



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)

Part I: Project Information

GEF ID

9166

Project Type

FSP

Type of Trust Fund

LDCF

Project Title

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)

Countries

Chad

Agency(ies)

FAO

Other Executing Partner(s):

Ministère de la Production de l'Irrigation et des Equipements Agricoles (MPIEA) is the principal executing partner, which will closely work with three Ministries (Ministry in charge of Livestock, Environment and Land Planning).

Executing Partner Type

Government

GEF Focal Area

Climate Change

Taxonomy

Focal Areas, Influencing models, Stakeholders, Gender Equality, Capacity, Knowledge and Research, Climate Change, Climate Change Adaptation, Innovation, Mainstreaming adaptation, Least Developed Countries, Climate resilience, Livelihoods, Convene multi-stakeholder alliances, Strengthen institutional capacity and decision-making, Demonstrate innovative approach, Beneficiaries, Local Communities, Private Sector, Individuals/Entrepreneurs, SMEs, Civil Society, Community Based Organization, Non-Governmental Organization, Communications, Behavior change, Public Campaigns, Awareness Raising, Type of Engagement, Consultation, Participation, Information Dissemination, Partnership, Gender Mainstreaming, Gender-sensitive indicators, Women groups, Sex-disaggregated indicators, Gender results areas, Participation and leadership, Knowledge Generation and Exchange, Access to benefits and services, Capacity Development, Access and control over natural resources, Learning, Theory of change, Adaptive management, Indicators to measure change, Training, Knowledge Generation

Rio Markers

Climate Change Mitigation

Climate Change Mitigation 1

Climate Change Adaptation

Climate Change Adaptation 2

Duration

48In Months

Agency Fee(\$)

384,837

A. Focal Area Strategy Framework and Program

Objectives/Programs	Focal Area Outcomes	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
CCA-1	Outcome 1.1, 1.2 and 1.3	LDCF	2,200,000	10,500,000
CCA-2	Outcome 2.4	LDCF	1,350,913	7,085,000
CCA-3	Outcome 3.1 and 3.2	LDCF	500,000	1,000,000
			Total Project Cost(\$)	18,585,000

B. Project description summary

Project Objective

To increase the resilience of agro-sylvo-pastoral and freshwater production systems to climate change in four provinces downstream of the Lake Chad Basin (Bahr El Gazal, Kanem, Hadjer Lamis and Lac).

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
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Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
Component 1: Strengthening provincial governance to reduce the vulnerability of agro-sylvo-pastoral and freshwater production systems to the adverse effects of climate change.	Investment	<p>Outcome 1.1: Improved governance at the provincial level to identify, prioritize, implement and evaluate CC adaptation strategies and measures.</p> <p><i>Indicator(s):</i></p> <p><i>1.1.1 4 Provincial Land Use Planning units (PPUs) established, functional and effectively facilitating CCA planning and implementation.</i></p> <p><i>1.1.2 4 five-year climate change adaptation agro-sylvo-pastoral and freshwater management investment plans (PCCAs) successfully formulated and under implementation with co-financing from financial partners.</i></p> <p>Outcome 1.2: Agro-sylvo-pastoral and freshwater production systems' vulnerability reduced and natural resource management strengthened.</p>	<p><u>Output 1.1.1</u> Four (4) five-year Provincial climate change adaptation Plans (PCCAs) formulated and implemented.</p> <p><u>Output 1.1.2</u> Planning, monitoring and coordination capacities of 4 provincial Delegations for Land Use Planning (DPLs) and 4 Provincial Action Committees (PACs) are strengthened.</p> <p><u>Output 1.1.3</u> At least four Local Bodies for Dialogue and Decision (LBODs) are created and strengthened.</p> <p><u>Output 1.2.1</u> 4 PCCAs implemented: water access is improved, pastoral land is restored and cropland is developed with drip irrigation schemes (water supply, equipment and technical advice).</p> <p><u>Output 1.2.2</u> Planning and implementation capacities of the National Agency for the Great</p>	LDC F	1,571,905	7,085,000

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
Component 2: Enhancement and diversification of agro-sylvo-pastoral and freshwater production systems.	Investment	<p>Outcome 2.1 Agro-sylvo-pastoral and freshwater production systems resilient to climate change through scaling up of innovative technologies, practices and know-how.</p> <p>-</p> <p><i>Indicator(s):</i></p> <p><i>2.1.1 8 farmer field schools & 50 agro-pastoral field schools operational. 70% adoption of CC and market adapted farming techniques and practices.</i></p> <p>Outcome 2.2 Production is increased, and markets are improved for sesame, spirulina, livestock feed and dried vegetables.</p> <p>-</p> <p><i>Indicator(s):</i></p> <p><i>2.2.1 % Increase in production and revenue:</i></p> <p><i>- Production of cereals and vegetables doubled.</i></p> <p><i>- 30% increase in</i></p>	<p><u>Output 2.1.1</u> Eight (8) demonstration FFSs and fifty (50) agro-pastoral field-schools (APFSs) are established in order to disseminate CC and market adapted farming techniques and practices.</p> <p>-</p> <p><u>Output 2.2.1</u> Producers, especially women and the youth are integrated into profitable value chains (sesame, spirulina, livestock feed and dried vegetables).</p>	LDC F	1,080,255	10,000,000

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
Component 3: Mainstreaming climate change adaptation into national and local policies and strategies.	Technical Assistance	<p>Outcome 3.1: Climate change and adaptation mainstreamed into key national laws on management of land and natural resources and their implementation at provincial level.</p> <p>-</p> <p><i>Indicator(s):</i></p> <p><i>3.1.1 % increase in volume of investment (USD) for climate change adaptation mobilized by province, type of beneficiary and gender.</i></p> <p><i>3.1.2 CC adaptation, gender and women empowerment inputs (recommendations) integrated in the land reform process.</i></p>	<p><u>Output 3.1.1</u> Institutional mechanisms at the national level are in place and facilitating implementation and access to climate finance (One national team with 5 focal points linked to provincial coordination structures – component 1).</p> <p><u>Output 3.1.2</u> Three (3) national laws (agro-sylvo-pastoral act and their implementation decrees are disseminated.</p> <p><u>Output 3.1.3</u> A National Forum on Land is conducted and recommendations developed.</p> <p>-</p>	LDC F	427,490	1,000,000

