversity.

The program's four main areas of work have been defined as the following:

- 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;
- Support to 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;
- 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; and

- 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).

The actions implemented include:

- Support to the management of Sena Oura National Park (Chad);
- Support to the management of Bouba Ndjida National Park (Cameroon);
- Support to transboundary cooperation;
- Develop measures strengthening food security and promote income-generating activities in the buffer zones of the two National Parks ;
- Capacity building at local and regional level;
- Development of sustainable financing mechanisms.

COMIFAC/RAPAC/OIBT - JICA Project

The *Renforcement des capacités de conservation de la biodiversité dans les aires protégées transfrontalières* project funded by the Japan International Cooperation Agency (JICA) in being implemented in eight transboundary protected areas within the COMIFAC region. They will benefit from a budget of 1.28 million USD starting in 2017 for one year. The sites selected include the Sena – Oura –Bouba –Ndjidda protected area complex.

The project will consist in strengthening capacities and expertise in the use of satellite imagery datasets to monitor threats on biodiversity in the transboundary protected areas. This capacity development program will benefit to the regional, sub-regional and national institutions in charge of biodiversity conservation. Tools based satellite imagery datasets will be developed to support police mandates and land planning activities of the TPA.

Programme de conservation de la biodiversité en Afrique centrale- Sauvegarde des éléphants d'Afrique Centrale - WWF/IUCN

This regional project has been implemented by IUCN and WWF from 2015 to 2016 in the National Parc of Sena Oura, Chad. It comprised two components: (i) strengthening structures and actors for the implementation of the legal framework in Chad and (ii) communication, sensitization and advocacy. The strengthening of conservation officers has led to decision-making on the management of protected areas, better production of thematic maps; enhance the value of this GIS training. The training of magistrates led to a better appropriation of the wildlife legislation and this resulted in the condemnation of the five apprehended poachers and their accomplices. Strengthening the capacities of media men, local elected officials and civil society leaders is a good way to involve them and the population in the sustainable conservation of biodiversity. But, making available and accessible the legal texts on wildlife remains the issue to address in order to combat wildlife trafficking.

Other projects to support transboundary biodiversity are currently being prepared by technical and financial partners, notably the United States Fish and Wildlife Service (USFWS) and Traffic.

3.5.3 GEF interventions

The proposed project is consistent with GEF-6 focal area strategies for land degradation (LD), climate change mitigation (CCM) and sustainable forest management (SFM) as it will contribute to the conservation of the MKO ecosystems through the sustainable management of natural resources.

A list of current and past GEF interventions related to these three targeted focal area strategies in Chad, at national and regional level is provided in Appendix 3.

Among these interventions are a subset of recently completed or on-going GEF projects that are of particular relevance to this project as they address the conservation of forest ecosystems and ecosystem restoration. The present project will be closely coordinated with these interventions. They include the following:

- Building Resilience for Food Security and Nutrition in Chad Rural Areas Communities (#9050, AfDB, LD-BD);
- Promoting energy efficient cook stoves in micro and small-scale food processing industries (#5795, UNIDO, CCM);
- Agricultural Production Support Project (with sustainable land and water management), (#4908, World Bank, LD-CCM-BD);
- LCB-NREE Chad Child Project: Integrated Management of Natural Resources in the Chadian part of the Lake Chad Basin (#9476, AfDB, LD-CCM-BD);
- Strengthening agro-ecosystems' adaptive capacity to climate change in the Lake Chad Basin (Lac, Kanem, Bahr El Ghazal, and part of the Hadjer-Lamis region) (#9166, FAO, CCM);
- Enhancing the Resilience of the Agricultural Ecosystems (#5376, IFAD, CCM);
- GGW Sahel and West Africa Program in Support of the Great Green Wall Initiative (#4511, World Bank, LD-CCM-BD); and
- Land Degradation Neutrality Target Setting Project (#9356, IUCN, LD).

The Integrated Development for Increased Rural Climate Resilience in the Niger Basin Project (PIDACC, 2017-2021, NBA/AfDB/GEF), implemented at regional level by the Niger Basin Authority, supports resilience strengthening of the resources and ecosystems in M3933KO region through improved soil and water conservation practices, sustainable forest management and agroforestry promotion (Component 1). Component 2 aims at strengthening the population resilience through investment in small hydraulic infrastructure (dams, irrigation schemes, rehabilitation of lowlands, etc.) and in the development of community markets.

The present GEF project will support local communities in developing alternative means of income generation, which will lead to an increase in forest coverage and its related benefits both at the local (ecosystem services) and global (biodiversity, enhanced carbon sinks) levels.

To do so, the proposed interventions will address need for training farmers, disseminating best practices in agroforestry and sustainable agriculture, developing better land management of the protected areas buffer zones/corridors. It will enhance local stakeholders' involvement in the management of the ecosystems in the Mayo Kebbi Ouest Region.

3.5.4 Gaps to be filled

An analysis of past and present initiatives in the MKO reveals the following:

- Funding sources and projects aimed at conserving and promotion of biodiversity have mainly **focused on protected areas**, including in the transboundary zone between the Sena-Oura National Park and the Bouba Ndjada National Park;
- Over the last two decades, multiple initiatives have been carried out aiming at supporting the structuring of local communities for the improved management of natural resources. **These initiatives have terminated, but these entities have not yet reached a sufficient level of maturity** to function independently; and
- There has been **no recent project or initiative aiming at mitigating the effects of climate change** through the management and restoration of forests.

According to the situation analysis and to the baseline analysis, the baseline scenario is characterized by three important trends:

- **A probable degradation of biodiversity** in areas outside of protected areas and their associated transboundary zones, i.e., areas that have been the target of repeated interventions to conserve biodiversity;
- On-going **degradation of natural resources** across the entire MKO region; and
- **An increase in competition, confrontations and conflicts over land use and natural resources** between stakeholders in the area.

3.5.5 Identified co-financing

Co-financing that will support the present project comes mainly from projects that focus on biodiversity restoration and conservation in the protected areas in the region:

- The BMZ/GIZ project to support national parks in the bi-national Sena Oura-Bouba Ndjida transboundary complex (*Appui aux parcs nationaux du complexe transfrontalier BSB Yamoussa*) (**USD 2,792,000**);
- The BMZ / EU Trust Fund AFRICA/GIZ project to support national parks in the bi-national Sena Oura-Bouba Ndjida transboundary complex (*Appui aux parcs nationaux du complexe transfrontalier BSB Yamoussa*) (**USD 5,584,000**);
- The EU-funded project implemented by IUCN/MEP-Chad (2017-2019) on improved information, education and communication of rural and peri-urban populations to adaptation to climate change (**USD 776,707**).

In addition, the project will liaise closely with other agencies involved in climate change mitigation through forest and land restoration projects, including the French Agency for Development (AFD) and the European Union, to insure synergies with upcoming projects.

4 Intervention strategy (alternative)

4.1 Project rationale and expected global environmental benefits

This project build on previous initiatives and projects implemented in the MKO, as detailed in Section 3.5.1. Consequently, during the Project preparation mission, particular attention was paid to assessing the outcomes of these projects. Initiatives, actions and activities that did not produce the desired results have been analyzed to avoid repeating mistakes. Project managers of these past or on-going initiatives were extensively consulted during the scoping and the field missions.

The project is structured to align with and reinforce the practices for local governance of natural resources implemented in particular by the Government of Chad in partnership with GIZ via the PRODALKA project and the European Union with PADLGRN and PRCPT.

Without the intervention of this project, the MKO region, including the immense area between 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 degraded (see Section 3.2). 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 and others ecosystem services. This project will respond to the need to address the main causes of greenhouse gas emissions, namely the disappearance and degradation of forests and unsustainable and expanding agro-sylvo-pastoral systems.

The project will focus on the management, restoration, protection and maintenance of ecological functionalities of natural environments, notably forest areas, and the mitigation of negative environmental impacts of agro-sylvo-pastoral systems. By providing local governance and management structures the skills, knowledge and means to operate and employ best-practices in the management of the MKO's forests and agro-sylvo-pastoral systems (including reforestation and soil conservation), the project will reduce greenhouse gas emissions and increase carbon sequestration. The project is designed to increase the sustainability of these positive impacts and will provide additional co-benefits. The global environmental benefits of this project will be:

- Reduction of greenhouse gas emissions, notably through the increase in the capacity for CO₂ sequestration due to improved forest management and reforestation. The volume of CO₂ sequestered thanks to the activities implemented will amount to 705 685 t CO₂ equivalent;
- Sustainable management of soil and forests over a total of 28,800 hectares;
- Conservation of water resources and maintenance of the water cycle;
- Improvement in the stabilization of the local climate.
- Reduction in land degradation and desertification (including through the constitution of ecological connectivity, essentially composed of forests);
- Multiplication of sustainable co-benefits. By addressing degradation, fragmentation and loss of natural areas, the project will improve species persistence, species richness, trophic dynamics, and species movement. The project will also improve multiple soil properties, including nutrient and water holding capacity. Finally, it will also provide positive impacts by helping to maintain the ecosystem's capacity to provision of multiple ecosystem services including timber, non-timber forest products, and fodder and building material, soil formation, etc. Many of these co-benefits have the potential to increase food security and support livelihoods. A halt in the desertification process through the constitution of ecological corridors, essentially made up of forests.

4.2 Project goal and expected impact

This project's goal is to restore and maintain ecosystem services, including the reduction of greenhouse gas emissions and the increase of carbon sequestration, in the forests and agro-sylvo-pastoral systems of the MKO. As part of achieving this goal, deforestation, degradation and fragmentation rates in natural ecosystems will be abated and sustainable "best practices" in forestry and the management of agro-sylvo-pastoral systems will be adopted and implemented by communities and other stakeholders in the MKO. As the health of ecosystems improves, additional

co-benefits (e.g., increased soil productivity, biodiversity conservation, and the provisioning of goods and services) will be delivered, improving the well-being of the population of the MKO.

The project's stated objective is "to improve the sustainable management of natural resources, and forest resources in particular, in order to reduce CO2 emissions and maintain ecosystem services".

The project has four anticipated outcomes:

- Improvement in the commitment and capacity of various stakeholders for the long-term, joint community-based sustainable management of natural resources.
- Increase in the capacity for CO2 sequestration through the sustainable management of forest ecosystems covering 21 600 ha.
- Sustainable use of natural resources, including development of sustainable income-generating activities and strengthening of the communities' overall resilience to climate change.
- Increase the production of degraded soils.

These outcomes will collectively deliver the anticipated environmental benefits described in Section 4.1

4.3 Project components, their expected outcomes and outputs and planned activities

Project: Restoring ecological corridors in the Mayo Kebbi Ouest, Chad, to support multiple land and forests benefits (RECONNECT).		
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		
Component	Outcomes	Outputs
Component 1: Local governance and capacity building	Outcome 1.1 Improvement in the commitment and capacity of various stakeholders for the long-term, joint community-based sustainable management of natural resources.	Output 1.1.1. Capacity of 13 existing orientation and decision-making authorities (ILOD) and 9 existing local development association (ADC) in the institutional governance of natural resources improved with a view to restoring forest ecosystems in the project area.
		Output 1.1.2. Capacity for forest restoration and management of 151 community-based organizations improved.
		Output 1.1.3. Capacity for natural resources management of MEP extension services in the project area improved.
		Output 1.1.4. Transhumant / semi-nomadic pastoralists engaged in the long-term, joint community-based sustainable management of natural resources in the project area.
Component 2: Maintenance of ecological continuities of forest blocks	Outcome 2.1: Increase in the capacity for CO2 sequestration through the sustainable management of forest ecosystems over 21 600 ha	Output 2.1.1. Critical forest blocks identified.
		Output 2.1.2. Operational and technical means of 151 community-based organizations to implement natural resources management established.
		Output 2.1.3. Operational and technical means of MEP extension services to implement natural resources management established.

		Output 2.1.4. Management documents (Charter, Convention and SAT) for the regulation of forest blocks developed, endorsed, implemented, enforced and monitored.
		Output 2.1.5. Sustainable financing mechanisms for the long-term community-based management of natural resources established, as laid out in the 20 updated Local Development Plans (PDL).
Component 3: Integrated management and increase in productivity of natural resources	Outcome 3.1: Sustainable use of natural resources, including development of sustainable income-generating activities and strengthening of the communities' overall resilience to climate change.	Output 3.1.1. Techniques for the sustainable use of timber and non-timber forest products developed and implemented.
		Output 3.1.2. Fishery sustainable management systems strengthened.
		Output 3.1.3. Human-Wildlife conflicts prevention and mitigation measures implemented.
		Output 3.1.4. Market chains for natural resources-based products developed.
	Outcome 3.2: Increase the production of degraded soils.	Output 3.2.1. Promotion of agroforestry for the restoration of degraded soils.
		Output 3.2.2. Promotion of sustainable pasture management measures.
Component 4: Monitoring, evaluation, knowledge management and sharing.	Outcome 4.1: Project implemented based on RBM, and lessons learned/best practices documented and disseminated.	Output 4.1.1. Assessment and Strengthening of the communities' resilience to climate change implemented as a driving principle of the project.
		Output 4.1.2. A set of 5 manuals or guidelines for use by community-based organizations and other relevant stakeholders that capture and describe improved practices, measures and technologies.
		Output 4.1.3. A communication strategy is developed and implemented.
		Output 4.1.4. Project Monitoring & Evaluation Plan and system developed and implemented.
		Output 4.1.5. Mid-term and Final Project Evaluations.
Project Management Cost (PMC)	Outcome 5.1: The project is implemented.	Output 5.1.1: Project management team established and functional.

Component 1: Local governance and capacity building

Outcome 1.1: Improvement in the commitment and capacity of various stakeholders for the long-term, joint community-based sustainable management of natural resources.

Output 1.1.1: Capacity of 13 existing orientation and decision-making authorities (ILOD) and 9 existing local development associations (ADC) in the institutional governance of natural resources improved with a view to restoring forest ecosystems in the project area.

- *Activity 1.1: Assess the institutional and technical capacities (and needs) of ILOD and ADC for project management and implementation; and for dealing with social change processes, develop and implement plan to build said capacities;*

A national expert (independent consultant or NGO staff) will be hired in Year 1 to lead a performance assessment of local governance bodies. Thanks to a series of field visits and

working sessions, and following the organization of a workshop to validate the key findings, the expert will elaborate a plan to strengthen their institutional and technical performance.

A national expert (independent consultant or NGO staff) will be hired to implement and monitor the performance plan, including the organization of 4 training sessions in Year 1 and 4 training sessions in Year 3 to address organizational needs and improve the performance of local organizations. This activity is critical to assure the local governance bodies have the adequate knowledge and skills to play their role, to be able to assess livelihood needs and to manage the grant system dedicated to the implementation of activities by community-based organizations.

- *Activity 1.2: Determine operational needs of ILOD and ADC, purchase and deliver equipment to sites;*

The determination of operational needs will figure in the performance assessment under Activity 1.1. As part of the performance plan developed under Activity 1.1, the expert will identify the resources and equipment required to assure effective performance of local entities over the five years of the project. All equipment supplied will be purchased by the project. In order to ensure adequate operational capacity over the lifespan of the project and beyond, the equipment will be provided in two endowments: one in Year 1 and 1 in Year 4.

- *Activity 1.3: Support the operation/functioning of the ILOD and ADC;*

Provide financial support to allow the ILOD and ADC to operate and perform as needed to achieve project goal. The determination of resource needs will be part of the performance assessment under Activity 1.1. The allocation of resources will be managed via an annual grant mechanism between the project and individual local entities, with dispersed on a monthly or quarterly basis.

- *Activity 1.4: Support the organization of scheduled ILOD and ADC governance meetings;*

Under the grant mechanism described in Activity 1.3, provide financial support to allow the ILOD and ADC to hold annual meetings throughout the duration of the project. These meetings are intended to allow for consolidating good governance practices.

- *Activity 1.5: Support cross-learning exchange visits and networking between the ILOD and ADC;*

Organize and support 3 exchange visits per year during the five years of the project. These exchange visits are intended to foster the sharing of expertise and experiences, and will be comprised of field visits, consultations with local stakeholders and roundtable discussions on subjects associated with the mandate of the local entities.

- *Activity 1.6: Support regular planning meetings of ILOD and ADC with CDA and CRA.*

Organize and support quarterly planning meetings with the three CDA and the single CRA covering the MKO. These meetings should foster collaboration and assure the integration of the annual work plans of local entities in departmental and regional planning streams.

Output 1.1.2: Capacity for forest restoration and management of 151 community-based organizations improved.

- *Activity 1.7: Assess the operational and technical capacities of the community-based organizations for forest restoration and management, develop plan to build said capacities;*

The consultant hired for the performance assessment under Activity 1.1, will also lead an assessment of the performance of the community-based organizations including their ability to assess livelihood needs, guide participatory change processes and empower women in natural resource management. The expert will produce a plan to build the operational and technical capacity of said organizations so as to strengthen their performance and deliver on their objectives.

- *Activity 1.8: Implement training sessions in each community-based organization, particularly technical training in implementation of forest restoration and management;*

Engage a local trainer and organize theoretical and practical training courses for each community-based organization. It is essential to strengthen the knowledge and skills of these local organizations in options and best practices for forest restoration and management that

generate both ecological and social benefits in order to implement and achieve concrete results on the ground.

Output 1.1.3: Capacity for natural resources management of MEP extension services in the project area improved.

- *Activity 1.9: Assess the technical capacities of the MEP extension services for implementing their management and enforcement mandate, develop plan to build said capacities;*
A national expert (independent consultant) will be hired in Year 1 to lead a performance assessment of local MEP services. The expert will produce a plan to build the operational and technical capacity of said services to strengthen their performance and deliver on their objectives
- *Activity 1.10: Implement training sessions gathering MEP extension services at the Department level.*
Engage a trainer and organize training sessions for local MEP services to strengthen their knowledge and skills to apply their mandate as technical agents in their respective fields of wildlife, forest, or fisheries management. One training session per department will be organized in Year 1 and Year 3.

Output 1.1.4: Transhumant / semi-nomadic pastoralists engaged in the long-term, joint community-based sustainable management of natural resources in the project area.

- *Activity 1.11: Analysis of the socio-ecological context of transhumant pastoralists in the areas broadly around Lake Chad and/or the active migration zone between northern Nigeria / southern Niger and the MKO;*
A national or regional expert (or team of national and/or regional experts) will be hired with relevant expertise on the subject of transhumant pastoralist issues. The study should include a livelihood assessment as well as an analysis of the ecological impacts of herd movements; the latter should involve referencing historical conditions and systems, describing the current system and future scenarios. The study is intended to broaden the understanding of social and environmental benefits of pastoral rangeland systems but also challenges resulting from interaction with sedentary systems and respective changes.
- *Activity 1.12: Implement consultations with transhumant / semi-nomadic pastoralists on the use of natural resources in relevant zones/ forest blocks and on issues of land use in grazing /transhumance routes versus farming areas;*
A national expert (independent consultant or NGO staff) will be hired in Year 1 to develop a strategy to identify the best means of reaching out to and engaging transhumant / semi-nomadic pastoralists. This will be based on consultations with relevant stakeholders, including the transhumant/semi-transhumant communities' members and organizations.
- *Activity 1.13: Develop and conduct targeted awareness raising activities on the transhumant/semi-nomadic pastoralists and sustainable resource use with all stakeholders;*
The awareness-raising program will be developed and implemented by the project team. Built on the outputs of Activity 1.11, it will promote best practices for coordinating multiple land uses within the project area. Yearly field visit by Pastoralist community representatives will be organized. The project will held sessions with MEP staff and other local entities to improve understanding and foster cooperation and coordination between said stakeholders and transhumant / semi-nomadic pastoralists. Two regional workshops will be organized in Year 2 and 4.
- *Activity 1.14: Develop a participatory early warning system on the mobility of transhumant livestock.*
This activity will support the organization of consultation between agropastoral and transhumant/semi-nomadic pastoral communities' members to discuss and agree on indicators, key messages and communication channels that will be used in an early warning system regarding the mobility of the transhumant livestock in and out the region. This system will be tested during the project implementation, adjusted and validated as the communication system to reduce the livestock mobility-induced conflicts between transhumant/semi-nomad

and the agropastoral sedentary communities, and allow equitable access and sustainable management of the shared resources.

Component 2: Maintenance of ecological continuities of forest blocks

Outcome 2.1: Increase in the capacity for CO2 sequestration through the sustainable management of forest ecosystems.

Output 2.1.1: Critical forest blocks identified.