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
Component 4: Monitoring and evaluation	Technical Assistance	Outcome 4.1: Effective monitoring, reporting and dissemination of results to facilitate corrections and CCA scale-up.	<u>Output 4.1.1</u> M&E system operational and linked to relevant national system/framework. <u>Output 4.1.2</u> Mid-term review and final evaluation conducted.	LDC F	778,363	500,000
Sub Total (\$)					3,858,013	18,585,000
Project Management Cost (PMC)						
					LDCF	192,900
Sub Total(\$)					192,900	0
Total Project Cost(\$)					4,050,913	18,585,000

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

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Amount(\$)
Government	Ministry of Agriculture	Grant	11,085,000
Donor Agency	IFAD	Grant	7,500,000
Total Co-Financing(\$)			18,585,000

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

Agency	Trust Fund	Country	Focal Area	Programming of Funds	NGI	Amount(\$)	Fee(\$)
FAO	LDCF	Chad	Climate Change		No	4,050,913	384,837
Total Grant Resources(\$)						4,050,913	384,837

E. Non Grant Instrument

NON-GRANT INSTRUMENT at CEO Endorsement

Includes Non grant instruments? **No**

Includes reflow to GEF? **No**

F. Project Preparation Grant (PPG)

PPG Required

PPG Amount (\$)

150,000

PPG Agency Fee (\$)

14,250

Agency	Trust Fund	Country	Focal Area	Programming of Funds	NGI	Amount(\$)	Fee(\$)
FAO	LDCF	Chad	Climate Change		No	150,000	14,250
Total Project Costs(\$)						150,000	14,250

Core Indicators

Indicator 4 Area of landscapes under improved practices (hectares; excluding protected areas)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
0.00	20000.00	0.00	0.00

Indicator 4.1 Area of landscapes under improved management to benefit biodiversity (hectares, qualitative assessment, non-certified)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
	20,000.00		

Indicator 4.2 Area of landscapes that meets national or international third party certification that incorporates biodiversity considerations (hectares)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Type/Name of Third Party Certification

Indicator 4.3 Area of landscapes under sustainable land management in production systems

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 4.4 Area of High Conservation Value Forest (HCVF) loss avoided

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Documents (Please upload document(s) that justifies the HCVF)

Title	Submitted
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Indicator 11 Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Female		7,000		

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Male		4,000		
Total	0	11000	0	0

PART II: Project JUSTIFICATION

1. Project Description

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

The proposed project design is largely in line with the original PIF. The objective and component structure remain the same. Some refinements have been made based on the analyses of the issues on the ground, consultations with stakeholders and new opportunities for technical and financial partnerships. Targets have been fine-tuned and innovative aspects, in terms of institutional arrangements, climate change adaptation techno-economic models and approach that builds sustainability into the project (in terms of capacities of local and national institutions and land-users; and long-term provincial investment plans for climate change adaptation linked strategically to existing and new financial partners). The project strategy is described in detail in section 1.3.1 in the attached FAO Project Document.

A.1. Project Description.

Please see attached FAO Project Document for full details.

1. Global environmental and adaptation problems:

Climate change in Chad. The climate is dry and tropical, characterized by two alternating seasons (dry and rainy). Since 1960, the mean annual temperature has increased by 0.7°C with an average increase of 0.16°C per decade. In the last half-century, Chad has been experiencing several serious droughts, and other climate related shocks including floods and erratic rainfalls, which have further hindered its economic development.

Chad is considered to be one of the most vulnerable countries to CC in Africa, while at the same time, it receives less international CC funding compared to other Sahelian countries. Moreover, Chad is surrounded by severe conflicts worsening the vulnerability context for rural communities and the State.

The impacts of CC on the Lake Chad Basin hydrologic system, and the agro-sylvo-pastoral and freshwater ecosystems, are important. The National Adaptation Programme of Action revealed a number of major problems, one of them being the 40-60% decline in the flow of the *Logone* and *Chari* river systems feeding Lake Chad, resulting in the shrinkage of the lake, a decrease in groundwater recharge, and degradation of vegetation cover and soil in the watershed. These conditions create negative impacts on biomass, genetic diversity, and food production, and exacerbate inter-community conflicts between land users.

Changes in climatic and socio-economic conditions have contributed to landscape and geographical transformation. The dichotomy between pastoral and agricultural livelihoods within families and farming systems have become less marked. Diversification of economic activities, human and livestock mobility in quest for livelihoods (water, pasture, and financial resources through outmigration) are socio-economic strategies adopted by agro pastoralist families to face the challenges of natural resource scarcity and drying-up of the Lake Chad ecosystems.

Although there are uncertainties regarding future changes, recent modelling exercises forecast the highest average annual temperature increases for the central and the east of the Lake Chad Basin, of around 3 to 6 °C by 2100.^[1] Increases in temperature will be accompanied by an increase in evapotranspiration, reduction in rainfall and water resources, and loss of viable agricultural lands. These conditions will affect the already highly vulnerable ecosystem and the populations that depend on it. (See also paragraphs 10-12).

Ecosystem degradation has considerably intensified due to extension of cultivated areas and livestock population growth, which increased tremendously as a result of the oil boom. Farmland increased threefold and livestock growth has been remarkable from 2005 onwards, reaching 114 million heads, of which about 30% live in the project area. Ground vegetation degradation by trampling and clearing of grasslands for cultivation has created shifting sand areas. Between 1975 and 2013, sandy areas have increased by 22%. The ongoing conflict that is reducing the scale and flexibility of livestock mobility will only lead to further degradation due to over concentration of animals in certain areas as herders cannot adequately use opportunistic resources available over space and time.

There are four main landscape types, each facing environmental threats due to pressure on resources:

1. Wadis and polders (20% of surface) mainly dedicated to farming (cereals and vegetables) are threatened by **siltation from sand dunes** when the latter are no longer stabilized by vegetation, and by **salinization**. This is due to overexploitation of resources in the surrounding agro-pastoral area. Siltation causes loss of arable land and lowering of water tables making water pumping more expensive. Sand dunes which are oriented south-west north-east where cereals such as millet are grown during the rainy season and used as a pastoral zone for sedentary small ruminants are under great pressure. This area is threatened by deforestation, overgrazing and ploughing for crops, threatening its function as a bulwark against sand invasion. Restoration programs on these degraded lands require village and inter-village consultations to protect areas to be revegetated.