- *Activity 2.1: Develop a Geographic Information System using existing spatial data to assess the vegetation cover in the project area, and monitor as feasible;*
The project will engage international expertise in Year 1 to work with a national expert and the project GIS / M&E officer to design and develop a GIS to compile, manage and analyze relevant spatial datasets for the project area and data collected on the ground over the course of the project. The national expert will support the project GIS / M&E officer from Year 2 to Year 4. Existing remotely sensed data will be used to assess land cover and a monitoring system that incorporates remotely sensed data and field data will be used to monitor changes. This activity will allow the project to capitalize on existing data and will facilitate information and data sharing amongst stakeholders.
- *Activity 2.2: Develop a methodology to assess the area, composition, structure, intactness, anthropogenic uses, vulnerability and management status of forest blocks occurring in the project area, combining both GIS and field data;*
An international expert and a national expert will be engaged in Year 1 to work with the project forest manager and GIS / M&E officer and local stakeholders to develop a methodology to assess and monitor forest blocks targeted. The national expert will support the data analysis in Year 2 (see Activity 2.5).
- *Activity 2.3: Train local community organization members in data collection;*
Training sessions will be organized in Year 1 by a national expert for local stakeholders to provide them with the basic skills required to actively participate in data collection and the monitoring of program objectives.
- *Activity 2.4: Define a set of criteria to rank the forest blocks (based on the data generated by the forest assessment methodology) according to their ecological relevance and the importance of their potential to provide ecosystem services;*
The expert consultant engaged under Activity 2.1 will work with project staff and a national expert to define a set of criteria that will be used to characterize forest blocks within the project area based on their ecological values and the potential to achieve project objectives.
- *Activity 2.5: Implement the forest assessment methodology to identify, describe the main forest blocks in the project area, and rank them following the defined set of criteria;*
Using a systematic process in year 1 and 2, criteria identified under Activity 2.4 will be used to identify and produce descriptions of forest blocks within the project area. The national expert engaged in Year 2 under Activity 2.2 will support the data analysis.
- *Activity 2.6: Assess potential livelihood impacts of regulations or restrictions, and their impact on local stakeholders*
The forest blocks identified for protection and regulation will be assessed on their socio-economic relevance in terms of providing critical livelihood resources in particular for marginalized or vulnerable peoples such elderly peoples and women headed households.
- *Activity 2.7: Select through a participative process, and based on the ranking above, the forest blocks to be managed through the project.*
Organize and hold workshops with representatives of the local communities and other relevant stakeholders, including pastoralists, to present results of Activities 2.5 & 2.6 and implement a systematic, participatory process to identify and prioritize areas for project intervention based on the ecological values and the potential of forest blocks to contribute to project objectives. This will include decisions about potential resource regulation and measures for mitigating potential adverse social impacts and also help identify actions to be

implemented to promote the sustainable management of the selected blocks of forests. Through this process voluntary and informed consensus will be achieved.

Output 2.1.2: Operational and technical means of 151 community-based organizations to implement natural resources management established.

- *Activity 2.8: Determine technical forest equipment needs for each community-based organization, purchase and deliver equipment to sites;*

The determination of operational needs of community-based organizations will figure in the performance assessment under Activity 1.7. As part of the performance plan developed under Activity 1.7, the expert will identify the resources and equipment required to assure effective performance of community-based organizations over the five years of the project. All equipment supplied will be purchased by the project. In order to ensure adequate operational capacity over the lifespan of the project and beyond, and as necessary, the equipment will be provided in multiple endowments.

- *Activity 2.9: Support the operation of each community-based organization;*

Provide financial and technical supports to allow community-based organizations to operate and perform as needed to achieve project goal. The determination of resource needs will be part of the performance assessment under Activity 1.7. The allocation of resources will be managed via quarterly grant mechanisms between the project and the ILOD and the ADC. The ILOD and the ADC will be responsible for supporting individual community-based organizations and will simultaneously work to build their operating capacity.

Output 2.1.3: Operational and technical means of MEP extension services to implement natural resources management established.

- *Activity 2.10: Determine operational and technical needs (administration, transport, communication, enforcement and monitoring) of MEP extension services, purchase and deliver equipment to sites;*

The determination of operational needs of local MEP will figure in the performance assessment under Activity 1.9. As part of the performance plan developed under Activity 1.9, the expert will identify the resources and equipment required to assure effective performance of local MEP agents over the five years of the project. All equipment supplied will be purchased by the project. In order to ensure adequate operational capacity over the lifespan of the project and beyond, and as necessary, the equipment will be provided in multiple endowments.

- *Activity 2.11: Support the operation of MEP extension services in relation with the community-based natural resource management activities;*

Provide financial and technical supports to allow local MEP agents to operate and perform as needed to achieve project goal. The determination of resource needs will be part of the performance assessment under Activity 1.9. The allocation of resources will be managed via a quarterly grant mechanism between the project and the MEP.

- *Activity 2.12: Support MEP extension services oversight by central MEP departments, through the organization of regular managerial and technical missions to the project area;*

Support regular central MEP services missions to the project area. These missions are important to assure local MEP services are in a position to carry out their mandate and contribute effectively to the project goal.

Output 2.1.4: Management documents (Charter, Convention and SAT) for the regulation of forest blocks developed, endorsed, implemented, enforced and monitored.

- *Activity 2.13: Assess the relevancy and adequacy to date of the existing set of management documents dealing with forest restoration and management, including the associated elaboration and endorsement process, revise it as necessary;*

International and national technical expertise will be hired to work with project staff and local stakeholders to review and assess the relevancy and adequacy of existing management documents pertaining to areas of project intervention. The consultant will provide expert advice on how to ameliorate interventions on forest restoration and management and provide important feedback on means to improve the process of elaborating and endorsing said documents.

- *Activity 2.14: Support the participative elaboration (or update) and endorsement process of the management document for each selected forest block with the aim of maintaining or restoring multiple forest benefits;*
Based on the outputs of Activity 2.12, support local entities to elaborate management documents, or revise existing ones, for forest blocks identified as priority areas for project intervention (see Activity 2.6). The consultants will also ensure that management documents satisfy IUCN ESMS principles and standards, that the needs of marginalized or vulnerable groups are appropriately understood and protected and that the endorsement process is based on voluntary and informed consensus of all relevant stakeholder groups (including transhumant pastoralists). This activity is critical to raise the overall quality of management documents and foster a process of adaptive management based on results achieved. It is also important to assure management interventions of different local entities are coordinated and consistent.
- *Activity 2.15: Support the implementation of management measures by community organizations (CG) for each selected forest block (as defined in the management document);*
Provide financial support to allow community-based organizations concerned with forest blocks identified as priority areas for project intervention (see Activity 2.6) to implement management measures outlined in management documents and improve performance as regards the objectives of the project. The allocation of resources will be managed via annual grant mechanisms between the project and the ILOD and the ADC. The operational manual of the grant award mechanism will include a mini-screening on environmental and social risks based on the ESMS Manual, ESMS principles and standards.
- *Activity 2.16: Support the enforcement of regulation measures by communication organizations (CVS) and MEP extension services for each selected forest block (as defined in the management document);*
Provide financial support to allow community-based organizations and local MEP services to enforce regulations pertaining to natural resource management within forest blocks identified as priority areas for project intervention (see Activity 2.6). This support will provide the means for local entities to actively enforce in a consistent and coordinated means any regulations laid out and endorsed within management documents (see Activity 2.13).
- *Activity 2.17: Deliver in situ technical assistance over the project lifespan to ensure adequate design, planning, implementation and follow-up of forest restoration and management activities;*
Provide on the ground technical support on forest management and restoration activities through the establishment of project capacities, including training in forest restoration, in particular for women. One forest manager and three forest officers will be hired over the project life span for the former. This staff should possess skills in social sciences and should include at least one woman. The project will provide local communities in project forest blocks with sustained technical assistance over the course of the project implementation period. This support will focus on assuring that local stakeholders can apply skills acquired via technical training sessions (see Activity 1.8) and have the knowledge to implement and adaptively manage their strategic interventions based on results achieved. This “hands-on”, targeted support will also provide an opportunity for project stakeholders to collectively assess and evaluate progress.
- *Activity 2.18: Produce up-to-date data and analysis on project progress and trends in natural resources management within the project area;*
Regularly update the database developed under Activity 2.1 through the establishment of project permanent GIS capacities. Create and disseminate knowledge-sharing products to communicate information, data and lessons learned from forest blocks across the project area.

Output 2.1.5: Sustainable financing mechanisms for the long-term community-based management of natural resources established, as laid out in the 20 updated Local Development Plans (PDL).

- *Activity 2.19: Determine the financial cost of community-based natural resources management systems;*
A national expert will be engaged in year 2 to work with the project team and local stakeholders to assess the cost to establish and sustain community-based natural resource management that follows endorsed management regulations (see Activity 2.13). A workshop will be held to present the findings.
 - *Activity 2.20: Design and pilot sustainable financing mechanisms for community-based management based on existing and potential revenue generated by the commercialization of natural resources products;*
This activity will be led by an international expert and a national one, with at least one of the position being filled by a woman, if possible. Possible pilot financial mechanisms will be identified and will be assessed in terms of their prospects and appropriateness for revenue generation through the commercialization of natural resources products or enterprise development. The financing mechanism will provide financing in particular for products or enterprises/cooperatives developed or led by women. Constraints, opportunities, conditions for success and keys to sustainability will all be taken into consideration. Workshops will be held to present the findings and to identify and advance the planning of a select set of pilot financial mechanisms. Operational procedure of the financing mechanism(s) will include a mini-screening on environmental and social risks based on the ESMS Manual, ESMS principles and standards.
 - *Activity 2.21: Monitor the pilot financing mechanisms;*
The project team will work with communities to develop a management oriented monitoring system and will support the documentation of the experience of each pilot mechanism.
 - *Activity 2.22: Conduct review and viability assessment of the financing mechanisms;*
An international consultant and the national expert will work with local stakeholders to collectively and systematically assess the results and sustainability of pilot mechanisms. Lessons learned will be shared and recommendations to improve the results of pilot mechanisms will be produced.
 - *Activity 2.23: Implement a participative process for the financing mechanisms to be adopted and integrated by relevant stake-holders in updated Local Development Plans;*
To promote sustainability and the systematic integration of successful financing mechanisms into management systems, the program will convene stakeholders of each pilot mechanism to share feedback on their experience and collectively examine the results. A participatory process will be enacted that will provide stakeholders the opportunity to formally adopt financial mechanisms and integrate them into their PDL during the revision phase that will be organized in year 5.
- Activity 2.24: Deliver in situ technical assistance over the project lifespan to ensure adequate support to local institutions.*
Provide permanent expert support to local entities (ILOD and ADC) implicated in coordinating management planning and piloting financing mechanisms. Sustained support is necessary to assure local entities possess skills to collectively manage and monitor any financing mechanisms.

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

Outcome 3.1: Sustainable use of natural resources and development of sustainable income-generating activities and strengthening of the communities' overall resilience to climate change

Output 3.1.1: Techniques for the sustainable use of timber and non-timber forest products developed and implemented.

- *Activity 3.1: Develop a method for establishing baseline inventories and subsequent monitoring of timber and non-timber forest products, train community organization members in data collection, and implement surveys in the selected forest blocks;*
A national expert will be hired by the project to design survey methodologies to establish baselines of select forest products within project forest blocks. The survey methodology will

be community-based to allow local stakeholders the means to repeat the survey and directly monitor and detect trends in their resources. The methodologies will be validated through a workshop. A national expert will be responsible for training community-members (including women) in survey methodologies. Survey will be implemented simultaneously with Activity 2.5.

- *Activity 3.2: Elaborate sustainable harvest guidelines for the key timber and non-timber forest products and support their integration into management plans of the selected forest blocks.*
An international expert and a national expert will be hired to provide technical expertise on establishing sustainable harvest guidelines of key forest products. A series of workshop will be organized to engage local stakeholders. Where needed separate workshops will be held for women to ensure strong attendance. The project team will then facilitate the integration of these guidelines into management plans (see Activity 2.13).

Output 3.1.2: Fishery sustainable management systems strengthened.

- *Activity 3.3: Assess the sustainability of the fishery management systems currently in place in Lake Léré and Lake Tréné;*
A national expert will be hired in year 1 to assess the sustainability of fishing regulations, practices, human dependency on fishery resources, and overall fisheries management for the two lakes and develop guidance on how the sustainability can be improved. Two workshops will be held to engage local stakeholders.
- *Activity 3.4: Elaborate the fishery management plans for Lake Léré and Lake Tréné based on the assessment of current systems;*
Based on the results of Activity 3.3, the project will hire a national expert in year 2 to support the revision of fisheries management plans. Two validation workshops will be organized to validate and endorse the revised plans.
- *Activity 3.5: Support the implementation of management measures by the ILOD for each Lake (as defined in the management document);*
Provide financial support through grant agreements with the ILOD to allow community-based organizations to implement management measures elaborated in revised fisheries management plans. Core costs covered include those associated with motorized boat patrolling and the maintenance of marking of no fishing areas.
- *Activity 3.6: Support the enforcement of regulation measures by the ILOD and MEP extension services for each lake (as defined in the management document).*
Similar to Activity 3.5, the project will support the enforcement of regulation measures for fisheries by local MEP services. Support will be included as part of grant agreement with MEP and will include costs associated with boat patrolling.

Output 3.1.3: Human-Wildlife conflicts prevention and mitigation measures implemented.

- *Activity 3.7: Assess patterns of the main human-wildlife conflicts in the project area*
A national expert will be hired in year 1 to assess the patterns of HWC in the project area. Conflictual species and causes will be identified and the conflict sites mapped. Priority actions will be defined and planned based on the Human–Wildlife Conflict Management Toolbox developed by FAO, CIRAD and RAPAC for Central Africa.
- *Activity 3.8: Support the implementation of prevention and mitigations measures by community organizations.*
Based on the results of Activity 3.7, as of year 2 the project will support the implementation of prevention and mitigations measures by local communities through a grant mechanism managed by relevant ILOD and ADC.

Output 3.1.4: Market chains for natural resources-based products developed.

- *Activity 3.9: Develop and implement a method for the assessment of the economic value of natural resources products in the project area, analyze the data;*
A team of two experts, an international and a national, will be hired in year 1 to lead this activity with at least one of the position being filled by a woman, if possible. Based on a

methodology they will develop, the project will organize and support the data collection necessary to conduct commodity chain analyses to identify economically viable commodities and potential markets for natural resource products that currently or could potentially play a significant role in economic activities and/or livelihood generation within the project area. Particular emphasis will be given to commodities that are already or can be managed by women or women groups. The results will be analyzed, disseminated and discussed during a workshop.

- *Activity 3.10: Select a set of natural resources products for the development and strengthening of a sustainable market-driven approach led by community organizations;*
In year 2, a national expert will be hired to take the results from Activity 3.9 and develop guidelines to ameliorate the production, transformation and marketing of natural resource products in order to intensify sustainable economic activities and contribute to the improvement of local livelihoods. This activity will apply the market development approach to natural resources products, linking market to the natural stock in order to ensure sustainability of the ecosystems providing the marketed products.
- *Activity 3.11: Elaborate and implement a program to support the transformation and the commercialization of selected natural resources products by community organizations.*
Provide support to local organizations to implement the guidelines elaborated under Activity 3.10. Depending on the type of support required and the implementing entity, the support will be provided directly or through the establishment of grants. Opportunities should be sought how to best support women or women groups. A broad range of activities aimed at involving local communities in commercialization efforts in value chains of identified commodities and supporting the establishment of viable community-based enterprises may be supported.

Outcome 3.2: Increase the production of degraded soils.

Output 3.2.1: Promotion of agroforestry for the restoration of degraded soils.

- *Activity 3.12: Conduct study on best practices in traditional tree-based agriculture techniques and enhanced agroforestry from comparable ecosystems;*
Engage 1 international and 1 national expert to undertake a short-term investigation on best practices and results from tree-based agriculture techniques and enhanced agroforestry techniques from comparable ecosystems. The specific objective of this activity is to become aware and better understand options for restoration, including conditions for success, and develop guidance on the application of best practices. A series of workshops will be conducted to consult with local stakeholders and disseminate the results of the study.
- *Activity 3.13: Promote the application of applicable best practices of agroforestry.*
Provide support to local organizations to implement the guidance developed under Activity 3.12. Depending on the type of support required and the implementing entity, the support will be provided directly or through the establishment of grants. A broad range of activities aimed at involving local communities in implementing best practices, such as the dissemination of improved seedlings to the establishment of small-scale nurseries for local tree species may be supported. The project will promote the use of native tree species and undertake due diligence to avoid pathways for introducing - even accidentally - alien invasive species. The promotion of use of these best practices will, in particular, target women.

Output 3.2.2: Promotion of sustainable pasture management measures.

- *Activity 3.14: Conduct study on best practices in grassland management and fodder production and management from comparable ecosystems;*
Engage 1 international and 1 national expert to undertake a short-term investigation on best practices in grassland management and fodder production and management from comparable ecosystems. The specific objective of this activity is to become aware and better understand options for grassland management and foster production and management, including conditions for success, and develop guidance on the application of best practices. This will build on the Voluntary Guidelines on Responsible Governance of Tenure-Guide to Pastoral Lands, developed by FAO (2016) with contributions from IUCN, in order to improved understanding of pastoralists' rights and responsibilities with respect to access to natural resources and how those are changing across ecosystems and communities in the project

intervention area. A series of workshops will be conducted to consult with local stakeholders and disseminate the results of the study.

- *Activity 3.15: Promote the application of applicable best practices of pasture management.*
Provide support to local organizations to implement the guidance developed under Activity 3.14. Depending on the type of support required and the implementing entity, the support will be provided directly or through the establishment of grants. A broad range of activities aimed at involving local communities in implementing best practices, such as techniques for intensified fodder production or soil conservation, may be supported. The promotion of use of these best practices will, in particular, target women.

Component 4: Monitoring, evaluation, knowledge management and sharing.

Outcome 4.1: Project implementation based on RBM and lessons learned/best practices documented and disseminated

Output 4.1.1: Assessment and Strengthening of the communities' resilience to climate change implemented as a driving principle of the project

- *Activity 4.1: Implementation of the Resilience Adaptation Pathways and Transformation Assessment Framework (RAPTA).*
The activity is part of the inception phase of the project and will be undertaken in a workshop setting where stakeholders from selected communities in each canton will be able to collectively assess the project's underlying assumptions and decide on any revisions or refinements to the project's design. An international consultant will be engaged to lead project stakeholders through the RAPTA framework to examine current social-ecological systems in the project area. This work will be undertaken during one workshop. As part of an adaptive management process, the RAPTA framework will also be used to review results during the implementation of the project's M&E plan (see Activity 4.6). The results will be communicated with stakeholders and used to further test any assumptions and refine the project's interventions.

Implementing the RAPTA framework will include a gender mainstreaming process that will start during the workshop mentioned above with a gender analysis and will continue throughout project implementation through subsequent workshops at the community level. The purpose of the analysis is to characterize the roles of women in natural resource governance and management, assess the impact of their action and commitment to natural resources management, and identify differing needs, constraints, and opportunities between women and men. Where gender based inequalities and vulnerabilities are identified the project will seek opportunities for compensation through measures such as income-generating activities, strengthening resource rights and others to be identified during the workshop. The project's adaptive management approach will ensure that insights gained are used to further improve project design, empower women and foster resilience of men and women.

Output 4.1.2: A set of 5 manuals or guidelines for use by community-based organizations and other relevant stakeholders, which capture and describe the improved practices, measures and technologies.

- *Activity 4.2: Review and compile technical and operational project-based lessons learned and best practices;*
Engage 1 international expert to work with project management team and local stakeholders to compile results of project investigations into best practices and lessons learned (see Activities 3.2, 3.3, 3.7, 3.10, 3.12 and 3.14). A workshop will be held to exchange information and review results.
- *Activity 4.3: Develop manuals (based on best practices and lessons learned) that can be disseminated to relevant stakeholders for application.*
Use the outputs of Activity 4.2 to develop a set of 5 manuals or guidelines that can be applied by local stakeholders to improve the sustainability of natural resource management. The manuals are intended to provide practical guidance on how to apply and monitor the impacts of improved practices.

Output 4.1.3: A communication strategy is developed and implemented.

- *Activity 4.4: Develop a communication strategy;*
Engage a national expert to develop and implement a communication strategy that supports the project's goal. The strategy will target numerous stakeholders, including indigenous groups, transhumant / semi-nomadic pastoralists and other community members who must change their practices to achieve anticipated results. As such, the strategy will consider various means to communicate on best practices and effectively disseminate of manuals developed under Activity 4.3. These means may include a series of communication tools or events.
- *Activity 4.5: Create and disseminate any communication products as detailed in the communication strategy.*
As detailed in the strategy developed under Activity 4.4, produce any communication materials and coordinate appropriate dissemination to assure effective project communication in support of overall goal and objectives.

Output 4.1.4: Project Monitoring & Evaluation Plan and system developed and implemented.

- *Activity 4.6: Define and establish a spatially-explicit result-based management M&E plan and finalize the project baseline that informs management decisions and is fed by both data collected in the course of the project and other near real-time datasets;*
A national consultant will be engaged to develop and implement an M&E plan that allows stakeholders to repeatedly evaluate the level of achievement of project results and forecast any significant deviations, supporting a results-based management approach that can be adapted based on lessons learned. The plan will lay out the relationships between partners as well as activities, outputs and the project goal. It will integrate a set of measurable indicators to track progress relative to baseline values. Information gained through monitoring will be disseminated as part of the communication strategy under Activity 4.4. The project's GIS / M&E officer will support the compilation and management of information and data pertaining to M&E. The baseline of project performance indicators will be finalized and validated by all stakeholders.
- *Activity 4.7: Organize project annual reporting, review and planning including M&E missions.*
Annual technical and financial reports will be prepared, validated and submitted to the GEF. Local executing agency will contribute to these reports to be consolidated by the project for submission to the GEF. Annual project review and planning workshops will be organized to analyze the progress made and plan for next year. Periodic monitoring and supervision missions will be organized to assess the course of project, compile M&E data and update the performance indicators.

Output 4.1.5: Mid-term and Final Project Evaluations.

- *Activity 4.8: Organize project Mid-term and Final evaluations.*
The project will engage an external consultant(s) to lead a mid-term review and a final evaluation mission. Terms of reference for each of these missions will be developed to spell out the scope, objectives and expected outcomes.

Project Management Cost (PMC)

Outcome 5.1: The project is effectively and efficiently managed.

Output 5.1.1: Project management team established and functional.

- *Activity 5.1: Appoint the project management unit;*
A project team will be recruited to ensure effective and efficient execution of the project activities. The details of the staff are described in the project organization chart and terms of reference will be developed for each position.
- *Activity 5.2: Procure office equipment to the project management and coordination units.*

The project will provide equipment to assure the working conditions for effective and efficient implementation of the field activities. This equipment will be acquired following IUCN procurement policies.

4.4 Risk analysis and risk management measures

Table below provides risks analysis and the associated mitigation measures.

Risk Description	Level	Mitigation measure(s)
Political instability	Moderate	IUCN in consultation with the executing agency and the GEF Secretariat will suspend the project implementation.
Institutional turn over at national level (MEP national services)	Moderate	IUCN and the Executing Agency ensure the participation of directors and managers from the Forestry Directorate and other relevant Directorates.
Institutional turn over at local level (MEP extension services, PMU experts, etc.)	High	Strengthen the role of the Regional Committee for Action (CRA). IUCN and the executing agency will jointly promote measures for a sustained project staffing over the project lifespan.
Terrorism	Low	The MKO is outside of Boko Haram's area of influence. However, the PMU will be in close contact with the Governor offices and will have access to security updates and benefit from the security systems in place along the boundary.
Security (e.g. <i>coupeurs de route</i> , <i>zaragina</i> , poachers)	Moderate	Same as above. In addition the project will be implemented by local stakeholders who are familiar with the local context and able to anticipate this risk.
Business climate is not favorable to non-timber forest products development (corruption preventing exports)	High	Ensure that local authorities support the project and fulfil their mandate effectively.
Legal constraints to the development of transformation products	Moderate	Component 2 of the present project includes specific measures to address sustainability

4.5 Consistency with national priorities and plans

As shown below, this project is highly consistent with national priorities, plans, and policies.

National Priorities	Project Consistency
Plan National de Développement (PND) (2013-2015)	All the project's actions, in particular those aimed at developing the capacity of local communities to govern and manage natural resources, as well as activities that will help increase the income of local populations (i.e., through agroforestry, agriculture and pastoralism) are included in the PND. The project will work to strengthen the bases of economic and social growth and will contribute to making Chad an emerging country by 2025, as laid out in 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 104 billion XAF.
Report on Land Degradation Neutrality	As defined within the framework of the "Report on Land Degradation Neutrality" prepared by the Government of Chad within the framework of the United Nations Convention to Combat Desertification, 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 solutions to some of the main causes of soil degradation identified in Chad, namely: overgrazing, water erosion and deforestation. More specifically, the entirely consistent with strategy's recommendations for the MKO and in the area surrounding Sena-Oura. These include recommended actions that should be taken to stabilize the banks of watercourses as well as for reforestation, the intensification and improvement of practices linked to livestock rearing, and the restoration of barren land.
National Communication by the Government of Chad to the United Nations Framework Convention on Climate Change (2012)	The project is consistent with the second "National Communication by the Government of Chad to the United Nations Framework Convention on Climate Change" (2012), which underscored the fact that greenhouse gas emissions are primarily linked to agriculture and land use, and the change in the use of land and forests. The project will contribute to a strategic response by promoting best practices in forestry and the agro-sylvo-pastoral systems (including soil restoration) of the MKO to reduce emissions and increase and preserve carbon sinks.
National Bush Fire Management Strategy	The project will contribute to the fulfilling of Chad's "National Bush Fire Management Strategy".

4.6 Project alignment with IUCN Programme

IUCN's mission is "To influence, encourage and assist societies throughout the world to conserve the integrity and diversity of nature and to ensure that any use of natural resources is equitable and ecologically sustainable." In doing so, IUCN envisions "A just world that values and conserves nature". It has been operating this through quadrennial programming. The IUCN's programs for 2017-2020 are focusing on: (i) expanding efforts to halt the loss of biodiversity and link-up with efforts for poverty reduction and sustainable development; (ii) developing and promoting nature-based solutions to global, regional and local development challenges, providing tangible livelihood benefits and conserving biodiversity and (iii) supporting and influencing the implementation of the Strategic Action Plan of the Convention of Biological Diversity and the Sustainable Development Goals.

IUCN work is organized around three programme areas. The 'Valuing and conserving nature' Programme Area addresses both the direct and indirect drivers of biodiversity loss and works to improve the status of biodiversity. It also works to increase the value of nature by society, and works on the development and implementation of effective gender-sensitive policies and legal frameworks for conserving nature. Addressing gaps in necessary legislation, and ensuring enforcement of existing

law is critical. The second programme area is “Promoting and supporting effective and equitable governance of natural resources”, which is considered as the foundation of sound natural resource management. In this programme area, IUCN addresses lack of appropriate governance and insecure rights, including lack of awareness about rights and entitlements and the omission of gender perspectives. It also works to develop and strengthen existing tools and methodologies to assess governance regimes in specific areas such as the application of rights-based approaches. The third programme area is about “Deploying nature-based solutions to address societal challenges”, where IUCN works to demonstrate how nature-based solutions can contribute to restoring landscapes, replenishing river flows and re-connecting fragmented ecosystems. Through the application of the Union’s knowledge of ecosystem management, forest conservation, gender-responsive approaches and protected areas, environmental law or sustainable business strategies, nature-based solutions help to make agriculture more sustainable, protect cities from flooding, absorb carbon emissions, conserve habitats and promote social justice and gender equality.

This project is consistent with the two last Programme areas, namely “Promoting and supporting effective and equitable governance of natural resources”, and “Deploying nature-based solutions to address societal challenges. The project will promote improved governance arrangements over natural resources in order to deliver rights-based and equitable use with tangible livelihoods benefits. It will also focus on approaches to “healthy and restored ecosystems make cost-effective contributions to meeting global challenges of climate change, food security and economic and social development”. These approaches include capacity development, knowledge generation on best practices, the creation of a robust set of principles, standards and tools, consolidating what already exists, and convening and empowering stakeholders to design solutions that influence policy, governance and action. The project will contribute to: (i) *Sub-result 2.1 Credible and trusted knowledge for assessing and improving natural resource governance at all levels is available from IUCN*, through the development of local development plans, training material for natural resources management at the local level, best practices for natural resources management; (ii) *Sub-result 2.2 Governance at national and subnational levels related to nature and natural resources is strengthened through the application of the rights-based approach, and incorporation of good governance principles* through the development of forest management plans including Charters, convention and SAT, and the development of capacities of the ILOD (Local decision-making authority); by building their capacity the project also develop and increase their commitment and participation in decision making; (iii) *Sub-result 3.2 Inclusive governance and resourcing mechanisms to facilitate the effective deployment of NBS are tested and adopted by decision makers and diverse stakeholders at all levels* through the support in the adoption of best practices in forest and natural resources management that generates social and ecological benefits; and *Sub-result 3.3. Intact, modified and degraded landscapes, seascapes and watersheds that deliver direct benefits for society are equitably protected, managed and/or restored* through the sustainable management of forest ecosystems.

Thus, this project will build on lessons learnt from and complement the abovementioned IUCN-led initiatives by providing resources to support incremental cost, taking into account what other organizations are doing in the target countries. In fact, over the last decade, IUCN has led initiative in Chad on various aspects of natural resources management in and outside protected areas. The major ones are: (i) the Livestock for Livelihood project implemented from 2010-2013 to help pastoral and agropastoral communities around the Lake Chad to develop and enforced sustainable pastureland and agricultural land management systems compatible to climate change context, (ii) the improved information, education and communication of rural and peri-urban populations to adaptation to climate change, which will be implemented from 2017-2019, to make accessible climate related issues and solutions to stakeholders and national and local levels in Chad that will guide their decision-making on production activities; etc.

4.7 Incremental¹ cost reasoning (for GEF projects)

The project is thus defined on the basis of previous interventions in the MKO, most of which were listed in the baseline section. The project is based on the best practices for the local governance of natural resources implemented by the Government of Chad in partnership with GIZ via the PRODALKA project and European Union with PADLGRN and PRCPT.

The additionality of this project is very high given that:

- 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 introduce ecosystem functionality and connectivity considerations and 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 MKO during the implementation of the GEF project are focused on one protected area (i.e., Sena-Oura National Park). These interventions focus on biodiversity conservation and the effective management of the national park. There has been little consideration to the management practices at the periphery of the protected areas. Where interventions have targeted the periphery of protected areas, they fail to consider the ecological connectivity between different ecosystems. This makes current natural resources management inappropriate to support the multiple benefit derived from the ecosystems they belong to.

Carried out outside the protected area, the GEF project will constitute a geographical increment and thematic by guaranteeing the ecological continuity of the zone by providing a “human-environment” relations management perspective (natural resource management, agriculture, agroforestry, etc.).

The value added of the present GEF project compared to what would be the Business-as-usual scenario is depicted in the following table.

Detailed incremental reasoning

<u>Business as usual scenario</u>	<u>Alternative scenario with the GEF resources</u>
Component 1: Local governance and capacity building	
The devolved State administration's technical services face significant obstacles to implementing national sectoral policies in the	Component 1 is structured to align with and reinforce the practices for local governance of natural resources implemented in particular by

¹ For climate change adaptation projects to be financed under the GEF, this section will be replaced by an analysis of the “additional cost reasoning”.

<u>Business as usual scenario</u>	<u>Alternative scenario with the GEF resources</u>
<p>agricultural, pastoral and forestry sector. This is partially linked to sectoral compartmentalization, as well as to a lack of sufficient 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 system that controls 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.</p> <p>The ILOD were designed to render decision concerning natural resource management local, sustainable and independent. Twelve ILOD have been formed in the MKO region over the past two decades, primarily in the periphery of the protected areas. While four of the twelve ILOD formed are not currently active, the PGG field mission found that six ILOD remain to varying degrees operational. ILOD that are not currently active need to be revitalized. As most ILOD do not generate significant income within the frame of their mandate, lack of resources is major constraint to their sustainability and functionality.</p> <p>In canton without ILOD, it is the ADC that assures the coordination and supervision of natural resource management in accordance with the canton's PDL. Similar to the ILOD, many ADC lack the necessary resources to fulfill their mandate sustainably.</p> <p>Similar to the ILOD and ADC, the current functionality of CG and CVS varies considerably and need strengthened capacities and technical support to perform their mandate.</p> <p>Through the implementation of the PRCPT project, local governance structures will be strengthened and emerging local planning efforts will be supported to improve local governance. The priority actions in the PDL in the field of job creation and socio-economic integration of youth, women and refugees/returnees will be implemented. Finally, local initiatives in favor of intercommunity, intra- and interreligious dialogue and promotion of a culture of peace, tolerance and civic education will be promoted. The PRCPT project does not address Natural Resource Management.</p>	<p>the Government of Chad in partnership with GIZ via the PRODALKA project and the European Union with PADLGRN and PRCPT.</p> <p>Component 1 will work with every stakeholder involved in natural resource management in MKO region using socio-ecological approach:</p> <ul style="list-style-type: none"> • MEP extension services • Local decision bodies (ILOD and ADC) • Community based organization (CG and CVS) • Transhumant pastoralists and indigenous people. <p>The intervention strategy will consist in assessing their specific technical, capacity and operational needs to be able endorse their role in the local and sustainable management of natural resources taking into consideration the ecological continuity. The activities will include training programs, and awareness raising programs specifically designed for each beneficiary group, with focus on how stakeholders should address ecological continuity of the block of forest and the needs of various resources users in the current governance systems.</p> <p>This first cluster of activities shall expand the former PRODALKA intervention, which was very successful, and complement PRCPT actions related to job creation and socio-economic integration of other sectors.</p> <p>The value-added shall be to end-up with MEP services, ILOD/ADC, CG/ CVS and vulnerable groups empowered to implement natural resource management and related economic development sustainably.</p>
	<p><u>GEF funds:</u></p> <p>- USD 520,368</p>

<u>Business as usual scenario</u>	<u>Alternative scenario with the GEF resources</u>
Component 2: Maintenance of ecological continuities of forest blocks	
<p>Most of the forested areas that remain in the MKO are degraded and increasingly fragmented. In addition, the natural ecosystem continuum between these protected areas has largely disappeared, especially between Sena-Oura National Park and Binder-Léré Wildlife Reserve. Remaining forest blocks are severely threatened. Deforestation and natural ecosystems degradation dynamics in the three protected areas in the MKO were confirmed during the PPG field mission.</p> <p>With the support of previous projects (PCGRN, PRODALKA, PADLGRN), the local stakeholders have drafted management tools (Conventions, Chartes or SAT). But these tools only cover a small part of the MKO forest corridors and, when existing, are not implemented.</p> <p>This alarming situation is currently addressed by the BSB Yamoussa projects supported BMZ/GIZ and BMZ/EU Trust Fund Africa/GIZ. These two projects however focus on the transboundary protected areas between Chad and Cameroun. Peripheral zones are out the scope.</p> <p>In addition, the PRCPT project will revise the Local Development Plans, which constitute strategic documents for action planning at Canton level, but which are now outdated. PRCPT project will however not support the revision of the environment and natural resources management related actions.</p>	<p>Component 2 responds to the need to address the main causes of greenhouse gas emissions, namely the disappearance and degradation of forests and unsustainable and expanding agro-silvo-pastoral systems, in the buffer zones of the protected areas, which are currently not addressed. The GEF will support actions leading to restoring and maintaining the ecological continuity in the intervention area, adding value to the current fragmented natural resources management.</p> <p>As a complement to Component 1, Component 2 will address the operational needs of the MEP services, the local decision bodies (ILOD and ADC) and the community-based organizations to actually manage the remaining forest blocks in MKO, with a view to restoring and maintaining the ecological continuity. The activities will include, support to their operational functioning and mandate, and provision of equipment. Every local stakeholder will be equipped and supported to identify and manage the remaining forest blocks in MKO.</p> <p>The environment and natural resources management actions in the PDL will be revised through a participatory planning process. It will help reduce and moderate the adverse effects of anthropogenic degradation and fragmentation of forest habitat, and provides a key means to address the management of peripheral areas and the maintenance or re-establishment of ecological corridors. These corridors are important to maintain the ecological functionality of the natural systems in the MKO and for remaining wildlife with large home ranges or that migrate as part of their natural lifecycle or to meet their resource needs. In this regard, the intervention strategy of the GEF project is highly complementary to the PRCPT project.</p> <p>Coordination.</p> <p>Based on the action strategy specified in each Canton PDL, management documents (Charters, Conventions and SAT) for the regulation of forest blocks will be developed, endorsed, implemented, enforced and monitored. The value-added of the GEF project is to end up with operational management document effectively implemented and monitored by operational MEP services, ILOD/ADC and community-based organizations</p>
<p><u>Co-financing:</u></p> <ul style="list-style-type: none"> - BSB Yamoussa BMZ/GIZ project: USD 	<p><u>GEF funds:</u></p> <ul style="list-style-type: none"> - USD 1,889,778

<u>Business as usual scenario</u>	<u>Alternative scenario with the GEF resources</u>
<p>796,000</p> <ul style="list-style-type: none"> - BMZ/EU Trust Fund Africa/GIZ project: USD 1,296,000 	
Component 3: Integrated management and increase in productivity of natural resources	
<p>The ecological functioning of certain areas of the MKO region have already been highly modified and local stakeholders report that ecosystem services, particularly supporting and provisioning services, have been significantly degraded. Notably, timber and non-timber forest products (plants and wildlife) are becoming increasingly depleted.</p> <p>Among the sources of these changes are an overall increase in the rate of harvesting of natural resources by human populations, an increase in livestock density, land conversion (see agricultural expansion below), and the application of harvesting techniques that do not allow for the maintenance and/or renewal of resources. The growing demand for new agricultural areas and pasturelands, due in part to the expanding human population is a significant contributor to deforestation, forest degradation, forest fragmentation and biodiversity loss.</p> <p>Transhumance corridors have been implemented with little effectiveness and do not seem to be an appropriate solution to the current situation in the region. Competition, confrontations and conflicts over natural resources between sedentary agro-pastoralists and transhumant pastoralists are increasing in frequency and pose security issues.</p> <p>More generally, pressures on land and competition for resources and access to resources continue to increase within the MKO region and raise the risk of violent conflicts between local communities and vulnerable groups in the short term. Using the resource-based approach, the Integrated Development for Increased Rural Climate Resilience in the Niger Basin Project (PIDACC, 2017-2021, NBA/AfDB/GEF) is working towards strengthening the resilience of resources and populations.</p>	<p>The present GEF project will support and promote sustainable income-generating activities of various economic sectors and stakeholders:</p> <ul style="list-style-type: none"> • Farmers; • Fishermen; • Transhumant pastoralists; • Local-communities using timber and non-timber products. <p>The project will promote a market-oriented approach to select and develop adapted market chains in support to the implementation of best practices for agroforestry development, sustainable pasture management, sustainable forest management, sustainable land management, sustainable fish resources management, etc. The GEF will promote the ecological continuity between blocks of forest in order the value the ecosystem-based approach to natural resources management taking into consideration the vulnerability of ecosystem to climate change.</p>

<u>Business as usual scenario</u>	<u>Alternative scenario with the GEF resources</u>
<u>Co-financing:</u> <ul style="list-style-type: none"> - BSB Yamoussa BMZ/GIZ project: USD 1,836,000 - BMZ/EU Trust Fund Africa/GIZ project: USD 3,110,500 - IUCN/MEP-Chad/EU project: USD 776,707 	<u>GEF funds:</u> <ul style="list-style-type: none"> - USD 2,267,014
Component 4: Monitoring, evaluation, knowledge management and sharing.	
<p>Data and information about natural resources are very scarce outside the protected areas in MKO region in particular and in Chad in general, and barely geo-referenced.</p> <p>Local associations and NGO are very active in promoting good practices in the sustainable use of natural resource for socio-economic development. Their small size and the lack of financial support hinder a greater and more extended impact on the ground.</p>	<p>The GEF project shall organize and structure knowledge management at the level of MKO region.</p> <p>A sound GIS database will be established to compile data collected on the ground through the local investigations, measures and patrols. These data will be used over the project lifespan and further to monitor forest and biodiversity evolution trends and assess the project impact. This database will also support local planning and forest management and support related decision-making process.</p> <p>In addition, best practices will be compiled and disseminated to target groups of crop farmers, pastoralists, fishermen, and local communities collecting timber and non-timber products.</p> <p>Finally, communication activities will be systematically organized to raise awareness about biodiversity conservation and best practices.</p>
<u>Co-financing:</u> <ul style="list-style-type: none"> - BSB Yamoussa BMZ/GIZ project: USD 27,000 - BMZ/EU Trust Fund Africa/GIZ project: USD 860,500 	<u>GEF funds:</u> <ul style="list-style-type: none"> - USD 434,242

Incremental cost matrix

The following incremental cost matrix only presents the confirmed co-financing.