[1]

2. The vast pastoral area north of Kanem and along the Barh El Gazal is divided into transhumance corridors around and between watering holes. Water networks determine herd itineraries that are generally related to the presence of pasture and water. Livestock populations have increased in recent years around pastoral wells while pasture yields have declined in some areas. These pasture lands are degrading by **over exploitation**.
3. The high steppe lands of Hadjer Lamis are under threat of overexploitation by agro-pastoral activities.
4. The lake areas (lake, river, pond and groundwater) are receding and **the water tables are falling, leading to the reduction of freshwater resources, such as spirulina**, the production of which has become more seasonal in many places. However, it remains an important food supplement and a significant source of cash income for the region's population, especially the poorest women. Small-scale projects implemented recently by FAO and SOS Sahel have succeeded in tripling spirulina revenue of participating women's groups.

Barriers to be addressed:

Four key barriers to effectively addressing climate change and environmental degradation in the Lake Chad Basin have been identified:

Barrier 1: Weak environmental governance and implementation capacity in the provinces, limiting fundraising and local implementation of climate change adaptation investments.

Generally speaking, knowledge and understanding of CC impacts are insufficient, leading to weak local-level adaptation strategies. This includes lack of capacities to generate, communicate and act on information relating to climate risks. As agro-sylvo-pastoral landscapes continue to be subjected to degradation of natural resources and ecosystem services due to pressures including climate change, there is a need for strong multi-sectoral actions based on a mid to long-term vision to manage landscapes to render them more resilient to climate change and other threats and to improve rural communities' livelihoods.

Provincial Governors' offices have the responsibility for the governance of the environment with technical support from decentralized technical services (DTS). The public agencies at Provincial level are poorly equipped and funded (transport, communication means, and equipment) and have limited planning, coordination and monitoring and evaluation capacity. Furthermore, rural communities are not sufficiently organized at inter-cantonal level to dialogue and deliberate in order to agree with the government on a common vision for land use at various scales, contributing to conflicts over the management of natural resources that feed and aggravate the prevailing context of insecurity.

Barrier 2: Sectoral agencies lack capacity to propose and implement actions that take into account climate change adaptation and markets.

Rural communities are increasingly combining agricultural, pastoral and freshwater production systems, in order to reduce risk and optimize the management of landscapes and resources. Extension approaches therefore need to integrate the different technical services in the provinces taking into account local adaptation strategies. Innovations in techniques and practices need to be sustainable, socially acceptable and economically viable.

There is poor research and extension capacities in the country. For example, the results of an assessment of the national agricultural research and extension system done in 2008 are still valid as the State is still incapable of providing extension for all the main crops in the country. The national extension system is hindered by lack of information and technical knowledge of innovative practices that are adapted to climate change. Extension programs are segmented, focused mainly on cropping and livestock raising techniques, rather than on the ecosystems and their interdependencies, notably between farming, livestock production and the environment. Extension approaches are top-down, with little integration of local knowledge, or adaptation to ecological challenges, such as the reduction of soil fertility and pasture production, the drying up of streams and ponds and the siltation of wadis and polders. Government funding of research and extension is also weak hindering generation of new information and transfer of technologies between research bodies and agro-silvo-pastoral stakeholders.

GEF resources will strengthen the capacities of the decentralized technical services to adopt and sustain an integrated approach in the dissemination of innovative technical-economic models adapted to climate change and to markets. A multi-disciplinary team consisting of three decentralized technical services (Agriculture, Livestock and Environment) will be established and supported by the project to disseminate techniques and practices adapted to climate change and to the social environment as well as to market demand. Particular attention will be paid to gender, women and youth empowerment, in order to facilitate inclusive and equitable local transformation.

Barrier 3: The land law dates back to 1967 and has not been designed to take into account current human and livestock population pressures on natural resources, and climate change.

Natural resources are facing considerable pressure from population pressure, increased competition and climate change which are impacting livelihood activities, land and resource use strategies and rights to property and resource use. Relations with the land are modified by new livestock grazing practices. Land acquisition by urban elites in fertile alluvial plains in Hadjer Lamis and in the South of Lake are starting to give rise to landlessness. Conflicts are numerous, diverse and not well addressed within the current legislative frameworks. Inter and intra-community conflicts are attributed to access and management of pastures and water resources (seasonal water bodies, pastoral watering holes).

A number of legal texts define the land allocation mechanisms, notably the Law N°23/PR/67 of 22 July 1967, on the status of State land, Law N° 24/PR/67 of 22 July 1967 on the formal land regime and customary rights, and Law N°25/PR/67 /PR/67 of 22 July 1967 on the limitation of land rights. These laws turn out to be obsolete in terms of addressing changes and problems in land use and access to land. In Chad, three land rights regulation systems are juxtaposed, customary rights that are controlled by traditional chiefs, Islamic law administered by religious chiefs and modern rights administered by the State. The latter is little known among Chad's citizens. In Chad's customary rights' systems, the land managers are the local chiefs who are the guarantors of rules agreed by the communities. Under modern land law, the State is the holder of the land and assures its distribution, while recognizing use rights of local communities. Therefore, the State can wield important power to improve access to newly equipped areas.

The land question is very sensitive in Chad and warrants a thorough dialogue. The new text on the Livestock Law that was submitted to the national assembly has not been adopted, which demonstrates the complexity of this political subject matter. The Chadian State wants to have certain use rights recognized for local communities, but the legal problems linked to land persist, in the absence of a redefinition of the rules and of local institutions to apply them. Rural communities need to be fully engaged in the management of natural resources, alongside the State. This implies the adoption of the principle of a "just and equitable sharing" of production areas, and the promotion of a participatory management of natural resources. Improving capacities of rural communities to advocate for these and other issues is thus paramount.

The fact that climate change is not taken into account in the legislative and regulatory texts on land – which are obsolete – does not favour the resolution of conflicts nor adaptive management to sufficiently address current complexities from climate variability to resource scarcity.

Barrier 4: National climate change adaptation policies and strategies are not translated into action at local level.

In Chad, many policy documents and legal texts have integrated the dimension of climate change, but these texts have not been translated to modify the land use practices of rural producers. The project will contribute to the dissemination of three laws and their application texts, supported by public agencies, civil society (HC-CACT) and traditional Chiefdoms. It will improve certain institutional aspects in order to coordinate and execute measures for enhancing adaptation and resilience at local level. The project will help create a local-level planning unit in the Governor's Office led by the delegation for Land Planning and composed of decentralized technical services. At central level, the focal points of the ministries concerned will be strengthened to bring about cross-sectoral synergies. The key is to mobilize financial resources to implement provincial- and local-level climate change adaptation plans as well as ensuring coherence within the various CCA interventions. Therefore, land use planning will help structure local organizations and mobilize funding in close collaboration with the national execution team.

2) Baseline projects:

Overall, with the Boko Haram conflict hampering investments, the majority of the current activities in the Lake Chad region are short-term projects focused on humanitarian, peace and security concerns, though resilience projects in the Kanem, BEG and Hadjer Lamis provinces have a stronger emphasis on productive investment.

Four strategic financial partners are highlighted below. The first two are confirmed co-financiers for a total of USD 18,585,000, while the last two are under negotiation:

- The AfDB through “Building resilience to food and nutrition insecurity in the Sahel” (P2RS) project in 2 provinces (Kanem and BEG) and implemented by the Ministry of Agriculture which signed a co-financing letter for an amount of USD 11,085,000. The GEF-LDCF co-financing will complement its investment and reinforce its strategy through institutional and innovation support.
- The IFAD “Strengthening Productivity and Resilience of Agropastoral Family Farms Project (RePER)” in the provinces of Hadjer Lamis, Kanem and BEG. Due to the size of this project (USD 49.3 million loan + USD 5.3 million grant = USD 54.6 million) covering 5 provinces with an extension to two new provinces (Kanem and BEG), taking into account its GCF co-financing for USD 17.2 million, REPER is a strategic financial partner in the Hadjer Lamis Province, and has confirmed co-financing of USD 7.5 million for the GEF-LDCF project.
- The regional project to be financed by the World Bank in the Province of Lac (PROLAC) with potential extension in the provinces of Kanem and BEG intends to partner with LCBC, French Cooperation, and NGOs to implement its activities in Chad, Lac province. This project could become an additional source of co-financing in the Lac province.
- The Regional Sahel Pastoralism Support Project (PRAPS) financed by the World Bank aims at improving access of production and services for transhumant herders located between 11th and 16th parallels. The targets are pastoralists and agro-pastoralists and areas with high concentration of cattle, along corridors and water spots. PRAPS could also become an additional source of co-financing for the GEF-LDCF project.

Two other projects that are currently under preparation - limited in terms of financial resources but strategic in terms of capacity building for improved coordination and policy dialogue – have been identified as potential co-financiers to support the GEF-LDCF policy dialogue: (i) FAO regional project on Land Governance financed by Germany (nearly USD 150,000 to be mobilized by the FAO Land tenure Unit in 2020) and, (ii) the OXFAM Land-at scale project financed by the Netherlands on land governance (USD 1.5 – 2 million to be mobilized in 2020). FAO is facilitating the integration of these initiatives and the co-financing with the GEF-LDCF project to support the road map of the Chad land reform process in partnership with the National Commission on Land reform and the Ministry of Land Use Planning.

Tables 4a, 4b and 4c in the attached FAO Project Document (Section 1.2.2. Baseline Initiatives) list in detail, investment and resilience projects ongoing or under preparation in the project area.

3) Proposed alternative scenario – brief description of project components (full description in FAO Project Document section 1.3):

Building on and collaborating with the baseline activities, the overall objective is “to increase the resilience of agro-sylvo-pastoral and freshwater production systems to climate change in four provinces downstream of the Lake Chad Basin (BEG, Kanem, Hadjer Lamis and Lac)”. The project objective and results will be realized through the implementation of the following three technical components plus one cross-cutting M&E component.

Component 1: Strengthening provincial governance to reduce the vulnerability of agro-sylvo-pastoral and freshwater production systems to the adverse effects of climate change.

Outcome 1.1: Governance is improved at the provincial level to identify, prioritize, monitor and evaluate CC adaptation strategies and measures.

As already mentioned, provincial governance is weak, leading to limited impact and lack of sustainability of interventions, whether on natural resources or on local livelihoods. In the absence of medium to long term provincial plans and of dialogue with local organizations, interventions fail to create synergies necessary for optimal impact.

The EU has funded water resources management plans in the provinces to improve access for human and livestock (2012-2017). The P2RS program is also financing human and livestock water supply in BEG and Kanem. These investments have not led to the establishment of a sustainable financing mechanism to continue planning efforts to further CC adaptation investments. Public planning and technical service institutions at the provincial level (delegations for Land Planning – DLPs and DTSSs) have received little support to improve governance and poorly – in terms of human resources, capital and transport.

The GEF project will address these gaps by strengthening planning and coordination capacities of delegations for Land Planning (DLPs) in the four target provinces, who will lead the development of participatory and gender-sensitive CC adaptation plans, in close collaboration with multi-actor platforms representing various use interests.

Three government bodies will be strengthened at the local level: DLPs and Provincial Action Committees (PACs), DTSSs, and the Great Green Wall National Agency (ANGMV). In addition, the project will assist in the creation and support of new land user platforms in the provinces – Local Bodies for Dialogue and Decision (LBOD). The LBOD is a model that has been successfully tested in other provinces of Chad, in projects supported by the EU and GIZ. The LBODs include customary chiefdoms as well as local associations and professional producer associations representing various types of users. The LBODs will serve as important platforms for discussion and decisions on provincial CC visions and land use plans – taking into account CC adaptation – and for their implementation with local chiefdoms and users.

The following outputs will be delivered:

Output 1.1.1: Four (4) five-year Provincial climate change adaptation Plans (**PCCAs**) are developed and implemented, one in each of the four Provinces covered by the project.