Costs	Baseline Costs (USD)	Alternative Scenario Costs (USD)	Incremental costs(USD)
Component 1: GEF funds		USD 520,368	USD 520,368
Component 2: BSB Yamoussa BMZ/GIZ BMZ/EU Trust Fund Africa/GIZ GEF funds	USD 796,000 USD 1,296,000	USD 796,000 USD 1,296,000 USD 1,889,778	USD 1,889,778
Component 3: BSB Yamoussa BMZ/GIZ BMZ/EU Trust Fund Africa/GIZ IUCN/MEP-Chad/EU GEF funds	USD 1,836,000 USD 3,110,500 USD 776,707	USD 1,836,000 USD 3,110,500 USD 776,707 USD 2,267,014	USD 2,267,014
Component 4: BSB Yamoussa BMZ/GIZ BMZ/EU Trust Fund Africa/GIZ GEF funds	USD 27,000 USD 960,500	USD 27,000 USD 960,500 USD 434,242	USD 434,242
Project management costs BSB Yamoussa BMZ/GIZ BMZ/EU Trust Fund Africa/GIZ GEF funds	USD 133,000 USD 217,000	USD 133,000 USD 217,000 USD 255,570	USD 255,570
Sub-total (US\$)	USD 9,152,707	USD 14,519,679	USD 5,366,972
<i>Agency fee</i>	/	USD 483,028	USD 483,028
Total (US\$)	USD 9,152,707	USD 15,002,707	USD 5,850,000

Table 3: Distribution of the project budget by financing types

<i>USD</i>	TA	INV	Total
Comp1	340 271	180 097	520 368
Comp2	934 934	954 844	1 889 778
Comp3	160 031	2 106 983	2 267 014
Comp4	259 242	175 000	434 242
PMC	255 570	-	255 570
Total	1 950 049	3 416 924	5 366 972

Table 4: Distribution of the project budget by focal areas

USD	CCM	LD	SFM	Total
Comp1	260 184	86 728	173 456	520 368
Comp2	566 933	-	1 322 844	1 889 778
Comp3	1 511 462	692 798	62 753	2 267 014
Comp4	217 121	72 374	144 748	434 242
PMC	127 785	42 595	85 190	255 570
Total	2 683 486	894 495	1 788 991	5 366 972

Table 5: Co-financing

USD	GEF financing	Co-financing
CCM	2,925,000	4,720,756
LD	975,000	1,645,585
SFM	1,950,000	2,786,366

USD	GIZ/BMZ BSB	BMZ/EU TFA/GIZ	UICN/MEP	TOTAL
Comp1				
Comp2	796,000	1,296,000		2,092,000
Comp3	1,836,000	3,110,500	776 707	5,723,207
Comp4	27,000	960,500		987,500
PMC	133,000	217,000		350,000
Total	2 792 000	5,584,000	776 707	9,152,707

4.8 Sustainability

In the context of this project, sustainability refers to as the probability of continued of project-derived benefits and impacts – institutional, environmental, social, economic and financial – beyond the project. In order to achieve sustainability, the project approach relies on principals of: a) strengthening on-going processes (i.e., processes put in place for natural resource governance by the government, local communities and previous and on-going projects) with ecological continuity lens, valuing the connection between natural resources within specific ecosystems (forest, pasturelands, farmlands, wetlands); b) local governance through the promotion of equitable access to natural resources

belonging to same ecosystems; c) capacity-building to effectively apply equitable management of natural resources that preserve the ecological continuity; d) the application of best practices; and e) direct investment in mechanisms to improve financial sustainability.

4.8.1 Financial and economic sustainability

The vulnerability of Chad's national economy to global events poses a risk to the financial and economic sustainability of the project, as financial stress reduces the ability of the country to sustain needed levels of counterpart funding and also reduces the likelihood of the country to assume the increased financial burden upon completion of GEF funding. The MKO, like other areas part in Chad, has its fair share of conflicts and localized disputes caused by natural resources uses (e.g., agricultural expansion, pressure from pastoralism, and transboundary security).

The project will work to minimize financial and economic risks, and improve the likelihood of sustainability, by building local capacity and investing in local governance. The project will build on existing mechanisms for local governance of natural resources, developed within national frameworks and supported by previous projects in the MKO. These mechanisms were developed in close consultation with local stakeholders, are participative and integrate processes to resolve conflicts. The project will also help increase respect for regional and local contractual, planning and management mechanisms, which were established recently but which require additional support to implement, enforce and monitor.

The project will invest in activities aimed at applying lessons learned and best practices in forestry and the management of agro-silvo-pastoral systems to assure activities are sustainable and contribute to the objective and anticipated outcomes of the project (including long term impacts such as a decrease in GHG emissions, maintenance of ecosystems' functions and co-benefits). The project will also work to assure the techniques tested and applied address the root causes of environmental degradation and will invest in pilot testing and monitoring the financial sustainability of a series of mechanisms for natural resource use (e.g., product transformation).

4.8.2 Institutional sustainability

The sustainability of the project has been taken into consideration since the early stage of project preparation, by engaging major stakeholders in all aspects of project design. An intense consultative process was undertaken, and included a reconnaissance mission, a scoping mission, field visits and a validation workshop.

The proposed interventions were both for their potential to deliver results and how well they could be owned and sustained by local stakeholders. The design is in line with Chad's national priorities and the high level of political commitment exhibited by the government during the project development process is a fair indication of their continued interest and support. The long-term success of the project will be insured by the confirmed political will of participating ministries to cooperate and sustain project interventions and outputs at project termination. The planned public awareness interventions will also contribute to building public ownership of the project and pave the way for continued support.

Memorandums of Understanding by the national executing agency and IUCN are in the process of being signed to secure the longevity of project outputs that will continue beyond the duration of the project.

4.8.3 Resilience strengthening

IUCN (2014) defines system's resilience as "a (social, watershed or forest) system's capacity to absorb, manage, and adapt to social and health, agricultural, and ecological changes (or stressors) while still maintaining its essential structure, feedbacks, and functionality". Based on this, it adopted resilience framework which includes four main integrated resilience themes, a) diversity (of economy, livelihood and nature), b) self-organization and adaptive governance (through participatory governance and empowerment of people in adaptive institutions), c) learning (ensuring that individuals and institutions can use new skills and technologies needed to adapt and make effective use of available climate and ecosystems information), and d) sustainable infrastructure and technology (portfolios that combine both engineered and 'natural infrastructure'. Using a participatory

qualitative assessment, the project will assess before-hand and at the end of the project the four components of this resilience framework in order to ascertain the progress made by the system (social and ecological) in terms of resilience.

The Resilience Adaptation Pathways and Transformation Assessment Framework (RAPTA) is methodological framework developed by GEF/STAP in order to mainstream resilience, adaptation and transformation related to climate change in the development of new projects. The implementation of this framework relies on 7 operational steps, requiring adapted funding and an adapted schedule for project design. It is particularly customized for projects with a design phase lasting 18 months. Giving the short period for the design of this project, it is planned to apply the RAPTA framework during the inception of the project to strengthen the resilience of ecosystems, including the communities in the project intervention areas (see Activity 4.1). The objectives are (i) to strongly engage local stakeholders to identifying gaps and planning for resilience, and (ii) to improve the results obtained from the application of the IUCN tool for resilience mainstreaming during the project preparation (IUCN, 2014). It is worth noting that the IUCN tool is fully compliant with the orientations and guidelines provided by RAPTA at design stage.

4.9 Gender equality and inequality issues

The project aims at establishing practices that promote equality between men and women in the activities proposed. The activities have been defined taking into account the social and cultural characteristics particular to the project intervention area, while bearing in mind the need to involve men and women equally. Women have a role to play in community and village activities, notably those linked to agriculture; however it should be noted that extensive consultations with women were difficult to implement due to the tight time frame of project preparation. This is why a gender analysis has been added to be carried out during the project's inception phase.

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

Because women are underrepresented in positions of responsibility within civil society organizations and local institutions, including as concerns land planning and natural resource management, and face significant barriers to securing resource rights, the project has integrated strategies and activities geared to raise awareness on these issues and engage said stakeholders in the project process and implementation.

Through the promotion of sustainable land management practices and improvement of natural resources productivity in Component 3, the project use opportunities to secure and enhance economic, social and environmental benefits to women.

4.10 Replication

The project's main objective "to improve the sustainable management of natural resources, and forest resources in particular, in order to reduce CO2 emissions and maintain ecosystem services" is applicable beyond the MKO; many of the strategies and activities proposed as part of this project could be replicated at a national level including, notably on the land encompassed by the Great Green Wall Initiative. Given that most countries in central Africa and in the Sahel zone share common environmental management issues, the potential for replication of the project outcomes is very high. 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 (through increased income and improved standard of living for the population) and at a global level with the significant sequestration of CO2 in order to mitigate the effects of climate change. There are also institutional frameworks in Central Africa (COMIFAC, RAPAC, and CEBEVIRA) and the Sahel zone (CILSS) whose mandates are related to natural resources management. These institutions are valuable channels to promote the achievements of the project. The Project potential for successful replication and scaling up is therefore high both at local, national and regional levels. To foster replication of the project achievement, the project intends to make available and accessible data and information related to

natural resources management and use, governance and best practices. It will also develop and implement an outreach plan of actions as part of the communication activities to ensure that potential users and next-users of the innovations and lessons derived from the project have access to them.

4.11 Communication and knowledge management

Communication

The project strategy includes multiple components that integrate awareness building (e.g., on environmental degradation and its causes, on the environmental and economic benefits of best practices) and has a component dedicated to monitoring, evaluation and knowledge management and sharing. To coordinate these aspects, a communication strategy will be elaborated (see Output 4.1.3 and Activity 4.4). The strategy will identify numerous targets for communication and knowledge sharing. Among the most direct targets will be social and institutional stakeholders within the project area, including indigenous groups, transhumant / semi-nomadic pastoralists and other community members who must be engaged and enabled to achieve anticipated outcomes and the project objective. As such, the strategy will consider various means to communicate on best practices and effectively disseminate of training and technical manuals developed under Activity 4.3. These means may include a series of communication tools or events. In addition, efforts will be made to assure local stakeholders have opportunities to exchange experiences and results on best practice management techniques that are applied and on the sustainability of efforts.

Beyond this integrated programmatic communication strategy, it is worth noting that communication is a key component of IUCN's core business from global to regional and country levels, and will be applied both internally and externally as part of this project. Internal communication will be key in removing misunderstanding and fostering genuine collaboration among the executing and implementation agencies. It was emphasized during project preparation that good communication on the project, its stakeholders and their respective role will be essential for smooth management and effective delivery of the project. Internal communications will be used to strengthen collaboration among partner organisations and structures. Regular contact will be established between IUCN, the implementing agency and the executing agency. The content of such communication will include information regarding the project, its progress towards the objective, and constraints related to the proper execution and or implementation of the project.

Regarding external communication and visibility, full compliance with IUCN and the GEF branding and marking guidelines will be required. These guidelines include descriptions on when and how to use IUCN and GEF logos. These documents can be accessed at https://www.thegef.org/gef/policies_guidelines/communication_visibility for the GEF and at https://cmsdata.iucn.org/downloads/iucn_publishing_guidelines_131210.pdf For IUCN. Where other agencies and project partners have provided support through co-financing, their branding policies and requirements should be similarly applied. External communication guidelines will be applied to project publications (including awareness raising and outreach products, technical tools, reports and communication products), vehicles, supplies and other project equipment.

Knowledge management

Similar to communication, knowledge management will entail internal and external processes. Internal processes will entail how the project systematically collects, archives and retrieves the knowledge of its staff and how it manages internal communications among its staff in order to strengthen its knowledge base. External processes will be concerned with how the project flows its knowledge into the hands of the people it most wants to use it, how it strengthens its knowledge through its interaction with external groups and how it learns whether its insights have made a difference.

Component 4 of the project is dedicated to monitoring, evaluation and knowledge management and sharing and will include the preparation and dissemination of knowledge products based on the best practices (see Component 3 and Component 4). The target audiences for the external communication of these products will be defined during the project inception period.

Knowledge management will be strongly linked to the project monitoring and evaluation outputs to ensure that all collected M&E data are processed into knowledge and shared with project staff and

other stakeholders to inform an adaptive approach. Expertise will be engaged to design and manage a GIS system will be used to help manage information and data compiled and collected by the project and used to inform communications and knowledge sharing tools. The objectives of this internal knowledge management process are to get the knowledge on project delivery right to the main stakeholders and to improve this knowledge based on experiences. This enriched knowledge will serve as inputs to the external processes of knowledge management. External knowledge management will be geared towards outreaching the project achievements and lessons to external partners at local, national, regional and international levels.

4.12 Environmental and social safeguards

The project aims at conserving natural resources and restoring ecological functionality by improving sustainable management of natural resources and reducing human pressure on natural resources. The project seeks to strengthen existing local governance mechanisms, to empower these local stakeholders in regional planning and community based resource management strategies, to protect critical forest blocks and increase the productivity of degraded soils through agroforestry and sustainable pasture management. By providing multiple benefits for local communities the project seeks to balance conservation objectives with social and development needs.

The project was screened on environmental and social risks at an early phase of project development. Despite the project's intention to integrate social and environmental objectives, the screening identified potential environmental and social risks, most importantly related to the protection of forest blocks which might imply restriction on the use of forest resources with associated livelihood impacts as well as related to potential risks for indigenous peoples associated to these restrictions. Also some minor environmental risks were identified. Overall the impacts were considered either as minor or to be readily addressed with mitigation measures; hence the project was classified as low risk project, with the classification to be confirmed (re-evaluated) after having further detailed the project design and improved the understanding of the socio-economic baseline through consultations and data collection in the field. The report of the socio-economic assessment as part of the field mission is attached in Appendix 13.

Based on the findings from the field mission and taking the final project design into consideration, the following conclusions and recommendations on environmental and social risks were drawn:

Standard on Involuntary Resettlement and Access Restrictions

The adoption of best-practices in forest management (including soil and forest restoration) and agro-sylvo-pastoral systems is likely to include measures for regulating and restricting the use of natural resources. The type and magnitude of any regulation, however, will only be known during project implementation subsequent to the forest assessment (activity 2.5) where ecological relevance of forest blocks and their importance for providing ecosystem services are analysed. The final decision which forest blocks are to be protected and respective use regulations will be taken through a participative process involving all relevant stakeholders including potentially affected groups (activity 2.7). A preceding resource use and livelihood assessment (activity 2.6) will ensure informed decisions and that the needs of vulnerable groups are fully understood. Members of the local natural resource governance bodies (ILODs and ADCs) as well as of the community-based organizations will be sensitized on the need to consider the full spectrum of livelihood implications and pre-empt potential negative social impacts of resource management recommendations.

The Standard is not triggered because any decision on regulating the use of forest resources will be taken by the community, and project management will ensure that this reflects voluntary and informed consensus. To aid the latter the project will, prior to these decisions, undertake appropriate livelihood assessment, as mentioned above. It should also be taken into consideration that the project addresses potential livelihood impacts through the development of sustainable income generating activities and measure for increasing the productivity of degraded soils (component 3).

Standard on Indigenous Peoples

The field mission confirmed the seasonal presence of transhumant pastoralists in the MKO; the most prominent group of transhumant herders being the Mbororo Peul (or Wodaabe) and the Ouddah. These social groups are largely marginalized within the legislative and political context and have very

limited access to basic social services, including health care, education, safe water sources or sanitation services. While Chad does not recognize the concept of indigenous people on its territory, their social organization and way of life fulfil the IUCN definition of “indigenous peoples”.

Because of seasonal presence in the project site, it was not possible to undertake a comprehensive livelihood assessment during the project preparation phase. A dedicated assessment has been programmed (activity 1.11) to be carried out at the outset of the project. The assessment will analyze livelihood conditions and identify potential negative impacts (material or non-material) from project activities, in particular impacts related to resource management regulations. The study will further elaborate on ecological impacts of herd movements taking into account historical conditions, current movements and impacts as well as future scenarios. The study is intended to broaden the understanding of social and environmental benefits of pastoral rangeland systems, but also to ascertain challenges resulting from interaction with sedentary systems in the context of socio-economic change processes and impacts from climate change. Where risks are identified culturally appropriate mitigation measures will be proposed as part of output 1.1.4 which will be discussed, refined and agreed (following FPIC) with legitimate representatives of transhumant groups.

In addition to the said assessment output 1.1.4 further includes activities that aim at engaging transhumant/semi-nomadic pastoralists in the sustainable natural resource management in the project area, fostering an understanding of other relevant stakeholders about pastoralist issues and promoting cooperation and coordination between said stakeholders. The ensemble of activities is considered to fully satisfy the provisions of the Standard on Indigenous People and hence a separate IPP is not deemed necessary.

Standard on Cultural Heritage

The project involves a small civil works component - anti-erosion mechanisms - which poses a very low risk of encountering buried cultural resources. The risk will be monitored and Chance Find Procedures will be at hand to be able to respond to unexpected encounter during civil works.

Standard on Biodiversity and Sustainable Use of Natural Resources

The impacts of the project on biodiversity are expected to be essentially positive as it is the explicit aim of the project to promote sustainable use of natural resources and restore ecological functionality. The project's restoration approach focusses primarily on natural regeneration and fire management; however, component 3 involves tree-planting support to local initiatives, an activity that might pose a minor risk of accidental introduction of alien invasive species. This risk will be mitigated by ensuring that tree-planting will not include alien species that involve risks of invasive behaviour and, where relevant, using protocols for germplasm procurement.

While it is the explicit purpose of the project to promote sustainable agriculture and a progressive phasing out of chemicals in favor of organic techniques, there might be a minor probability that some activities involve small application of pesticides. Any use of pesticide will be carried out in full adherence to the IUCN ESMS Guidance Note on Pest Management Planning (available at www.iucn.org/esms).

Other environmental or social risks

The project recognizes the diversity of social groups that make up the population of the MKO. These include groups that are marginalized when it comes to the governance of natural resources: transhumant herders, vulnerable groups and women. These groups are underrepresented in positions of responsibility within civil society organizations and local institutions, including as concerns land planning and natural resource management, and face significant barriers to securing resource rights. The project has integrated strategies and activities geared to raise awareness on these issues, engage said stakeholders in the project process and implementation, and develop income-generating activities aimed at securing and, when appropriate, enhancing the economic, social and environmental benefits to these groups. Issues related to transhumant herders are already covered in the section above (Indigenous Peoples Standard).

Gender equality and women empowerment

The project's approach to promote gender equality and women empowerment is explained in chapter 4.9. During the field mission women were consulted and their roles, needs and concerns discussed which provided critical input to the project design. However, it was also realized that a more in-depth gender analysis should be conducted in order to ensure that differences in the role of men and women are appropriately taken into account when implementing gender relevant activities. Such a gender analysis requires more time than was available during the PPG phase in order to ensure a meaningful consultative process. Hence this has been conceptualized as a separate activity to be carried out at the outset of the project.

A number of concrete measures have already been included in project design to ensure that gender based inequalities are avoided or compensated for such as

- ensuring that training opportunities are accessible for women (restoration, sustainable harvesting, surveying, productive skills etc.),
- hiring women consultants in order to facilitate communication with women and ensure that project activities are better aligned to their needs and capacities,
- as part of output 2.1.5 (Sustainable financing mechanisms for the long-term community-based management of natural resources established) financing will be provided in particular for products or enterprises/cooperatives developed/led by women (groups);
- output 3.1.4 (Identification of economically viable commodities and potential markets for natural resource products) gives particular emphasis to products that are already or can be managed by women or women groups.

It is expected that the consultative gender analysis will result in the identification of further measures or the refinements of project activities.

ESMS Grievance Mechanism

As a way to demonstrate that IUCN holds itself accountable for observance of the ESMS principles, standards and procedures, IUCN has put in place a grievance mechanism. This mechanism provides a transparent, timely and effective procedure for raising and submitting complaints, providing response and for corrective actions in cases where IUCN projects have failed to respect ESMS requirements. As such it assures people who fear or suffer from adverse impacts access to justice and redress.

Resolution of complaints should be sought at the lowest possible level following a three-stage process. First, complainants should bring up the issue with the project management (executing agency) to try to resolve it together. If not effective, the concern should be raised with the nearest IUCN office. If neither of the two stages have been successful, a formal complaint can be submitted to the IUCN Project Complaints Management System. Detailed guidance is provided on the ESMS website at www.iucn.org/esms.

All IUCN projects are required to inform relevant stakeholders about the mechanism at the earliest possible moment, no later than the official launch of the project. Cultural appropriate adaptations to improve complaint resolution at the local level are encouraged (e.g. assignment of a local ombudsperson).

ESMS Clearance

The project has been conditionally cleared; assessment results and reports indicated in the clearance report (see appendix 10) are to be submitted to IUCN.

5 Institutional framework and implementation arrangements

The proposed institutional set-up to implement the project activities are depicted in the organizational flow provided in **Appendix 2** and is described in the following sub-sections.

5.1 National and local decision making and planning

The execution of the project will be under the responsibility of the Ministry of the Environment and Fisheries Resources, Republic of Chad.