Output 1.1.2: The planning, monitoring and coordination capacities of the four DLPs and the four PACs are strengthened.

Output 1.1.3: At least four Local Bodies for Dialogue and Decision (LBODs) are created and strengthened.

LBODs, consisting of representatives of land and natural resource users (producer organizations, pastoralists, women and young people) and traditional chiefs, will be established. These inter-cantonal consultative platforms will have the mandate to facilitate the integrated and concerted management of natural resources and to define management rules conducive to CC adaptation, and to reduce community and inter-community conflicts. They will allow traditional chiefs to learn new rules and decision modalities by formulating and signing Charters on the management of landscapes, land and natural resources. They will contribute to better integration of farming and pastoral activities, in order to reduce conflicts and protect resources (pasture, forest and freshwater resources). They will facilitate social change through information sharing and advocacy. This will help to ensure equitable access to resources for women, youth and other marginalized social groups, and support the implementation and planning of development projects over time.

Outcome 1.2. Agro-sylvo-pastoral and freshwater production systems' vulnerability is reduced and natural resource management regulation is strengthened.

Output 1.2.1: PCCAs implemented: water access is improved, pastoral land is restored and cropland is developed with drip irrigation schemes (water supply, equipment and technical advice).

This product relates to the structuring of GEF investments to support the climate change adaptation agro-sylvo-pastoral and freshwater management plans (PCCAs), which is the project's main tool to facilitate CC adaptation of local people's livelihoods. A public-private partnership (PPP) will be supported for the implementation of actions coordinated by the DLPs and executed by the ANGMV and the private sector, with the participation of LBODs. This inclusive and participatory concept promotes linkages between the cantonal, provincial and national levels.

Multi-stakeholder agreements will be signed between the Project, ANGMV, private hydraulic companies, LBODs and the beneficiary chiefdoms to execute annual plans. Consultations with local communities will be carried out three months before each intervention, to agree on user rules, stakeholder responsibilities, and to organize activities to be carried out by ANGMV. HC-CACT will sensitize traditional chiefdoms to involve them in LBODs and facilitate access to lands for women youth and marginalized groups. NGOs will build the capacity of LBOD members to assist with business planning and mobilize civil society for participation in local policy dialogue feeding the national policy dialogue on land reform (component 3).

Implementation of PCCAs will be co-financed by investment-oriented projects in the four target provinces. In BEG and Kanem, the GEF project will partner with P2RS for financing complementary activities for infrastructure such as pastoral and vegetable wells and warehouses. GEF resources will finance solar pumps and panels and the maintenance system, drip irrigation and land restoration. Negotiations will be conducted during implementation by the project national team to establish additional co-financing partnerships, for instance with IFAD and World Bank projects currently under formulation.

Component 2: Enhancement and diversification of agro-sylvo-pastoral and freshwater production systems.

Outcome 2.1. Agro-sylvo-pastoral and freshwater production systems are resilient to climate change through scaling up of innovative technologies, practices and know-how.

The P2RS and REPER projects are supporting various types of value chains to improve incomes of rural communities. The main ones are: vegetable production, raising chicken and small ruminants. P2RS plans to fund a feasibility study for the establishment of drip irrigation perimeters. GEF resources will complement these projects through strengthening extension methods and the establishment of “mother” agro-pastoral field schools (APFS) for demonstration of nine innovative technologies adapted to CC and the digitization of public services. Four promising value chains have been identified to be supported by the GEF: forage and dried vegetables (tomatoes, okra) in all four provinces; spirulina in Lac Province, sesame and gum arabic in Hadjer Lamis. The GEF project partners will help the project to reach its target groups and to facilitate linkages between public services and the private sector (partnerships, value chain contracts).

Output 2.1.1 Eight (8) demonstration FFSs and fifty (50) agro-pastoral field-schools (APFSs) are established and disseminate CC and market adapted farming techniques and practices.

Outcome 2.2 Production is increased, and markets are improved for sesame, spirulina, livestock feed and dried vegetables.

Spirulina was identified as the main focus in the PIF. Three other promising value chains in addition to Spirulina have been identified: sesame in Hadjer Lamis, Forage and livestock feed in three provinces (BEG, Kanem and Lac) and finally, dried vegetables (BEG, Kanem and Lac).

Animal feed and fodder value chains have become critical for feeding sedentary small ruminants herds, which have increased massively due to donor programmes in recent years, aggravating pressure on fragile lands around villages and wadis. This value chain is a means to transform the extensive management of large numbers of small ruminants owned by women and youth and organize protected grazing areas. The GEF project will also target sesame in the province of Hadjer Lamis because of its good international market opportunities, especially with increasing Asian demand. Chinese collectors are already based in West Africa and Chad might become a collection area for this crop. Moreover, seeding sesame in association with Acacia gum trees is a win-win strategy tested in Sudan to restore degraded pastoral lands with agropastoralists, while increasing their incomes. Finally, the project area is producing vegetables. Drying vegetables is a means both to conserve these products and generate income for women. There is a strong national demand for dried tomato and okra.

The project will sign Letters of Agreement (LoAs) with NGOs and crop and livestock producers’ federations to provide assistance to each of these value chains.

Output 2.2.1 Producers, especially women and the youth are integrated into profitable value chains.

Sesame in the province of Hadjer Lamis. In close collaboration with the REPER project, the GEF project will facilitate connections and contracts between the National Federation of Farmers (CNCPRF), and Chinese exporters/buyers based in Burkina Faso, to collect, produce, sell and transport quality hulled sesame processed throughout the province, from Hadjer Lamis' fields to Burkina Faso's markets. A funding agreement will be signed with CNCPRF and the federation of livestock producers for the extensive production of sesame to provide additional income to nomadic agro-pastoralists and encourage them to regenerate pasture.

APFSs will be set up in Hadjer Lamis for sedentary and nomadic agro-pastoralists. It is planned to produce extensively sesame with mobile agro-pastoralists by planting it in association with gum seeds in degraded areas mechanically plowed in half-moon but also intensively sesame (400 kg/ha yield) with sedentary agro-pastoralists.