The Steering Committee (SC): The SC will serve as a national steering committee in an advisor capacity for implementation activities. Proposed SC members would include the Forestry and Fight against Desertification Directorate as the Secretariat, representatives of the relevant directorates of the Ministry of Environment and Fisheries resources (MEP), Ministry of Agriculture, Ministry of Livestock, Ministry of Land Planning, representative of the ILO focal points, representatives of the co-financiers (BSB Yamoussa/BMZ-GIZ, BSB Yamoussa/BMZ-KfW, etc.). IUCN will participate, as an observer. The final list of SC members will be completed during the project inception phase together with their terms of reference, but no later than three months after project kick off. The SC will meet annually to monitor past progress in project execution, and to review and approve annual work plans and budgets. Key members will meet as needed for activity specific guidance and will:

- Align the project with other regional and nation-wide initiatives;
- Monitor project progress and take timely actions to resolve implementation constraints;
- Liaise with different local project coordination units in the different cantons to ensure that the local units and the regional PMU act in harmony;
- Receive and review annual technical and financial reports on project activities;
- Review and approve annual work plans; and
- Ensure monitoring and evaluation of project activities.

Implementing Agency: IUCN is the implementing agency for the project. IUCN will support the MEP to ensure effective and efficient execution of administrative and financial matters and will assist in key technical and scientific issues. Its role will also be to provide guidance in consolidating results, facilitating workshops and the convening of key stakeholders (consistent with its comparative advantage in capacity building), and support additional fund raising initiatives to complement project activities. It will work to connect the project with other opportunities for synergy and complementarities. Opportunities for involving the GIZ, the European Union, JICA, the World Bank (WB), the French Cooperation (AFD), the African Development Bank (AfDB) and other relevant technical and financial partners in potential investment opportunities will be explored during project implementation to secure partnerships for follow up investments for on-the-ground activities. IUCN will designate internally a, composed of adequate thematic experts, in charge of supervision and backstopping of technical works to ensure effective implementation of the project at national and local levels. The Implementing Agency will be the primary responsible to:

- Ensure fluid communication between with the executing agency;
- Provide technical backstopping to executing agencies at national and regional levels;
- Supervise project implementation;
- Provide technical guidance to the project management unit for the annual work plan and budget preparation;
- Ensure quality control of the project workplans, budget and reports
- Ensure proper M&E and communication of the project achievements;
- Ensure proper financial management and reporting of the project resources;
- Ensure compliance with GEF and IUCN project management procedures and standards.

5.2 Project coordination and management

The project coordination and management will comprise national implementing and executing agencies as well as local partners.

The Project Management Unit (PMU) will be established with the help of the Implementation Agency (IUCN) and will provide a management structure for the development and implementation of the project in accordance with the rules and procedures of GEF/IUCN and consistent with directions provided by the Steering Committee/PTF. The PMU will be hosted by the Ministry of the Environment and Fisheries Resources and will be based in its regional offices in Pala. It will consist of 4 permanent staffs:

- A National Project Coordinator with and expertise in forestry;
- A Project Administrative and Finance Officer;
- An Accountant - Administrative Assistant;
- An Office Cleaner.

The PMU will be supported by the following technical experts and operation staff provided by the Technical Assistance activities of the project:

- A Forestry Expert (Activity 2.16);
- Three Forest technicians (Activity 2.16);
- Three Drivers (Activity 2.16);
- A GIS/Database/ M&E Specialist (Activity 2.17);
- An Institutional and Local Governance Expert (Activity 2.23).

The PMU will be for the primary responsible to:

- Provide technical guidance to Local Project Coordination Units for annual workplan and budget preparation;
- Ensure proper M&E and communication of the project achievements;
- Ensure proper financial management and reporting of the project resources;
- Ensure fluid communication between the executing and implementing agencies;
- Ensure compliance with GEF and IUCN project management procedures and standards;
- Consolidate of workplan and budget from local project management units
- Prepare of bid documents;
- Procure any necessary equipment and supplies;
- Administer contracts;
- Consolidate national reports from local project management units;
- Provisioning of reimbursements for expenses (e.g., daily allowance for participation to meetings, transport costs, etc)
- Other duties as defined.

Local Project Coordination Unit (LPCU). With support from the project, the national executing agency shall establish a Local Project Coordination Unit (LPCU) consisting of the President (or Focal Point) of each involved ILOD or ADC/CCD. The LPCU shall report to the PMU. The LPCU will work closely with the PMU, and will be responsible for implementing activities at the local / canton level. The LPCU provides a critical link between the PMU, other project resource persons and the various national specialists, technical services, and local partners involved in implementing the various project components within the respective cantons.

The role of the LPCU will be responsible for:

- Preparation of ILOD work plan and budget for project related activities; and
- Prepare ILODS specific reports.

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.

5.3 Procurement procedures and plan

Procurement will be carried out in accordance with the Policy and Procedure on Procurement of Goods and Services of IUCN in November 2013. This policy aims at ensuring that executing agencies obtains value for money in all its procurement activities and that procurement is conducted in an efficient and cost effective manner that respects sustainability, the environment and ethical principles. It therefore sets the procurement method depending on the value of Goods or Services, and includes the level of delegation of authority. The following Table 6 summarizes the procurement process for different value.

Table 6: Required procurement process for different values

Value	Process	Media
≥ USD 100,000	Formal Request for Proposal to a broad selection of potential suppliers.	Must be advertised on IUCN website. Resulting award must also be published on IUCN website
USD 25,000 – 99,999	Minimum of 3 proposals or quotations from identified suitable parties	No advertising required
USD 1 – 24,999	Competitive bidding not essential but should be considered where the benefits of competitive tendering in terms of price and quality will outweigh the costs.	No advertising required

The procurement plan for good, non-consultant services and consultant services is provided in appendix 12.

Training Programs, Conferences, Workshops, etc.: All training and workshops will be carried out on the basis of the project's joint work plans and budgets approved by the IUCN, and which will among others, identify: (i) the envisaged training and workshops; (ii) the personnel to be trained; (iii) the institutions which will conduct the training; and (iv) duration of the proposed training.

Operating Costs: Operating Costs include office supplies, operation and maintenance of vehicles, maintenance of equipment, communication, rental, utilities, consumables, transport and accommodation, travel costs and per diem, etc. Operating costs procedures will follow the World Bank Procurement Guidelines.

Project Management Unit: Terms of reference for all full-time positions will be developed in close collaboration between IUCN and the executing agencies.

6 Stakeholder engagement and participation

Stakeholder contribution to the design phase

The project design process benefited from the contributions of various regional, national and local stakeholders. Regional, national and local stakeholders from the national institutions and their extension services, from local institutions (e.g., ILOD, ADC), from the community-based organizations, from the private sector and from vulnerable groups were invited to share data and information on the environmental issues they face. They were also invited to express their needs in terms of capacity building, institutional strengthening and on-the-ground intervention to tackle these issues. National and local consultations (15-20/12/2016 and 3-17/01/2017, respectively) and dedicated work sessions during the national workshops held in N'Djamena, Chad on 20 December 2016 and on 22-23 February, 2017 were specifically organized to facilitate this information sharing. A broad range of stakeholders took part in these exercises. The minutes of the consultations are detailed in Appendix 13.

Stakeholder involvement in the implementation of the project

Successful implementation of the project will depend on the active participation of stakeholders. To assure this, stakeholder involvement is recognized as an integral requirement for each project component. In hosting the project document, the Forestry and Fight against Desertification Directorate (MEP) - Executing Agency, and the key stakeholders of the MKO recognize and embrace the need for this direct involvement by all stakeholders in the project process. The primary stakeholders in this project include:

- Public Sector: Relevant Directorates in the Ministry of the Environment and Fisheries Resources (MEP), Ministry of Agriculture, Ministry of Livestock, Ministry of Land Planning, and the Ministry of Education (at both national level and extension services level);
- Local government authorities (i.e., MKO Governor offices, CRA, CDA);
- Local community-based decision bodies (i.e., ILOD, ADC/CCD, CG/CSV);
- Community-based organizations: groups, cooperatives, associations and Non-Governmental Organizations (NGO): national trusts, conservation associations, women's organizations, organizations of fisher-folk and national and regional organizations representing sedentary crop growers and livestock raisers, pastoralists, etc. (BELACD, OCRA, CECADDEC, PADEL, AFAP, OPLO);
- Local communities: traditional rulers, farmers, fisher-folk, women, nomadic herdsman and transhumant groups, hunters, etc.
- Private sector: manufacturers/industrialists from agriculture and other industries;
- Professionals: researchers, sociologists, medical practitioners, environmental managers, engineers (e.g., water, civil, environmental), biologists, teachers, curriculum specialists, media practitioners, etc.

The overall project approach recognizes that the presence of some stakeholders at the local level is seasonal which compromised a comprehensive consultation and involvement process during the design stage. For this reason, it has been agreed that stakeholders' consultation and engagement should be taken further at the onset of the project field work. The extension services of the public organizations and the local community-based decision bodies will be supported to enable them to engage and implement their mandate. This shall stimulate the empowerment of local stakeholders and strengthen their interventions in the MKO. For this to happen, a Stakeholder's Involvement Plan will be developed to indicate how the various stakeholders will be involved, and at what stages. In order to attain sustainability, the activities are designed to address interests of large groups of stakeholders.

Engagement strategy

Each of the main project components relies on a same 3-step workflow:

- Capacity building;
- Technical support for an accurate diagnostic;

- Consultation and dialogue involving all the stakeholders towards the elaboration and implementation of development strategies, management plans, adaptation measures, or resilience strengthening activities.

For each component and each workflow step, the proposed engagement strategy will be based on two pillars:

- **A grant agreement / subsidy contract:** The PMU will enter into a grant agreement with each targeted local stakeholders / structures in charge of natural resource management (MEP services, ILOD and ADC/CCD, CG/CVS) in order to provide them with capacity building, organizational support and equipment. The content of the grant will be defined by the PMU during the project implementation stage, based on a performance assessment, , which will identify needs relative to the stakeholder or structure's mandate, as well as the activities provisioned under each component. Depending on the volume of finances associated with certain activities or items (e.g., skills building, equipment), the grant could be provided in kind for the larger items - in this case these items would be procured by the PMU, or financially – in this latter case, the beneficiary (MEP services, ILOD and ADC/CCD, CG/CVS) will be in charge of the procurement.
- **A service agreement / contract:** The PMU will contract technical partners (community based organizations) to support local decision and management stakeholders (i.e., ILOD, ADC/CCD, CG/CVS) in the implementation of specific technical activities. The technical partners will be local community-based organizations (e.g., specialized associations or cooperatives) or national/international consultants. Depending on the financial volume of the contract, the support of the IUCN and the executing agency to the PMU may be required.

Specific roles of each stakeholder

Indicative roles of identified key partners are detailed in the following stakeholder table.

Table 8: Preliminary stakeholder involvement plan during Project implementation

Stakeholder name	Role/Involvement in the project
State services	
MEP extension services (<i>Services Techniques</i> – ST)	<ul style="list-style-type: none"> – Decentralized extension services of the Ministry of the Environment and Fisheries Resources (MEP) – Work in collaboration with ILOD, ADC/CDC, CG and CVS as well as other stakeholders to implement resource management measures and enforce them – Provide technical assistance in multiple fields of natural resource management
Local decision and management bodies	
ILOD or ADC/CCD in MKO	<ul style="list-style-type: none"> – Local structures for multi-stakeholder consultation and cooperation – Administer natural resource management over their reference area. In the case of ADC/CDC this is part of coordinating multi-sectoral planning at the level of the canton and their mandate to supervise the development and monitoring of PDL. – Define conservation and management priorities – Design and monitor the enforcement of rules to implement natural resource management – Develop resource mobilization strategies
CG/CVS in MKO	<ul style="list-style-type: none"> – Community-based committees – Coordinate implementation, enforcement and monitoring of measures agreed upon by management authorities and laid out in management documents

Stakeholder name	Role/Involvement in the project
Community-based organizations	
BELACD. (<i>Bureau d'Etudes de Liaison et d'Action Caritative pour le Développement</i>)	<ul style="list-style-type: none"> – Specific roles to be defined at project inception, based on identified needs and their focal areas (See Section 3.4) – Specific to each ILOD and ADC or CG/CVS – Possible roles, provided through service contracts, in the implementation of the project activities include: a) implementation of capacity building activities and b) provision of technical support in relevant sectors (forestry, erosion control, agriculture, livestock, fisheries management, etc.
OCRA. (<i>Organisation pour l'Autopromotion des Communautés Rurales à Pala</i>)	
CECADEC. (<i>Centre Chrétien d'Appui au Développement Communautaire à Pala</i>)	
PADEL. (<i>Pôle d'Appui au Développement Local</i>)	
AFAP. (<i>Association des Femmes pour l'AutoPromotion</i>)	
OPLO. (<i>Organisation des Paysans de Léré Ouest</i>)	

7 Monitoring and evaluation plan

Monitoring and evaluation (M&E) of the proposed project will be conducted in accordance with established IUCN and GEF procedures/guidelines. The standard M&E reports and procedures required for all IUCN/GEF projects will apply to the M&E plan for the proposed project, including the following:

Inception Workshop and Report. The Inception Workshop gathering the stakeholders involved in the project, and resulting Inception Report are the venue and means to finalize preparations for the implementation of the proposed project, involving the formulation of the first annual work plan, detailing of stakeholder roles and responsibilities, and of reporting and monitoring requirements. It is noteworthy; however, that the preparation of the Project Document of the proposed project already adopted a consultative process based on scoping and field missions, as well as two national stakeholder workshops. It is therefore anticipated that the inception workshop and the resulting report ensuing during the incipient months of the succeeding project's implementation would result in minor adjustments to the provisions in the original Project Document.

Strategic Result Framework. Monitoring and evaluation begins with preparation of the Project Document, including a logical framework matrix based on indicators of implementation progress and means of verification. This Log Frame will underpin the M&E system for the proposed project.

Quarterly Progress Report. Each quarter, the PMU will prepare a brief summary of the project's substantive and technical progress towards achieving its objectives. The summaries will be reviewed and cleared by IUCN/PACO before being sent to the IUCN/GEF Coordinator;

The Annual Project Report (APR) / project implementation review is designed to obtain the independent views of the main stakeholders of a project on its relevance, performance and the likelihood of its success. The APR covers performance assessment on project outputs and outcomes, major achievements, early evidence of success, constraints experienced, lessons learned and recommendations as well as an overall rating of the project. The APR will be prepared by the Project Coordinator and the M&E officer, after consultation with the relevant stakeholders, and will be submitted to IUCN. The stakeholder review will focus on the logical framework matrix and the performance indicators. Stakeholders could include a letter to the IUCN that they have been consulted and their views taken into account. A Terminal Project Report will be prepared for the terminal meeting.

Tripartite Review (TPR) (Steering committee). The Tri-Partite Review (TPR) is a policy-level meeting of the parties directly involved in the implementation of a project. The same parties involved in the prior Inception Workshop will participate in the TPR, ie the members of the Steering Committee, including the national executing agencies, IUCN, PMU/LPCU, the local partners, the direct beneficiaries, and other stakeholders. It will assess the progress of the project and take decisions on recommendations to improve the design and implementation of the project in order to achieve the expected results. On these occasions, the Project Coordinator will submit an updated workplan (if required) and the latest Annual Project Report (APR), and formulate recommendations for eventual adjustments of strategies and activities. A draft APR shall be prepared at least two months in advance of the TPR to allow review by IUCN prior to the meeting. The Executing Agencies make sure that the recommendations of the TPR are carried out. Annual TPRs are not required as the Steering Committee meetings are expected to address many of the issues that would normally be addressed in a TPR.

Independent External Evaluation at mid-term and termination of the project. A mid-term project evaluation will be conducted during the second implementation year, focusing on relevance; performance (effectiveness, efficiency and timeliness); issues requiring decisions and actions; and initial lessons learned about project design, implementation and management. A final evaluation, which occurs three months prior to the final TPR meeting, focuses on the same issues as the mid-term evaluation but also covers impact, sustainability, and follow-through recommendations, including the contribution to capacity development and the achievement of global environmental goals.

Budget Revisions. Project budget revisions will reflect the final expenditures for the preceding year, to enable the preparation of a realistic plan for the provision of inputs for the current year. Other budget revisions may be undertaken as necessary during the course of the project. It is expected that significant revisions will be cleared with the IUCN/GEF Coordinator for consistency with the GEF principle of incrementality and GEF eligibility criteria before being approved;

Corresponding budget. The corresponding budget for the M&E plan is USD 129,652. The detailed budget of the M&E plan is provided within the detailed budget of the overall GEF project (Appendix 5).

To implement these provisions, the PMU includes a Monitoring and Evaluation Officer, who will manage and monitor the overall M&E system of the project. She/he will refine and detail the set of indicators presented in the Logical Framework, applying the structure of GEF Land degradation and Climate Change mitigation indicators, based on process (e.g., policy, legal, institutional, etc. reforms), stress reduction (e.g., reduced logging, reduced deforestation, etc.) and environmental and social status indicators (e.g., restored habitats, sustainably managed forests, etc.).

The overall monitoring and evaluation plan is summarized in Table 9.

Table 9: M&E Activities, Timeframes, and Responsibilities

M&E activity	Frequency	Responsible	Budget (GEF funded)
1. Project Planning Documents: Prodoc, Logframe (including indicators), M&E Plan	During project design stage	Project proponent together with RCU Staff and consultants and other stakeholders	PPG grant. (USD 150,000)
2. Quarterly Progress Report	Quarterly	M&E expert and the national project coordinator	Activity 2.17 (USD 73,504)
3. Annual Project Progress Report	Annually	M&E expert and the national project coordinator and local focal points in consultation with project stakeholders	Activity 4.7 (USD 25,648)
4. Tripartite Review / Project Implementation Review (PIR)	At 18 months	MEP (National Executing Agency), National Project Coordinator, PMU, IUCN, LFP, etc	PMC
5. Independent External Evaluation	At the mid-point and end of project implementation	Implementing agency to hire audit experts	Activity 4.8 (USD 30,000)
6. Budget revisions	When necessary	Project team (M&E officer), IUCN headquarters	PMC

8 Project financing and budget

The overall project budget is 5,850,000 USD, excluding the PPG mission costs. It comprises the following items:

- Activities Budget: 5,111,402 USD.
 - Component 1 – : USD 520,368;
 - Component 2 - : USD 1,889,778
 - Component 3 - : USD 2,267,014
 - Component 4 - : USD 434,242
- Project Management Cost (Component 3): 255,570 USD;
- Implementing Agency Fee: 483,028 USD.

The activity summary budget and schedule are presented in the following tables. The detailed budget is provided in Appendix 5.