The project will subsidize the production of quality seeds adapted to the buyers' request during the first two years of the project by validating production contracts with seed groups. Over the following two years, the project facilitates connections between buyers and producers to make Chad a collection area for this product. Alliances are facilitated between Chinese buyers, Chadian carriers and unionized groups to produce and distribute quality seeds, collect and store sesame and transport it to the processing area. The project also facilitates negotiation with banks and private operators for campaign plans.

Spirulina in Kanem and Lac. Project preparation studies have shown that although in some areas, spirulina production has become more seasonal, it remains a very important income generating activity for poor rural women. The predicted CC will not threaten this production, given the temperature increase tolerance reported in spirulina scientific literature. An economic study will evaluate the possibilities of increasing the value generated by spirulina, by seeking more efficient processing methods, identifying more profitable domestic and international markets, and by promoting the geographical certification of Lake Chad and Kanem wadis spirulina to guarantee the unique quality of this product and its recognition at international level. The project will rely on the Chamber of Commerce to identify buyers, put them in touch with producer groups and support a quality approach. The project will subsidize equipment lines for women's groups in consultation with buyers to improve the quality of their production. Once spirulina production is scaled up sufficiently, the buyer may be able to obtain a fair-trade label (and a price premium) on international markets. The validation workshop underlined the need to build the entire Chadian certification system which does not exist.

Forage and livestock feed are of strategic importance for the management of agro-pastoral lands, in all areas. Their production requires changes in the herding and feeding practices of small ruminants. Groups of young farmers are supported in the production, mowing and storage of fodder in fodder banks with the involvement of female small ruminant herders. Small equipment such as corn/sorghum silage crushers (50), mechanical mowers (50) and quad tractors (10) will be procured. The project will engage banks and suppliers to develop the sector. 10 fodder banks co-funded with P2RS will be set up in BEG and in Kanem, managed by youth and women's associations. P2RS funds the storage infrastructure according to appropriate standards and with wire barbed stalls to park small ruminants in developed areas. GEF will co-fund the electrification of the infrastructure. 20 CEAP will support this activity in all project provinces.

Component 3: Mainstreaming climate change adaptation into national and local policies and strategies.

A regional FAO project on governance of land and natural resources funded by the German international cooperation in five Sahelian countries (Senegal, Mali, Burkina Faso, Niger and Chad) is under formulation. In Chad, the regional project anchored with the ministry in charge of Livestock will build on the results of four provincial workshops (to be held in year 1) on the Voluntary guidelines for the responsible governance of tenure (VGGT), with particular emphasis on conflict prevention, especially in pastoral areas, in order to prepare a national forum on land governance in Chad (year 3). These activities will be carried out in partnership with the National Commission on Land Reform led by the Ministry in charge of Land Use Planning (MLPH).

In addition, GEF resources will enable the dissemination in the Provinces of three national laws and their implementation decrees, with the support of HC-CACT, local media and local authorities. Finally, GEF resources will support a national implementation team led by the GEF focal point to participate in the national-provincial liaisons, coordination of FTPs, supervision and resource mobilization to diversify funding sources for the implementation of provincial CC adaptation plans.

Outcome 3.1. Climate change adaptation mainstreamed into key national laws on management of land and natural resources and their implementation at provincial level.

Output 3.1.1. Institutional mechanisms at the national level are in place to facilitate implementation and mobilize resources.

Output 3.1.2 Three national laws and their implementation decrees are disseminated.

Output 3.1.3. A National Forum on Land is conducted at national level.

Chad is currently in the process of updating the land and estate code, which dates back to 1967, so that it can better respond to current pressing issues such as conflicts over natural resource access and management, climate change, gender inequality, the strengthening of customary rights and the need for land tenure security. The revision of this law aims to improve land governance in Chad. It is led by a committee established by ministerial order and composed of representatives of the technical ministries concerned with land issues, representatives of civil society, international organizations, experts and University academics.

The GEF project, in partnership with the Regional Project on the Voluntary Guidelines for Responsible Governance of Tenure implemented by FAO and with the collaboration of OXFAM, will co-finance this two-year political dialogue process (Year 1 and 2) including a national workshop on land issues, led by the national Committee on land reform – to ensure that climate change adaptation is appropriately incorporated in the reform.

Component 4: Monitoring and evaluation

Component 4 is intended for the purposes of monitoring and evaluating the project ensuring effective results-based management and dissemination of best practices.

4) Additional cost reasoning:

Below is a summary of how the project is additional to the baseline (as described above).

Project	Donor	Project provinces	Objectives, implementing agency and Investments	Additional value of the LDCF project
P2RS · 2015 – 2035 · Phase 1 2015-2020, · Phase 2 2021-2025 · Co-finance USD11,085,000	AfDB	Kanem and BEG	<p>The twenty-year regional (multi-country) project is divided into four phases of five years each. The first phase 2015-2020 is ending and the second phase (2021-2025) is currently under formulation. In Chad the project is implemented by the ministry in charge of Agriculture</p> <p>Investments realized for rural communities are pastoral wells (30), warehouses for cereals (30) and fodder, shops for inputs (34), drip irrigation (studies for 345 ha). The project is expected to invest in supplementary pastoral and agriculture wells, market infrastructure for cattle (2), slaughterhouses (2) vaccination parks (10) and Multi-purpose service Platforms (10).</p>	The AfDB and IFAD projects have a strong national component involving government bodies. The Delegations for Land Use Planning (DLPs), however, are not supported, whereas in a context of weak decentralization, they represent a strategic administration to plan and monitor provincial action plans, in partnership with traditional chiefdoms and land user’s organizations. The GEF-LDCF resources will complement the activities financed by these strategic