Restoring ecological corridors in the Mayo-Kebbi Ouest, Chad, to support multiple land and forests benefits - (RECONNECT) – Project Document

Table 11: Planned project budget by activity and by component

Activities	Details	TOTAL BUDGET	Year 1	Year 2	Year 3	Year 4	Year 5
Restoring ecological corridors in the Mayo-Kebbi Ouest, Chad, to support multiple land and forests benefits (RECONNECT)			879 762	1 310 488	922 750	1 207 761	1 046 211
Component 1 Local governance and capacity building			215 127	77 823	66 282	116 624	44 512
Outcome 1.1	Improvement in the commitment and capacity of various stakeholders for the long-term, joint community-based sustainable management of natural resources.						
Output 1.1.1	Capacity of 13 existing orientation and decision-making authorities (ILOD) and 9 existing local development association (ADC) in the institutional						
Activity 1.1	Assess the institutional and technical capacities (and needs) of ILOD and	47 321	36 452	-	10 868	-	-
Activity 1.2	Determine operational needs of ILOD and ADC, purchase and deliver equipment to sites	148 919	109 926	-	-	38 993	-
Activity 1.3	Support the operation/functioning costs of the ILOD and ADC	89 928	5 290	21 160	21 160	21 160	21 160
Activity 1.4	Support the organization of scheduled ILOD and ADC governance meetings	44 083	8 817	8 817	8 817	8 817	8 817
Activity 1.5	Support cross-learning exchange visits and networking between the ILOD and ADC	30 056	6 011	6 011	6 011	6 011	6 011
Activity 1.6	Support regular planning meetings of ILOD and ADC with CDA and CRA	16 030	3 206	3 206	3 206	3 206	3 206
Output 1.1.2	Capacity for forest restoration and management of 151 community-based organizations improved.						
Activity 1.7	Assess the operational and technical capacities of the community-based organisations for forest restoration and management, develop plan to build said capacities	0	-	-	-	-	-
Activity 1.8	Implement training sessions in each community-based organization, particularly technical training in implementation of forest restoration and management	68 352	-	33 310	-	35 042	-
Output 1.1.3	Capacity for natural resources management of MEP extension services in the project area improved.						
Activity 1.9	Assess the technical capacities of the MEP extension services for implementing their management and enforcement mandate, develop plan	14 267	14 267	-	-	-	-
Activity 1.10	Implement training sessions gathering MEP extension services at the Department level	25 648	12 824	-	12 824	-	-
Output 1.1.4	Transhumant / semi-nomadic pastoralists engaged in the long-term, joint community-based sustainable management of natural resources in the project area						
Activity 1.11	Analysis of the socio-ecological context of transhumant pastoralists in the areas broadly around Lake Chad and/or the active migration zone between northern Nigeria / southern Niger and the MKO	9 939	9 939	-	-	-	-
Activity 1.12	Implement consultations with transhumant / semi-nomadic pastoralists on the use of natural resources in relevant zones/ forest blocks and on issues of land use in grazing /transhumance routes versus farming areas	5 000	5 000	-	-	-	-
Activity 1.13	Develop and conduct targeted awareness raising activities on the transhumant/semi-nomadic pastoralists and sustainable resource use with all stakeholders	11 980	2 396	2 396	2 396	2 396	2 396
Activity 1.14	Develop a participatory early warning system on the mobility of transhumant livestock	8 847	1 000	2 923	1 000	1 000	2 923
TOTAL Component 1			215 127	77 823	66 282	116 624	44 512
Activities	Details	TOTAL BUDGET	Year 1	Year 2	Year 3	Year 4	Year 5
Component 2 Maintenance of ecological continuities of forest blocks			407 196	548 742	244 904	298 802	390 134
Outcome 2.1	Increase in the capacity for CO2 sequestration through the sustainable management of forest ecosystems over 21 600 ha						
Output 2.1.1	Critical forest blocks identified						
Activity 2.1	Develop a Geographic Information System using existing spatial data to assess the vegetation cover in the project area, and monitor as feasible	42 187	21 797	6 797	6 797	6 797	-
Activity 2.2	Develop a methodology to assess the area, composition, structure, intactness, anthropogenic uses, vulnerability and management status of forest blocks occurring in the project area, combining both GIS and field data	32 441	23 720	8 720	-	-	-
Activity 2.3	Train local community organisation members in data collection	19 621	19 621	-	-	-	-
Activity 2.4	Define a set of criteria to rank the forest blocks (based on the data generated by the forest assessment methodology) according to their ecological relevance and the importance of their potential to provide ecosystem services	0	-	-	-	-	-
Activity 2.5	Implement the forest assessment methodology to identify, describe the main forest blocks in the project area, and rank them following the defined set of criteria	10 740	2 685	8 055	-	-	-
Activity 2.6	Assess potential livelihood impacts of regulations or restrictions, and their impact on local stakeholders	0	-	-	-	-	-
Activity 2.7	Select through a participative process, and based on the ranking above, the forest blocks to be managed through the project	14 812	-	14 812	-	-	-

Restoring ecological corridors in the Mayo-Kebbi Ouest, Chad, to support multiple land and forests benefits - (RECONNECT) – Project Document

Output 2.1.2	Operational and technical means of 151 community-based organizations to implement natural resources management established.						
Activity 2.8	Determine technical forest equipment needs for each community-based organisation, purchase and deliver equipment to sites	56 105	-	14 026	14 026	14 026	14 026
Activity 2.9	Support the operational costs of each community-based organisation	76 944	-	19 236	19 236	19 236	19 236
Output 2.1.3	Operational and technical means of MEP extension services to implement natural resources management established.						
Activity 2.10	Determine operational and technical needs (administration, transport, communication, enforcement and monitoring) of MEP extension services, purchase and deliver equipment to sites	88 967	65 523	-	-	23 444	-
Activity 2.11	Support the operational costs of local MEP services in relation with the community-based natural resource management activities	90 890	18 178	18 178	18 178	18 178	18 178
Activity 2.12	Support MEP extension services oversight by central MEP departments, through the organisation of regular managerial and technical missions to the project area	24 045	4 809	4 809	4 809	4 809	4 809
Output 2.1.4	Management documents (Charter, Convention and SAT) for the regulation of forest blocks developed, endorsed, implemented, enforced and monitored.						
Activity 2.13	Assess the relevancy and adequacy to date of the existing set of management documents dealing with forest restauration and	23 720	23 720	-	-	-	-
Activity 2.14	Support the participative elaboration (or update) and endorsement process of the management document for each selected forest block with the aim of maintaining or restoring multiple forest benefits	245 259	-	245 259	-	-	-
Activity 2.15	Support the implementation of management measures by community organisations (CG) for each selected forest block (as defined in the management document);	68 673	-	17 168	17 168	17 168	17 168
Activity 2.16	Support the enforcement of regulation measures by community organisations (CVS) and MEP extension services for each selected forest block (as defined in the management document)	88 293	-	22 073	22 073	22 073	22 073
Activity 2.17	Deliver in situ technical assistance over the project lifespan to ensure adequate design, planning, implementation and follow-up of forest restoration and management activities	553 367	196 355	95 056	95 056	95 056	71 842
Activity 2.18	Produce up-to-date data and analysis on project progress and trends in natural resources management within the project area	73 504	12 933	13 893	16 393	13 893	16 393
Output 2.1.5	Sustainable financing mechanisms for the long-term community-based management of natural resources established, as laid out in the 20 updated Local Development Plans (PDL).						
Activity 2.19	Determine the financial cost of community-based natural resources management systems	8 720	-	8 720	-	-	-
Activity 2.20	Design and pilot sustainable financing mechanisms for community-based management based on existing and potential revenue generated by the commercialization of natural resources products	35 134	-	27 952	7 181	-	-
Activity 2.21	Monitor the pilot financing mechanisms	24 045	-	8 015	8 015	8 015	-
Activity 2.22	Conduct review and viability assessment of the financing mechanisms	27 568	-	-	-	27 568	-
Activity 2.23	Implement a participative process for the financing mechanisms to be adopted and integrated by relevant stake-holders in updated Local Development Plans	204 928	-	-	-	12 568	192 360
Activity 2.24	Deliver in situ technical assistance over the project lifespan to ensure adequate support to local institutions	79 817	17 855	15 971	15 971	15 971	14 048
TOTAL Component 2		1 889 778	407 196	548 742	244 904	298 802	390 134

Activities	Details	TOTAL BUDGET	Year 1	Year 2	Year 3	Year 4	Year 5
Component 3	Integrated management and increase in productivity of	2 267 014	131 533	599 390	512 030	512 030	512 030
Outcome 3.1	Sustainable use of natural resources, development of sustainable income-generating activities and strengthening of the						
Output 3.1.1	Techniques for the sustainable use of timber and non-timber forest products developed and implemented.						
Activity 3.1	Develop a method for establishing baseline inventories and subsequent monitoring of timber and non-timber forest products, train community organisation members in data collection, and implement surveys in the	41 357	8 720	32 637	-	-	-
Activity 3.2	Elaborate sustainable harvest guidelines for the key timber and non-timber forest products and support their integration into management plans of the selected forest blocks	29 491	-	29 491	-	-	-
Output 3.1.2	Fishery sustainable management systems strengthened.						
Activity 3.3	Assess the sustainability of the fishery management systems currently in place in Lake Léré and Lake Tréné	10 644	10 644	-	-	-	-
Activity 3.4	Elaborate the fishery management plans for Lake Léré and Lake Tréné based on the assessment of current systems	10 644	-	10 644	-	-	-
Activity 3.5	Support the implementation of management measures by the ILOD for each Lake (as defined in the management document)	31 969	6 394	6 394	6 394	6 394	6 394
Activity 3.6	Support the enforcement of regulation measures by MEP extension services for each selected lake (as defined in the management document)	7 958	1 592	1 592	1 592	1 592	1 592

Restoring ecological corridors in the Mayo-Kebbi Ouest, Chad, to support multiple land and forests benefits - (RECONNECT) – Project Document

Output 3.1.3	<i>Human-Wildlife conflicts prevention and mitigation measures implemented</i>					
Activity 3.7	Assess patterns of the main human-wildlife conflicts in the project area	12 568	12 568	-	-	-
Activity 3.8	Support the implementation of prevention and mitigations measures by community organisations	96 180	-	24 045	24 045	24 045
Output 3.1.4	<i>Market chains for natural resources-based products developed.</i>					
Activity 3.9	Develop and implement a method for the assessment of the economic value of natural resources products in the project area, analyse the data	32 633	32 633	-	-	-
Activity 3.10	Select a set of natural resources products for the development and strengthening of a market-driven approach led by community organisations	3 847	-	3 847	-	-
Activity 3.11	Elaborate and implement a program to support the transformation and the commercialization of selected natural resources products by community organisations	730 740	-	190 740	180 000	180 000
Outcome 3.2	Increase the production of degraded soils					
Output 3.2.1	<i>Promotion of agroforestry for the restoration of degraded soils.</i>					
Activity 3.12	Conduct study on best practices in traditional tree-based agriculture techniques and enhanced agroforestry from comparable ecosystems	29 491	29 491	-	-	-
Activity 3.13	Promote the application of any applicable best practices of agroforestry	600 000	-	150 000	150 000	150 000
Output 3.2.2	<i>Promotion of sustainable pasture management measures.</i>					
Activity 3.14	Conduct study on best practices in grassland management and fodder production and management from comparable ecosystems	29 491	29 491	-	-	-
Activity 3.15	Promote the application of any applicable best practices of pasture	600 000	-	150 000	150 000	150 000
TOTAL Component 3		2 267 014	131 533	599 390	512 030	512 030

Activities	Details	TOTAL BUDGET	Year 1	Year 2	Year 3	Year 4	Year 5
Component 4	Monitoring, evaluation, knowledge management and sharing	434 242	63 315	36 289	51 289	232 060	51 289
Outcome 4.1	Project implementation based on RBM and lessons learned/best practices documented and disseminated						
Output 4.1.1	<i>Assessment and Strengthening of the communities' resilience to climate change implemented as a driving principle of the project</i>						
Activity 4.1	Implementation of the Resilience Adaptation Pathways and Transformation Assessment Framework (RAPTA)	2 916	2 916	-	-	-	-
Output 4.1.2	<i>A set of 5 manuals or guidelines for use by community-based organisation and other relevant stakeholders, which capture and describe the improved practices, measures and technologies</i>						
Activity 4.2	Review and compile technical and operational project-based lessons learned and best practices	20 771	-	-	-	20 771	-
Activity 4.3	Develop manuals (based on best practices and lessons learned) that can be disseminated to relevant stakeholders for application	175 000	-	-	-	175 000	-
Output 4.1.3	<i>A communication strategy is developed and implemented.</i>						
Activity 4.4	Develop and implement a communication strategy	15 389	15 389	-	-	-	-
Activity 4.5	Create and disseminate any communication products as detailed in the communication strategy	146 180	29 236	29 236	29 236	29 236	29 236
Output 4.1.4	<i>Project monitoring & evaluation plan and system developed and implemented</i>						
Activity 4.6	Define and establish a spatially-explicit M&E plan and system that informs management decisions and is fed by both data collected in the	8 720	8 720	-	-	-	-
Activity 4.7	Organize project annual reporting, review and planning including M&E missions	25 648	5 130	5 130	5 130	5 130	5 130
Output 4.1.5	<i>Mid-term and Final Project Evaluations</i>						
Activity 4.8	Organize project Mid-term and Final evaluations	30 000	-	-	15 000	-	15 000
Output 4.1.6	<i>The environmental and social management plan (ESMP) is developed and implemented</i>						
Activity 4.9	Refine and implement the ESMP	9 618	1 924	1 924	1 924	1 924	1 924
TOTAL Component 4		434 242	63 315	36 289	51 289	232 060	51 289

Activities	Details	TOTAL BUDGET	Year 1	Year 2	Year 3	Year 4	Year 5
Project Management Costs		255 570	62 591	48 245	48 245	48 245	48 245
Outcome 5.1	The project is effectively and efficiently managed						
Output 5.1.1	<i>Project management team established and functional</i>						
Activity 5.1	Appoint the project management unit	174 727	34 945	34 945	34 945	34 945	34 945
Activity 5.2	Procure office equipment to the project management and coordination units	80 843	27 646	13 299	13 299	13 299	13 299
TOTAL Project management cost		255 570	62 591	48 245	48 245	48 245	48 245

Table 12: Project schedule by activity and by year

Restoring ecological corridors in the Mayo-Kebbi Ouest, Chad, to support multiple land and forests benefits - (RECONNECT) – Project Document

Outcomes, outputs and activities		Months																			
		Year 1				Year 2				Year 3				Year 4				Year 5			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
COMPONENT 1 Local governance and capacity building																					
Outcome 1.1 Improvement in the commitment and capacity of various stakeholders for the long-term, joint community-based sustainable management of natural resources																					
Output 1.1.1 Capacity of 13 existing orientation and decision-making authorities (ILOD) and 9 existing local development association (ADC) in the institutional governance of natural resources improved with a view to restoring forest ecosystems in the project area																					
A.1.1	Assess the institutional and technical capacities (and needs) of ILOD and ADC for project management and implementation; develop and implement plan to build said capacities																				
A.1.2	Determine operational needs of ILOD and ADC, purchase and deliver equipment to sites																				
A.1.3	Support the operation/functioning costs of the ILOD and ADC																				
A.1.4	Support the organization of scheduled ILOD and ADC governance meetings																				
A.1.5	Support cross-learning exchange visits and networking between the ILOD and ADC																				
A.1.6	Support regular planning meetings of ILOD and ADC with CDA and CRA																				
Output 1.1.2 Capacity for forest restoration and management of 100 community-based organizations improved																					
A.1.7	Assess the operational and technical capacities of the community-based organisations for forest restoration and management, develop plan to build said capacities																				
A.1.8	Implement training sessions in each community-based organization, particularly technical training in implementation of forest restauration and management																				
Output 1.1.3 Capacity for natural resources management of MEP extension services in the project area improved																					
A.1.9	Assess the technical capacities of the MEP extension services for implementing their management and enforcement mandate, develop plan to build said capacities																				
A.1.10	Implement training sessions gathering MEP extension services at the Department level																				
Output 1.1.4: Transhumant / semi-nomadic pastoralists engaged in the long-term, joint community-based sustainable management of natural resources in the project area																					
A.1.11	Analysis of the socio-ecological context of transhumant pastoralists in the areas broadly around Lake Chad and/or the active migration zone between northern Nigeria / southern Niger and the MKO																				
A.1.12	Implement consultations with transhumant / semi-nomadic pastoralists on the use of natural resources in relevant zones/ forest blocks and on issues of land use in grazing /transhumance routes versus farming areas																				
A.1.13	Develop and conduct targeted awareness raising activities on the transhumant/semi-nomadic pastoralists and sustainable resource use with all stakeholders																				
A.1.14	Develop a participatory early warning system on the mobility of transhumant livestock																				
COMPONENT 2 Maintenance of ecological continuities of forest blocks																					
Outcome 2.1 Increase in the capacity for CO2 sequestration through the sustainable management of forest ecosystems over 21 600 ha																					
Output 2.1.1 Critical forest blocks identified																					
A.2.1	Develop a Geographic Information System using existing spatial data to assess the vegetation cover in the project area, and monitor as feasible																				
A.2.2	Develop a methodology to assess the area, composition, structure, intactness, anthropogenic uses, vulnerability and management status of forest blocks occurring in the project area, combining both GIS and field data																				
A.2.3	Train local community organisation members in data collection																				
A.2.4	Define a set of criteria to rank the forest blocks (based on the data generated by the forest assessment methodology) according to their ecological relevance and the importance of their potential to provide ecosystem services																				
A.2.5	Implement the forest assessment methodology to identify, describe the main forest blocks in the project area, and rank them following the defined set of criteria																				
A.2.6	Assess potential livelihood impacts of regulations or restrictions, and their impact on local stakeholders																				
A.2.7	Select through a participative process, and based on the ranking above, the forest blocks to be managed through the project																				
Output 2.1.2: Operational and technical means of 151 community-based organizations to implement natural resources management established																					
A.2.8	Determine technical forest equipment needs for each community-based organisation, purchase and deliver equipment to sites																				
A.2.9	Support the operational costs of each community-based organisation																				
Output 2.1.3: Operational and technical means of MEP extension services to implement natural resources management established																					
A.2.10	Determine operational and technical needs (administration, transport, communication, enforcement and monitoring) of MEP extension services, purchase and deliver equipment to sites																				
A.2.11	Support the operational costs of local MEP services in relation with the community-based natural resource management activities																				
A.2.12	Support MEP extension services oversight by central MEP departments, through the organisation of regular managerial and technical missions to the project area																				
Output 2.1.4: Management documents (Charter, Convention and SAT) for the regulation of forest blocks developed, endorsed, implemented, enforced and monitored																					
A.2.13	Assess the relevancy and adequacy to date of the existing set of management documents dealing with forest restauration and management, revise it as necessary																				
A.2.14	Support the participative elaboration (or update) and endorsement process of the management document for each selected forest block with the aim of maintaining or restoring multiple forest benefits																				
A.2.15	Support the implementation of management measures by community organisations (CG) for each selected forest block (as defined in the management document);																				
A.2.16	Support the enforcement of regulation measures by community organisations (CVS) and MEP extension services for each selected forest block (as defined in the management document)																				
A.2.17	Deliver in situ technical assistance over the project lifespan to ensure adequate design, planning, implementation and follow-up of forest restoration and management activities																				
A.2.18	Produce up-to-date data and analysis on project progress and trends in natural resources management within the project area																				
Output 2.1.5: Sustainable financing mechanisms for the long-term community-based management of natural resources established, as laid out in the 20 updated Local Development Plans (PDL)																					
A.2.19	Determine the financial cost of community-based natural resources management systems																				
A.2.20	Design and pilot sustainable financing mechanisms for community-based management based on existing and potential revenue generated by the commercialization of natural resources products																				
A.2.21	Monitor the pilot financing mechanisms																				
A.2.22	Conduct review and viability assessment of the financing mechanisms																				
A.2.23	Implement a participative process for the financing mechanisms to be adopted and integrated by relevant stake-holders in updated Local Development Plans																				
A.2.24	Deliver in situ technical assistance over the project lifespan to ensure adequate support to local institutions																				

Restoring ecological corridors in the Mayo-Kebbi Ouest, Chad, to support multiple land and forests benefits - (RECONNECT) – Project Document

[illegible]

9 Appendices

Appendix 1: Detailed maps of intervention sites.

Appendix 2: Project Organizational flow.

Appendix 3: List of GEF projects (CCM, LD, SFM) in Chad.