<p>Strengthening Productivity and Resilience of Agropastoral Family Farms Project – REPER</p> <p>Co-finance</p> <p>USD 7.5 million</p>	<p>IFAD</p>	<p><u>Hadjer Lamis</u></p> <p>Planned Extension Zone: <u>Kanem and Lac</u></p>	<p>This new project formulated in 2019 to help Chadian farmers to adapt to climate change and boost the agriculture sector in five provinces of Chad. Beneficiaries are sedentary agropastoralists (1 million)</p> <p>The project is expecting to raise the performance and resilience of agropastoral family farms by strengthening agricultural water infrastructure, rehabilitating rural feeder roads, intensifying and diversifying family farming production systems, supporting value chains, improving nutrition and adult literacy, supporting farmers' organizations and improving access to financial services.</p> <p>The new IFAD COSOP expects to extend IFAD area of intervention to the provinces of Lac and Kanem.</p>	<p>financial partners by financing vigorous capacity development programs for four local technical administrations (DTs for Agriculture, Environment, Livestock and Land Use Planning); and investments in innovative technical-economic models adapted to climate change and to markets. Strengthened capacities at the local level will also benefit the implementation and sustainability of AfDB and IFAD projects and mainstreaming of concrete climate change adaptation models in these, and new and future investments highlighted below.</p>
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5) Adaptation benefits:

The project interventions strengthen the resilience of agro-sylvo-pastoral and freshwater production systems in arid environments by adopting an integrated approach linking agriculture, livestock breeding and forestry. Concrete benefits to be delivered include:

1. In four years, environmental governance at the provincial level is improved by strengthening planning, monitoring, coordination and consultation between provincial and local organizations. As a result, four (4) five-year climate change adaptation agro-sylvo-pastoral and freshwater management investment plans (PCCAs) are under implementation with co-financing from financial partners.
2. The project benefits 11 000 people, including: 3 000 mobile agro-pastoralists; 5 000 sedentary agro-pastoralists farming in wadis (80% of whom are women and young people); 2 500 sesame producers (40% of whom are women and young people), 500 spirulina producers (women) and 500 village and canton chiefs.
3. 150 ha of wadi lands, including 100 ha of orchard, are developed and drip irrigated; 20 000 ha of degraded lands, including 15 000 ha of pastures and 5 000 ha of agropastoral lands around wadis/polders, are restored (set aside and developed in the form of agro-forestry parks to combat siltation) and 15 000 ha of Assisted Natural Regeneration (ANR) in pastoral zones to increase forage production. Small ruminant herds are stocked in managed areas and fed with fodder and complementary feeds.

4. 8 “mother” farmer field-schools and 50 “daughter” agro-pastoral field-schools have been set up, 24 agents, 200 farmer-facilitators and 5 000 sedentary agro-pastoralists (80% of whom are women and young people) and 3 000 nomadic agro-pastoralists are trained in techniques and practices adapted to CC and markets. 21 training topics and nine high-performance techno-economic models are disseminated with a target adoption rate of 60%.
5. In four years, Chad becomes a crop collection area especially for sesame buyers based in Burkina Faso. Fodder production increases by 30% and the quality of production of spirulina and dried vegetables is improved. The Chadian spirulina is labelled to improve prices on international markets.
6. In four years, the project mobilizes additional resources to fund the PCCAs (see (i) above), raises awareness on three laws, and improves the political dialogue on land reform.

Although, for LDCF funding, the project is not obliged to generate GEF global environmental benefits, some of the adaptation options promoted will result in significant CC mitigation benefits. This is the case for the restoration of degraded pasture (15,000 ha), the stabilization of sand dunes and the establishment of agroforestry parks (5,000 ha).

6) Innovativeness, sustainability and potential for scale-up:

The project promotes many technical, social and practical innovations to stimulate change dynamics for climate change resilience.

On the technological area, the project will introduce two innovations:

(i) Drip irrigation is a water-saving technology that increases plant growth and decreases climate risks, provided that technicians and producers develop the capacity to set up the system and train farmers to the use of this technology, a substantial vendor network and quality equipment are also needed; when products are successfully sold on urban markets, the return on investment makes it possible to attract the banks. The drip irrigation reduces the plant watering chore, which is ideal in an area where there is a lack of workforce and water during the dry season.

(ii) Solar energy for water pumping on market and hydraulic wells is a technological innovation that saves workforce and alleviates work hardship, especially for women. This requires building maintenance capacities for proper operation of this technology among young users and technicians who are literate in commonly spoken languages. It also requires networking with solar panel suppliers and providing for high capacity water storage tanks for gravity irrigation.

The project will introduce use of an online GIS to plan and monitor project investments and digitalization of public services in order to cater for remote areas, develop tutorials and distant consulting. These technologies make it possible to innovate and transmit knowledge dissemination.

Regarding organizations, Local Bodies for Dialogue and Decision (LBODs) are new social organizations that will be created by the project to support landscape planning and enactment of local land rules. These will reduce conflicts and tensions over land and natural resource use, demonstrating the ability to jointly manage, enact and enforce user rules.

In terms of practices, these will be promoted:

(i) The stabulation of small ruminants in managed wadis is an innovation in women's livestock rearing practices that requires (a) available production areas to stock small livestock for 7 months, during the dry season and fed with fodder and crop residues; (b) support to women in the self-management of shared spaces; (c) development of livestock feed value chains, and storage capacities through fodder banks, and support to small-scale grain processing (corn/sorghum silage).

(ii) The digitalization of technical units and services and distant learning through tutorials, to address geographical access challenge and to popularize technical consulting.

There are a number of elements integrated into the design that should contribute to financial and economic sustainability:

a) Establishing a strong coalition around agreed investments plans (PCCAs) with financial partners already investing in the target provinces.

b) Provincial Action Committees (CPAs), decentralized technical services (DTS) and traditional chiefdoms are all sustainable organizations. The sustainability of the provincial planning units (PPUs) to be established depends on the ability to mobilize funds. Similarly, LBODs representing users are new structures that need public resources to be invested on a longer term than the project, to ensure their sustainability, which is very fragile so far. They will have to win adhesion by the relevance of their approach to investment planning, by improving user rules and reducing conflicts.

Therefore the project will support the development of resource mobilization strategies for the target provinces, to ensure the sustainability of the new structures and for continued implementation of the PCCAs.