Appendix 4: Activities schedule / project work plan - *See Excel file attached to the project document.*

Appendix 5: Detailed project budget - *See Excel file attached to the project document.*

Appendix 6: Detailed costed M&E Plan and related workplan - *See Excel file attached to the project document.*

Appendix 7: GEF tracking tools – *See Excel file attached to the project document.*

Appendix 8: Signed co-financing letters

Appendix 9: GEF Operational Focal Point Endorsement Letters

Appendix 10: ESMS Clearance

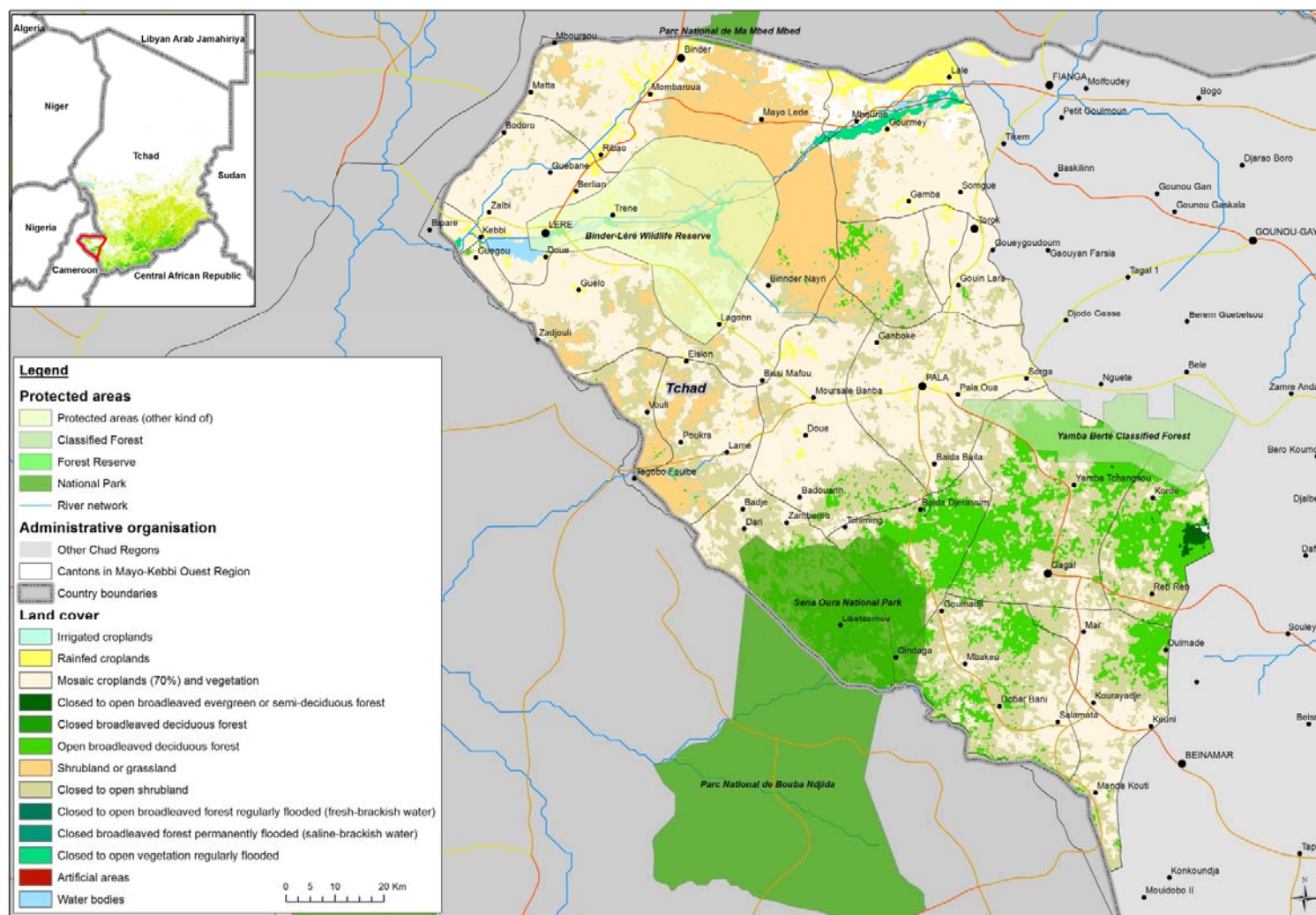
Appendix 11: Chance Find procedures

Appendix 12: Procurement plan for the three years – *See Excel file attached to the project document.*

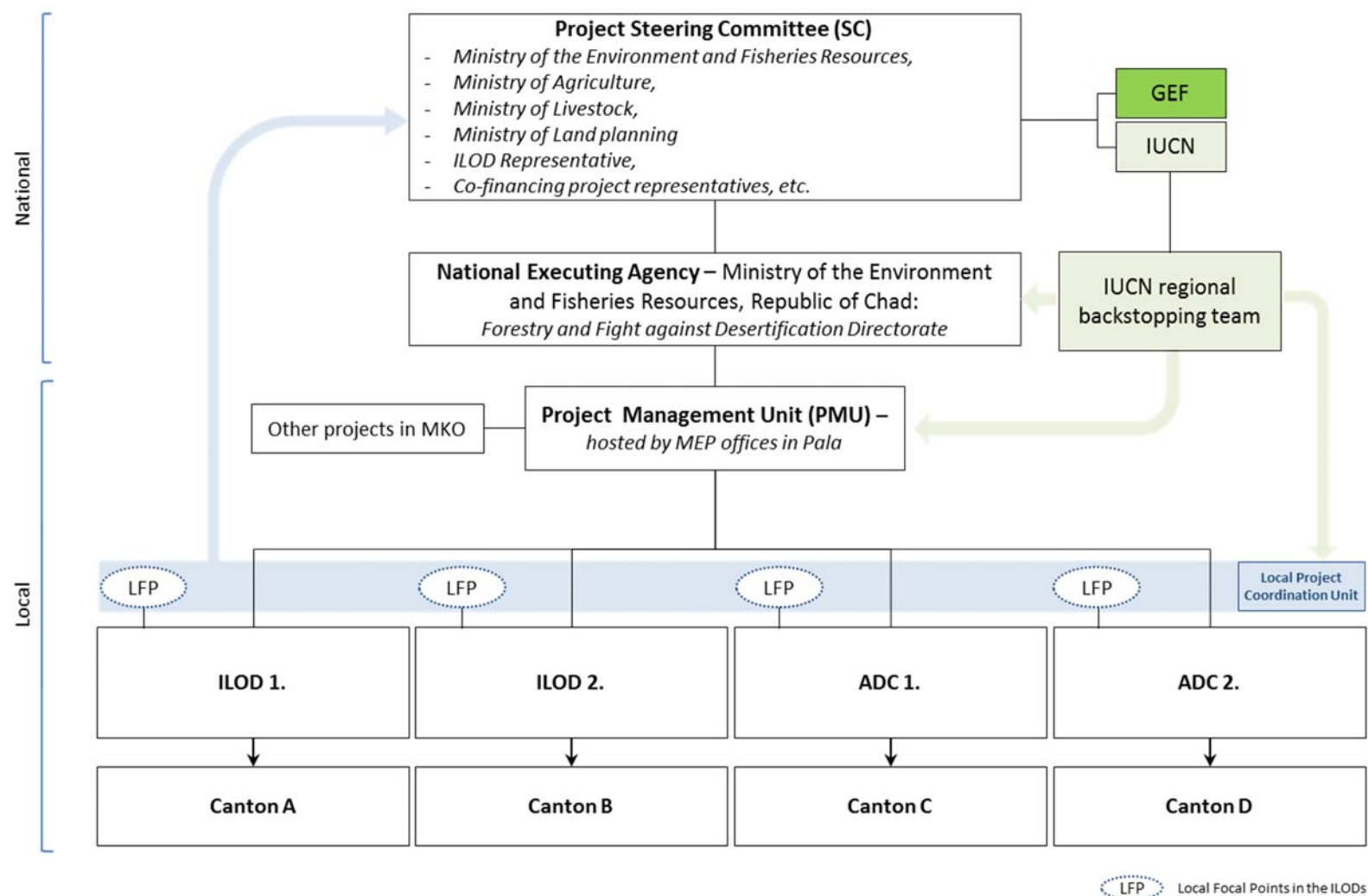
Appendix 13: Field mission report and Consultation workshop minutes (PPG mission) – *See Word files attached to the project document*

Appendix 14: References and bibliography

Appendix 1: Detailed map of intervention sites



Appendix 2: Project Organisational flow chart



Appendix 3: List of GEF projects (CCM, LD, SFM) in Chad

<u>GEF_ID</u>	<u>Country</u>	<u>Project Name</u>	<u>Focal Area</u>	<u>Agency</u>	<u>Project Type</u>	<u>GEF Grant</u>	<u>Cofinancing</u>	<u>Status</u>
NATIONAL PROJECTS								
9417	National	Restoring Ecological Corridors in Western Chad for Multiple Land and Forests Benefits - RECONNECT	Climate Change, Land Degradation	International Union for Conservation of Nature	Full-size Project	5,366,972	19,000,000	Concept Approved
4908	National	GGW: Agriculture Production Support Project (with Sustainable Land and Water Management)	Land Degradation, Biodiversity, Climate Change	The World Bank	Full-size Project	9,259,259	102,250,000	Completed
9050	National	Building Resilience For Food Security and Nutrition in Chad's Rural Communities	Biodiversity, Land Degradation	African Development Bank	Full-size Project	5,329,452	17,600,000	Concept Approved
9476	National	LCB-NREE Chad Child Project: Integrated Management of Natural Resources in the Chadian part of the Lake Chad Basin	Biodiversity, Land Degradation, Climate Change	African Development Bank	Full-size Project	2,557,942	8,292,500	Project Approved
9166	National	Strengthening agro-ecosystems' adaptive capacity to climate change in the Lake Chad Basin (Lac, Kanem, Bahr El Ghazal, and part of the Hadjer-Lamis region)	Climate Change	Food and Agriculture Organization	Full-size Project	4,050,913	19,100,000	Concept Proposed
6968	National	Chad National Adaptation Plan	Climate Change	United Nations Development Programme	Full-size Project	5,775,000	18,000,000	Concept Approved
5795	National	Promoting Energy Efficient Cook Stoves in Micro and Small-scale Food Processing Industries	Climate Change	United Nations Industrial Development Organization	Medium-size Project	665,000	2,600,000	Completed
5376	National	Enhancing the Resilience of the Agricultural Ecosystems	Climate Change	International Fund for Agricultural Development	Full-size Project	7,305,936	24,500,000	Project Approved

Restoring ecological corridors in the Mayo-Kebbi Ouest, Chad, to support multiple land and forests benefits - (RECONNECT) – Project Document

<u>GEF ID</u>	<u>Country</u>	<u>Project Name</u>	<u>Focal Area</u>	<u>Agency</u>	<u>Project Type</u>	<u>GEF Grant</u>	<u>Cofinancing</u>	<u>Status</u>
3959	National	SPWA-CC: Promoting renewable energy based mini-grids for rural electrification and productive uses	Climate Change	United Nations Industrial Development Organization	Full-size Project	1,758,182	1,801,364	Completed
2480	National	Préparation du Programme d'Action National pour l'Adaptation aux Changements Climatiquesn (NAPA)	Climate Change	United Nations Development Programme	Enabling Activity	200,000	20,000	Project Approved
1880	National	Climate Change Enabling Activity (Additional Financing for Capacity Building in Priority Areas	Climate Change	United Nations Development Programme	Enabling Activity	100,000	0	Project Approved
37	National	Preparation of the First National Communication in Response to the Provisions of the UNFCCC	Climate Change	United Nations Development Programme	Enabling Activity	100,425	0	Project Approved
4081	National	SPWA-BD: Strengthening the national protected area network in Chad	Biodiversity	United Nations Development Programme	Medium-size Project	859,091	3,360,000	Cancelled
2185	National	Identification of Capacity-building Needs for the Implementation of the National BSAP - Add on	Biodiversity	United Nations Development Programme	Enabling Activity	202,000	0	Project Approved
1125	National	Conservation and Sustainable Use of Biodiversity in the Moyen-Chari	Biodiversity	United Nations Development Programme	Full-size Project	1,400,000	1,635,000	Completed
604	National	Clearing House Mechanism Enabling Activity	Biodiversity	United Nations Development Programme	Enabling Activity	13,970	0	Project Approved
237	National	National Biodiversity Strategy, Action Plan and Country Report to the COP	Biodiversity	United Nations Development Programme	Enabling Activity	218,160	0	Completed
1855	National	Community-Based Ecosystem Management Project		The World Bank	Full-size Project	6,000,000	87,920,000	Completed
REGIONAL PROJECTS								

Restoring ecological corridors in the Mayo-Kebbi Ouest, Chad, to support multiple land and forests benefits - (RECONNECT) – Project Document

<u>GEF ID</u>	<u>Country</u>	<u>Project Name</u>	<u>Focal Area</u>	<u>Agency</u>	<u>Project Type</u>	<u>GEF Grant</u>	<u>Cofinancing</u>	<u>Status</u>
4511	Regional	GGW Sahel and West Africa Program in Support of the Great Green Wall Initiative	Biodiversity, Land Degradation, Climate Change	The World Bank	Full-size Project	4,814,815	682,172,483	Concept Approved
5487	Regional	Integrated Development for Increased Rural Climate Resilience in the Niger Basin	Climate Change, Land Degradation, International Waters	African Development Bank	Full-size Project	12,014,800	61,000,000	Concept Approved
4680	Regional	LCB-NREE: Lake Chad Basin Regional Program for the Conservation and Sustainable Use of Natural Resources and Energy Efficiency (PROGRAM)	Biodiversity, Climate Change, International Waters, Land Degradation	African Development Bank	Full-size Project	20,313,084	172,563,158	Concept Approved
9452	Global	Technology Needs Assessments-Phase III	Climate Change	United Nations Environment Programme	Full-size Project	5,400,000	750,000	Concept Approved
9442	Global	Umbrella Programme for Preparation of National Communications and Biennial Update Reports to the UNFCCC	Climate Change	United Nations Environment Programme	Enabling Activity	10,530,720	1,043,000	Concept Proposed
9087	Global	Preparation of Intended Nationally Determined Contribution (INDC) to the 2015 Agreement under the United Nations Framework Convention on Climate Change (UNFCCC)	Climate Change	United Nations Environment Programme	Medium-size Project	1,600,000	170,000	Project Approved
4498	Global	Umbrella Programme for National Communication to the UNFCCC	Climate Change	United Nations Environment Programme	Full-size Project	11,330,000	2,013,500	Project Approved
4178	Regional	SPWA-CC Promoting Coherence, Integration and Knowledge Management under Energy Component of SPWA	Climate Change	United Nations Industrial Development Organization	Medium-size Project	700,000	790,000	Completed
3789	Regional	SPWA-CC: GEF Strategic Program for West Africa: Energy Component (PROGRAM)	Climate Change	United Nations Industrial Development Organization	Full-size Project	0	0	Concept Proposed

Restoring ecological corridors in the Mayo-Kebbi Ouest, Chad, to support multiple land and forests benefits - (RECONNECT) – Project Document

<u>GEF ID</u>	<u>Country</u>	<u>Project Name</u>	<u>Focal Area</u>	<u>Agency</u>	<u>Project Type</u>	<u>GEF Grant</u>	<u>Cofinancing</u>	<u>Status</u>
2190	Regional	Technical Assistance to Francophone LDCs to Implement the UNFCCC8/CP8 Decision	Climate Change	United Nations Development Programme	Medium-size Project	211,126	38,000	Project Approved
1193	Regional	Capacity-building for Improving Greenhouse Gas Inventories (West and Francophone Central Africa)	Climate Change	United Nations Development Programme	Full-size Project	2,694,000	605,585	Project Approved
385	Regional / Global	Asia Least-Cost Greenhouse Gas Abatement Strategy (ALGAS)	Climate Change	United Nations Development Programme	Enabling Activity	9,500,000	3,500,000	Completed
299	Regional / Global	Climate Change Training Phase II - Training Programme to Support the Implementation of the UNFCCC	Climate Change	United Nations Development Programme	Enabling Activity	2,700,000	2,013,000	Completed
4829	Global	Support to GEF Eligible Parties for Alignment of National Action Programs and Reporting Process under UNCCD	Land Degradation	United Nations Environment Programme	Full-size Project	2,830,000	2,750,000	Project Approved
2469	Regional	Supporting Capacity Building for the Elaboration of National Reports and Country Profiles by African Parties to the UNCCD	Land Degradation	The World Bank	Medium-size Project	900,000	900,000	Completed
9118	Global	Support to Preparation of the Third National Biosafety Reports to the Cartagena Protocol on Biosafety - AFRICA REGION	Biodiversity	United Nations Environment Programme	Medium-size Project	1,368,550	1,225,000	Project Approved
5454	Regional	Ratification and Implementation of the Nagoya Protocol on Access and Benefit Sharing (ABS) for the Member Countries of the Central African Forests Commission COMIFAC	Biodiversity	United Nations Environment Programme	Medium-size Project	1,762,557	9,200,000	Project Approved
4623	Global	Support to GEF Eligible Parties (LDCs & SIDs) for the Revision of the NBSAPs and Development of Fifth National Report to the CBD - Phase II	Biodiversity	United Nations Environment Programme	Full-size Project	6,118,200	5,513,637	Completed
4523	Global	Support to Preparation of the Second National Biosafety Reports to the Cartagena Protocol on Biosafety-Africa	Biodiversity	United Nations Environment Programme	Medium-size Project	993,950	840,000	Project Approved
3785	Regional	SPWA-BD: GEF Program in West Africa: Sub-component on Biodiversity	Biodiversity	The World Bank	Full-size Project	0	0	Concept Proposed

Restoring ecological corridors in the Mayo-Kebbi Ouest, Chad, to support multiple land and forests benefits - (RECONNECT) – Project Document

<u>GEF ID</u>	<u>Country</u>	<u>Project Name</u>	<u>Focal Area</u>	<u>Agency</u>	<u>Project Type</u>	<u>GEF Grant</u>	<u>Cofinancing</u>	<u>Status</u>
3781	Regional	SPWA-BD: Evolution of PA systems with regard to climate change in the West Africa Region	Biodiversity	United Nations Environment Programme	Full-size Project	3,536,363	12,119,471	Completed

Appendix 8: Signed co-financing letters



Support to the Central African Forests Commission
(COMIFAC)



Deutsche Gesellschaft für Internationale
Zusammenarbeit (GIZ) GmbH
B.P. 7814 Yaoundé,
Cameroun / Cameroon
Tél.: +237 222 20 23 73
Port: +237 577 93 47 19
Fax: +237 222 21 50 48
Email : paul.schulte@giz.de
cuaseyncu.ndiaye@giz.de

Yaounde, the 23/05/2017

GEF Coordination Unit of IUCN

Subject: 'Co-funding' of the project « Réduction des effets
du changement climatique par la reconstitution
des continuités écologiques dans le Mayo Kebbi ouest - RECONNECT »

Dear Jean-Yves,

As representative of the GIZ Program of Sustainable management of Forests of Congo Basin, funded by BMZ (German Federal Ministry for Economic Cooperation and Development), I wish to acknowledge our intention to support the proposed IUCN/GEF project entitled "Réduction des effets du changement climatique par la reconstitution des continuités écologiques dans le Mayo Kebbi ouest - RECONNECT", through the bilateral project (Cameroon / Chad) "Appui aux parcs nationaux du complexe transfrontalier BSB Yamoussa, PN: 2013.2280-9". The two projects should be seen as two separate but closely coordinated (matching) activities of which objectives complement each other, both geographically and thematically. We recognize clear synergies between these projects of GIZ and IUCN/GEF.

The funding allocated to the BMZ/GIZ project is 6.9 million EUR, of which an estimated one third (2.3 million EUR) is spend in Chad.



Dr. Paul Schulte
Coordinator of the Program of Sustainable management of Forests of Congo Basin
Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH



Programme Afrique Centrale et Occidentale Tél. : +226 25 37 42 16 / 25 40 99 42
Bureau Régional 25 37 46 85
01 BP 1618 Ouagadougou 01 E-mail : paco@iucn.org
Burkina Faso www.iucn.org/paco

Ouagadougou, 26 May 2017

To
Mr Jean-Yves Pirot
IUCN GEF Unit Coordination

Ref. IUCN-PACO/004-2017/AP/bm

RE. Letter of co-financing commitment for the IUCN-GEF project “Restoring ecological corridors in the Mayo-Kebbi Ouest, Chad, to support multiple land and forests benefits” - RECONNECT

Dear Jean-Yves

The International Union for Conservation of Nature (IUCN), West and Central Africa Programme (PACO) is hereby grateful to commit a total of USD776,707 as Co-Finance to support the implementation of the GEF funded “Restoring ecological corridors in the Mayo-Kebbi Ouest, Chad, to support multiple land and forests benefits” (RECONNECT) project.

This in-kind co-funding is committed through our EU-funded/IUCN/MEP-Chad “Improved information, education and communication of rural and peri-urban populations to adaptation to climate change”.

While counting on your continuous collaboration, IUCN-PACO avails itself of this unique opportunity to renew to the IUCN GEF Unit and the GEF Secretariat, the assurances of its highest esteem.

Best regards

Aliou Faye

Regional Director (acting)



Union Internationale pour la Conservation de la Nature

Siège mondial : IUCN, Rue Mauverney 28, CH-1196, Gland, Suisse ; Tél. : +41 22 999 0000 ; Fax : +41 22 999 0002 ; e-mail : mail@hq.iucn.org



Appendix 9: GEF Operational Focal Point Endorsement Letter



Subject: Endorsement for Support to climate change initiatives and sustainable management of savannah ecosystems in Chad

In my capacity as GEF Operational Focal Point for Chad, I confirm that the above project proposal (a) is in accordance with my government's national priorities and our commitment to the relevant global environmental conventions; and (b) was discussed with relevant stakeholders, including the global environmental convention focal points.

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

The total financing (from GEFTF, STAR, or SCCF) being requested for this project is **US\$6,000,000**, inclusive of project preparation grant (PPG), if any, and Agency fees for project cycle management services associated with the total GEF grant. The financing requested for Chad is detailed in the table below.

Source of Funds	GEF Agency	Focal Area	Amount (in US\$)			
			Project Preparation	Project	Fee	Total
STAR	IUCN	C Change	50,000	2,664,726	260,274	3,000,000
STAR	IUCN	LD	50,000	888,242	86,758	1,000,000
GEFTF	IUCN	Multi focal	50,000	1,776,484	173,516	2,000,000
Total GEF Resources						6,000,000

Sincerely,

The GEF Operational Focal Point


HAKIM DJIBRIIL

Appendix 10: ESMS clearance sheet

ESMS Clearance of Project Proposal

Project data and ESMS history

The fields below are copied from the Screening Report

Project Title:	Restoring ecological corridors in Western Chad for multiple land and forests benefits - RECONNECT		
Project proponent:	IUCN PACO		
Country:	Chad	Contract value (US\$):	5,366,972
Estimated start date / duration:	36 months	In CHF:	5,279,810


Risk category - FINAL:	<input checked="" type="checkbox"/> low risk <input type="checkbox"/> moderate risk <input type="checkbox"/> high risk
Rationale for maintaining risk category assigned during screening or suggesting changes	<p>The project aims at conserving natural resources and restoring ecological functionality by reducing human pressure on natural resources and creating ecological continuity through the designation of corridors between existing protected areas. Strategies for reducing pressure include integrated resource management, restoration of degraded land and improving productivity of natural resources use. The project seeks to strengthen existing local governance mechanisms (ILODs and others) and to empower these local stakeholders in regional planning and natural resource management. By providing multiple benefits for local communities it balances conservation objectives with social and development needs.</p> <p>The project was screened on environmental and social risks at an early phase of project development. Despite the project's intention to integrate social and environmental objectives, the screening had identified potential environmental and social risks, most importantly related to the protection of forest blocks which might imply restriction on the use of forest resources with associated livelihood impacts as well as related to potential risks for indigenous peoples associated to these restrictions. Also, some minor environmental risks were identified. The findings of the screening are summarized in the Screening Report (separate document).</p> <p>After having further detailed the project design and improved the understanding of the socio-economic baseline through consultations and data collection in the field, the identified impacts were judged either as minor and/or appropriately addressed or mitigated through by project activities; for further details see the below Checklist</p>

	for Clearance (Annex A). Hence the project maintains the classification as low risk project.	
ESMS Standards and other E&S Impacts	Trigger	Required tools or plans
Involuntary Resettlement and Access Restrictions	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no <input type="checkbox"/> TBD	<input type="checkbox"/> Resettlement Action Plan <input type="checkbox"/> Resettlement Policy Framework <input type="checkbox"/> Action Plan to Mitigate Impacts from Access Restriction <input type="checkbox"/> Access Restrictions Mitigation Process Framework
Indigenous Peoples	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> TBD	<input type="checkbox"/> Indigenous People Plan
Biodiversity Conservation and Sustainable Use of Natural Resources	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no <input type="checkbox"/> TBD	<input type="checkbox"/> Pest Management Plan
Cultural Heritage	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no <input type="checkbox"/> TBD	<input checked="" type="checkbox"/> Chance Find Procedures

ESMS Clearance of Project Proposal

The fields below are completed by the IUCN ESMS reviewer at Clearance stage

	Name	Organization and function	Date
IUCN ESMS Reviewer Clearance Stage:	Linda Klare	ESMS Coordinator	16.5.2017
	Title		Date
Documents submitted at Clearance Stage:	1_ProDoc_9417_RECONNECT_Chad_UICN-GEF_Final		
	2_CEOEndorsement_GEF6_9417_RECONNECT_Chad_IUCN		
	Appendix13_FieldMissionReport_PPG_ReconnectTchad_GEF_IUCN		
Clearance decision			
<input type="checkbox"/> Cleared	<i>The conclusions are positive and the project proposal meets all requirements with regards to avoiding or reducing environmental and social risks: the proposal is accepted.</i>		
<input checked="" type="checkbox"/> Conditionally cleared	<i>The conclusions call for improving one or more ESMS activities and/or for important re-formulation of some mitigation measures. This will lead to the proposal being conditionally cleared; the reviewer will provide guidance on the way forward.</i>		
<input type="checkbox"/> Clearance rejected	<i>Essential ESMS provisions have not been complied with, critical mitigation measures have not been incorporated or don't seem feasible or sufficient for avoiding or minimizing impacts; or significant data gaps still prevail and additional field assessments are required.</i>		
Rationale - Summarize key findings from the checklist (Annex A)	<p>Completing the checklist in Annex A has confirmed that the project can be cleared, on the condition that the following assessments are carried out during the inception phase and respective reports submitted to IUCN for approval:</p> <ul style="list-style-type: none"> • Analysis of the socio-ecological context of transhumant pastoralists in the areas broadly around Lake Chad and/or the active migration zone between northern Nigeria / southern Niger and the MKO (Activity 1.11) and • Assessment of potential livelihood impacts of regulations or restrictions, and their impact on local stakeholders (Activity 2.6). 		
Recommendations for next steps (where relevant):	n/a		
Approval ESMS Clearance			
Name	Function	Date	Signature

Jean-Yves Pirot	Director GEF and GCF Coordination Unit	19 05 /2017	
-----------------	--	-------------	---

Annex A: Checklist for ESMS Clearance of Project Proposal

This checklist is completed by the ESMS Coordinator in consultation with the IUCN ESMS Expert team. The purpose of the appraisal is to check whether the project and its ESMP have incorporated adequate measures to avoid, minimize or compensate for potential social and environmental impacts and that a suitable mechanism is conceptualized that assures implementation of mitigation measures. Some questions may not be applicable for the appraised project and hence should be marked with n/a.

	Yes, no, n/a	Comment
General appraisal of project proposal and process of stakeholder engagement		
1. Have the ESMS procedures on stakeholder consultation been properly applied and resulted in effective engagement of relevant stakeholders, including affected groups? ²	Yes	See overview of stakeholder consultation provided in Chapter 6 and in the Appendix 13 (Field Mission) of the Project Document
2. Have required disclosure of information been made in a culturally appropriate way (e.g. through information sessions with local communities or local newspapers)? ³ Indicate place(s) and date(s) of disclosure.	n/a	

² The minimum requirements for consultation are summarized in table 6 in the ESMS Manual available at www.iucn.org/esms. The final ESIA report must contain a description of the public consultation process, including a summary of the concerns raised by various stakeholders and how these concerns have been addressed in the ESIA and ESMP.

³ The minimum requirements for disclosure of information are summarized in table 5 in the ESMS Manual available at www.iucn.org/esms.

3. Have the EISA recommendations been incorporated in the project proposal and mitigation measures presented in form of an ESMP (or other ESMS action plans ⁴)? Have required resources been accounted for in the project budget (including initial investments and recurring expenses)? Are responsibilities and implementation schedule specified?	n/a	
4. Has the guidance on ESMP monitoring ⁵ been followed and an ESMP presented?	n/a	
5. Have potential data gaps been filled through baseline studies (where relevant)?	n/a	<p>Some data couldn't be gathered during the project preparation phase, either due to constraints of timing and/or the requirement to have other activities undertaken first. Filling the data gaps was conceptualized as project activities:</p> <p>Activity 1.11: Analysis of the socio-ecological context of transhumant pastoralists in the areas broadly around Lake Chad and/or the active migration zone between northern Nigeria / southern Niger and the MKO</p> <p>Activity 2.6: Assess potential livelihood impacts of regulations or restrictions, and their impact on local stakeholders</p>
6. Have relevant stakeholders been informed about the IUCN	No	Information about the grievance mechanism should be disseminated at the earliest

⁴ For instance Indigenous Peoples Plan (IPP) or Action Plan to Mitigate Impacts from Access Restrictions.

⁵ See ESMS Guidance Note on Developing and Monitoring an ESMP, available at www.iucn.org/esms.

ESMS grievance mechanism or is it stated how this will be done upon launch of the project? ⁶ Have cultural appropriate adaptations been made to improve complaint resolution at the local level, where relevant?		possible moment, no later than the official launch of the project. Cultural appropriate adaptations to improve complaint resolution at the local level are encouraged (e.g. assignment of a local ombudsperson).
Involuntary Resettlement and Access Restrictions - <i>answer only if standard has been triggered</i>		
7. Have project alternatives been sufficiently considered to avoid the need for resettlement or access restrictions?	Yes	<p>The Standard is not triggered in a strict sense as the access restriction element of the Standard generally applies in situations where restrictions are established under formal and statutory frameworks. Situations where communities establish resource use regimes themselves for the purpose of sustaining long-term use of the resources (which is the case of the project), are usually not considered under this Standard. However, social impacts might occur in case local decision-making processes do not provide sufficient consideration to the needs of vulnerable members of the society. This risk has been addressed by the project through the following activities:</p> <p>Activity 2.6: Assess potential livelihood impacts of regulations or restrictions, and their impact on local stakeholders.</p> <p>Activity 2.7: Select through a participative process, and based on the ranking above, the forest blocks to be managed through the project.</p>
8. If avoidance is not possible, have measures been developed to minimize the impact on people's livelihood and/or a mechanism for compensation, assistance and benefits to enhance or at least restore the livelihoods of affected people relative to pre-project levels ("no net loss")?		
9. Are proposed mitigation measures technically and operationally feasible, sustainable and culturally adequate? Do they seem fair and are they accessible by all affected groups? Are they sufficient and reach all affected groups?	n/a	

⁶ See chapter 3.3.2 of the ESMS Manual about the need to inform stakeholders about the grievance system, available at www.iucn.org/esms

10. Has a FPIC process been adhered to and have affected people participated in designing an action plan or a process framework and assigned a role in its implementation and monitoring? Have the consultation been done with legitimate representatives of the affected groups? Is this properly evidenced?	n/a	
Indigenous peoples - <i>answer only if standard has been triggered</i>		
11. Have project alternatives been sufficiently considered to avoid impacts on indigenous peoples?	postponed	<p>The PPG missions confirmed the seasonal presence of transhumant pastoralists in the MKO; the most prominent group of transhumant herders being the Mbororo Peul (or Wodaabe) and the Ouddah. These social groups are largely marginalized within the legislative and political context and have very limited access to basic social services, including health care, education, safe water sources or sanitation services. While Chad does not recognize the concept of indigenous people on its territory, their social organization and way of life fulfil the IUCN definition of “indigenous peoples”.</p> <p>Because of seasonal presence in the project site, it was not possible to undertake a comprehensive livelihood assessment during the project preparation phase. A dedicated assessment has been programmed (activity 1.11) to be carried out at the outset of the project. The assessment will analyse livelihood conditions and identify potential negative impacts (material or non-material) from project activities, in particular impacts related to resource management regulations. The study will further elaborate on ecological impacts of herd movements taking into account historical conditions, current movements and impacts as well as future scenarios. The study is intended to broaden the understanding of social and environmental benefits of pastoral rangeland systems, but also to ascertain challenges resulting from interaction with sedentary systems in the context of socio-economic change processes and impacts from climate change. In case potential impacts are identified, culturally appropriate mitigation measures will be proposed as part of output 1.1.4 which will be discussed, refined and agreed (following FPIC) with legitimate representatives of transhumant groups.</p> <p>In addition to the said assessment output 1.1.4 further includes activities that aim at engaging transhumant/semi-nomadic pastoralists in the sustainable natural resource management in the project area, fostering an understanding of other relevant stakeholders about pastoralist issues and promoting cooperation and coordination between said stakeholders. The ensemble of activities is considered to fully satisfy the provisions of the Standard on Indigenous People and hence a separate IPP is not</p>
12. If avoidance is not possible, have measures been developed to minimise the impacts, secure and, when appropriate, enhance the economic, social, environmental and cultural benefits to these communities and/or provide adequate and fair compensation for impacts?		
13. Have consultations been held with affected indigenous groups regarding rights or use of natural resources and have they adhered to FPIC? Is this properly evidenced? Have affected groups participated in the design of mitigation measures (ESMP) or indigenous peoples plan (IPP) and assigned a role in its implementation and monitoring?		
14. Are proposed mitigation measures technically and operationally feasible, sustainable and culturally adequate? Are they sufficient and reach all affected groups?		

		deemed necessary.
Cultural Heritage - <i>answer only if standard has been triggered – NOT TRIGGERED</i>		
1. Have appropriate stakeholders been consulted in the assessment of impacts on cultural heritage and on the users of the resources? Have project alternatives been sufficiently considered to avoid impacts or restricting access to resources?	n/a	The project involves a small civil works component - anti-erosion mechanisms - which poses a very low risk of encountering buried cultural resources. Due to the low probability of risks the Standard is considered as not triggered. The remaining risk, however, will be monitored and Chance Find Procedures will be at hand to be able to respond to unexpected encounter during civil works (see Appendix 11)
2. If avoidance is not possible, have measures been developed to minimise adverse impacts on cultural heritage and on the users of the resources? Have appropriate stakeholders been included in developing these measures and assigned a role in its implementation and monitoring?	n/a	
3. Are proposed mitigation measures technically and operationally feasible, sustainable and culturally adequate?	n/a	
4. If the project involves earth works with a potential risk of accidental discovery of buried resources, does the project proposal contain provisions for “chance find”?	yes	
5. If the project intends to promote the development or use of resources to which communities have legal (including customary) rights, has a FPIC process been implemented? Have arrangements been made to ensure fair and equitable sharing of the benefits?	n/a	
Biodiversity Conservation and Sustainable Use Living Natural Resources - <i>answer only if standard has been triggered- NOT TRIGGERED</i>		
Other environmental or social risks - <i>answer only if other environmental or social risks had been identified during screening (or scoping)</i>		
6. Is the project in compliance with national legislation and regulations that pertain to environmental and social matters and respective international laws, conventions and standards?	n/a	

7. Have project alternatives been sufficiently considered to avoid social and environmental risks identified during screening (or scoping)?	n/a	
8. If avoidance is not possible, have measures been developed to minimise the impacts or provide appropriate compensation?	n/a	
9. Are proposed mitigation measures technically and operationally feasible, sustainable and culturally adequate?	n/a	
Gender		
10. Were men and women involved in project design and ESIA process in a culturally appropriate way?	yes	<p>During the field mission women were consulted and involved in project design. However, it was also realized that for conducting a more in-depth gender analysis more time is required to ensure a meaningful consultative process. This has been conceptualized as a separate activity.</p> <p>A number of measures have already been identified such as</p> <ul style="list-style-type: none"> ensuring that training opportunities are accessible for women (restoration, sustainable harvesting, surveying, productive skills etc.) hiring women consultants in order to facilitate communication with women and ensure that project activities are better aligned to their needs and capacities, as part of output 2.1.5 (Sustainable financing mechanisms for the long-term community-based management of natural resources established) financing will be provided in particular for products or enterprises/cooperatives developed/led by women (groups); output 3.1.4 (Identification of economically viable commodities and potential markets for natural resource products) gives particular emphasis to products that are already or can be managed by women or women groups <p>It is expected that the consultative gender analysis might result in the identification of further measures.</p>
11. If gender issues were identified during screening and ESIA, does the project proposal include measures to address these issues? Have these measures been developed in consultation with women in affected communities and gender experts with knowledge of local needs?		
12. Does the project include specific plans and measures to secure and, when appropriate, enhance the economic, social and environmental benefits to women?		
13. Does the project include specific measures to strengthen women's rights and access to land and resources, when appropriate and consistent with national policy?	postponed	This will be explored as part of the gender analysis.

14. Does the monitoring plan provide for measuring gender equality progress and/or gender disaggregated indicators? If there is a risk that women may be affected by project activities, are specific provisions included to monitor these impacts and are services of qualified experts secured to guide this monitoring work?	yes	Some indicators have already specified to be disaggregated by gender; the gender analysis might propose further indicators.
Vulnerable groups		
15. If risks for vulnerable groups were identified during screening and ESIA, were those addressed in the final project proposal?	postponed	Potential livelihood impacts will be assessed as part of Activity 2.6 (Assess potential livelihood impacts of regulations or restrictions, and their impact on local stakeholders)
16. Does the project include specific plans and measures to reduce vulnerability, build resilience and promote equity?	postponed	The development of mitigation measures will only be needed in case the above assessment (activity 2.6) will identify risks. If this was confirmed mitigation measures will be developed as part of activity 2.7: Select through a participative process, and based on the ranking above, the forest blocks to be managed through the project.
Climate Change		
17. If it has been identified that climate change might affect the implementation of project activities or their effectiveness and sustainability, has this been addressed by mitigation measures?	Yes	This is addressed by Output 4.1.1: Assessment and Strengthening of the communities' resilience to climate change implemented as a driving principle of the project
18. If there is a risk that the project might increase the vulnerability of local communities and the ecosystem to current or future climate variability and changes, have these issues been addressed by mitigation measures?		
19. Are opportunities sought to enhance the adaptive capacity of communities and ecosystem to climate change?		

Appendix 11: Procedures for accidental discovery of cultural resources (chance find)

If cultural resources are discovered during project implementation (e.g., when undertaking civil works), the agency responsible for the work that has resulted in the find (e.g., the executing entity, executing partner or contractor) is obliged to declare the discovery at the earliest possible date to IUCN and the competent national authority.

If there is a legally established procedure for accidental discoveries (e.g., of archaeological objects or remains) in the country where the project is implemented, that procedure will be followed, without prejudice to compliance with this standard. If there is no such procedure, it will be the responsibility of the executing entity to prepare a specific 'chance find' procedure that must contain the following elements:

- a clear identification of roles and responsibilities;
- procurement of the services of a qualified entity, expert or group of experts to assess the cultural significance and conservation requirements of the find;
- a temporary suspension of the work, for up to one month, to allow this assessment to take place;
- protection and security for the resource and/or the site during the assessment to prevent looting or other loss;
- consultation of relevant local, national and international actors in the conduct of this assessment;
- a system for keeping appropriate records and ensuring expert verification of the process;
- the public release, in a culturally appropriate format, of the results of the assessment;
- the implementation of the protection or mitigation measures recommended by the assessment, when applicable, including alternative siting;
- the inclusion of this procedure in the project implementation plan, as part of the ESMP.

Appendix 12:

Appendix 13:

Appendix 14: References and bibliography

Studies, reports, policy documents and legal documents

- Convention on Biological Diversity, 2016. National Biodiversity Strategies and Action Plans (NBSAPs), Available from: <https://www.cbd.int/nbsap/>
- Harrison, R.D., 2011. Emptying the Forest: Hunting and the Extirpation of Wildlife from Tropical Nature Reserves. *Bioscience* 61(11): 919-924.
- Hartmann D.L., Klein Tank A.M.G., Rusticucci M., Alexander L.V., Brönnimann S., Charabi Y., Dentener F.J., Dlugokencky E.J., Easterling D.R., Kaplan A., Soden B.J., Thorne P.W., Wild M. and P.M. Zhai, 2013. Observations: Atmosphere and Surface. In: Stocker, T.F., Qin, D., Plattner, G.-K., Tignor, M., Allen, S.K., Boschung, J., Nauels, A., Xia, Y., Bex, V. and Midgley, P.M. (2013) *Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge University Press, Cambridge, UK.
- IUCN (2014). *A Guiding Toolkit for Increasing Climate Change Resilience*. Gland, Switzerland: IUCN. 66 pp. https://cmsdata.iucn.org/downloads/iucn_toolkit.pdf.
- IUCN, 2015. Environment and Social Management System (ESMS): Executive Summary.
- Mallon, D.P., Hoffmann, M., Grainger, M.J., Hibert, F., van Vliet, N. and McGowan, P.J.K., 2015. An IUCN Situation Analysis on Terrestrial and Freshwater Fauna in West and Central Africa. Occasional Paper of the IUCN Species Survival Commission No. 54. IUCN, Gland, Switzerland and Cambridge, UK.
- Olson, D.M., E. Dinerstein, E.D. Wikramanayake, N.D. Burgess, G.V.N. Powell, E.C. Underwood, J.A. D'Amico, I. Itoua, H.E. Strand, J.C. Morrison, C.J. Loucks, T.F. Allnutt, T.H. Rickettes, Y. Kura, J.F. Lamoreux, W.W. Wettengel, P. Hedao, and K.R. Kassem. 2001. "Terrestrial Ecoregions of the World: A New Map of Life on Earth." *BioScience* 51:933-938.
- UNEP, 2008. Africa: Atlas of Our Changing Environment. UNEP, Nairobi, Kenya.
- UNFCCC, 2016. National Action Plans (NAPs). Available from: http://unfccc.int/adaptation/workstreams/national_adaptation_plans/items/6057.php
- Wicander, S., 2012. The lessons learned from alternative livelihood projects to reduce bushmeat hunting in West and Central Africa. MSc dissertation, University of Oxford, Oxford, UK.
- Wilkie, D.S., Bennett, E.L., Peres, C.A. and Cunningham, A.A., 2011. The empty forest revisited. *Year in Ecology and Conservation Biology* 1223: 120-128.
- World Bank, 2013. GNI per capita, Atlas method (current US\$). Consulted on 09/05/2016 at the following link: <http://data.worldbank.org/indicator/NY.GNP.PCAP.CD>.
- World Resources Institute, 2014. Earth Trends – Atlas of Restoration Opportunities.

Websites

- FAOSTAT, 2015. Online Statistical Service. Available from: <http://faostat.fao.org/>.
- GEF, 2016. GEF Database. Available from: https://www.thegef.org/gef/project_list
- GEF, 2016. GEF Templates and Guidelines. Available form: https://www.thegef.org/gef/guidelines_templates Gef guidelines

UNEP-WCMC-IUCN, 2016. Protected areas GIS layers. Available from: ProtectedPlanet.net.