- c) The sustainability of farmer field-schools (FFS) depends on the dynamism of the groups and their affiliation to federations in order to develop promising markets. In many FFS projects implemented by FAO, FFS facilitators trained by FAO have become private extension agents, paid by the farmers they provide advice to, thus guaranteeing the financial sustainability of the approach. The techno-economic models are based on the presence of equipment suppliers on the national market and on the availability of technical and financial banking services.
- d) The project will fund practices and technologies that can be sustained when beneficiaries have access to financial services e.g. value chains such as spirulina, sesame, cattle feed, onion and dried products.
- e) The sustainability of the economic sectors supported by the project depends on the capacity of stakeholders to develop markets and therefore their affiliation to the producers' federations (CNCPRRT and farmers' federations). Sector alliances are being set up for sesame, with buyers from West Africa, to make Chad a collection area, and to negotiate financial products with banks and the private sector. Regarding spirulina, the project will work with the Chamber of Commerce to bring in international buyers and producers of spirulina and have this product recognized on international markets by supporting a labelling process. The potential for sesame and livestock feed is high considering international and local markets. Financial services will have to be tailored to allow sector stakeholders to take over after the project and to maintain growth. Moreover, the project includes an innovative approach at different levels:

Detailed description of Innovativeness, sustainability and potential for scale-up is given in section 3 in the attached FAO Project Document.

[1] For the B1 and A2 scenarii respectively, with larger increases during the spring and fall. " Africa Supra Regional, Adaptation to Climate Change in the Lake Chad Basin, GiZ 2015, <https://www.giz.de/en/downloads/giz2015-en-climate-change-study-africa-supraregional.pdf>

A.2. Child Project?

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

NA.

A.3. Stakeholders

Please provide the Stakeholder Engagement Plan or equivalent assessment.

The formulation of the project has followed a social innovation approach and stakeholders have been engaged in (1) data and information gathering, (2) project design and (3) decision making over project activities and outputs. The table below presents a summary of project stakeholders, their mandates and engagement in the project.

Stakeholder Name	Stakeholder profile	Consultation methodology during PPG	Consultation findings	Engagement in Implementation
Ministère de la Production de l'Irrigation et des Equipements Agricoles (MPIEA)	Civil Society Organization	Meetings in N'Djamena	Inputs to the project design and validation of the project document	Bilateral meetings with FAO at political level
4 Focal points (Agriculture, Livestock, Forestry and GEF)	Non-Governmental Organization	Meetings in N'Djamena	Inputs and agreement on the project multi-disciplinary approach, CC adaptation strategies, GEF intervention in Chad	Members of the Steering Committee. The focal points will facilitate the integrated approach and implementation at the national level, and contribute to national-provincial linkages
National Directorates of Agriculture / Livestock / Forestry and Territory Planning (Aménagement du territoire)	National Government Institution body	Meetings in N'Djamena	Contributed to the analysis of national policy and institutional frameworks and design of project components.	Engagement in implementation.
ÂNADER	National Government Institution body	Meetings and email exchanges	Inputs to the analysis and proposals on institutional reform, Integrated approach, area of intervention human resource capacity for implementation	Direct involvement in implementation through a letter of agreement (execution agreement) for some subcomponents
Projet P2RS de renforcement de la résilience pour la sécurité alimentaire Financement BAD	Resource Partner/Donor	Meetings, email exchanges	Technical and financial partnership in BEG and Kanem (comp.1 and 2), area of intervention to better impact on rural communities. Co-financings	Engagement in preparation of provincial plans (PCCAs) - the technical and financial partnership: areas of intervention, investments Year 1, 2, 3, 4
Projet FAO Sahel sur les Directives Volontaires pour une Gouvernance responsable des régimes fonciers	Resource Partner/Donor	Several skype call meetings and email exchanges	Support to policy dialogue in favor of responsible governance of land tenure, co-financing	Engagement in preparation of provincial plans (PCCAs) - technical and financial partnership: areas of intervention, investments Year 1 and 2

Stakeholder Name	Stakeholder profile	Consultation methodology during PPG	Consultation findings	Engagement in Implementation
Projet RESILAC (redressement économique et social inclusif du Lac Tchad) Financement UE / AFD	Resource Partner/Donor	Meetings, email exchanges	Partnership in the Lake Province, Bagassola and Bo, cofinancing (comp. 1 and 2)	Engagement in preparation of provincial plans (PCCAs) - technical and financial partnership: areas of intervention, investments Year 1, 2, 3, 4
Projet de Réaménagement hydroagricole de Tandal NGuimi Financement AFD	Resource Partner/Donor	Meeting	Implementation context in the Lake Province, 1000 ha to develop with full water control € 10 M.	Engagement in preparation of provincial plans (PCCAs) - technical and financial partnership: areas of intervention, investments Year 1, 2, 3, 4
Projet PROLAC de Relance et de Développement de la Zone du Lac Tchad Financement Banque Mondiale	Resource Partner/Donor	-	Information on the ongoing formulation of the program, USD 45 million for Chad component. Infrastructure, capacity building.	Engagement in preparation of provincial plans (PCCAs) - technical and financial partnership: areas of intervention, investments Year 2, 3, 4
Comité Provincial d'Action	Regional Government Institution/body	Meetings	Strengths and weaknesses for coordination and planification	
Decentralized State technical services	Regional Government Institution/body	Meeting in N'Djamena and email exchanges with ANADER, several meetings in the field with the three technical services	Strengths and weaknesses to support agropastoralists, capacity of intervention,	Execution through Letter of Agreement.
HC CACT Haut Conseil des collectivités autonomes et des chefferies traditionnelles	Civil Society Organization	Meetings	Implementation of information / communication campaigns (comp.1 and 3), advocacy vis-a-vis traditional <u>chieftaincies</u>	Execution through Letter of Agreement.
ANGMG – Agence Nationale de la Grande Muraille Verte	National Government Institution body	Meetings and email exchanges	Implementation of comp1 (techniques for land restoration), National Restoration Plan, institutional framework	Execution through Letter of Agreement.
OXFAM	Non-Governmental Organization	Meetings	Implementation of LBOD (comp.1) and Policy Dialogue on Land issue for the mobilization of the civil society (comp.3)	Execution through Letter of Agreement.
Federation of producers / Herders	Civil Society Organization	Meetings in N'Djamena	Food chain approach, contract for sesame and fodder VCs, structuration of local producer groups, relevance of warehouses	Full engagement in project implementation through LBODs, consulted.

Documents

Title

Submitted

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

Please see the table above and sections 1.4 and 2.1 on implementation arrangements in the attached FAO Project Document.

Select what role civil society will play in the project:

Consulted only;

Member of Advisory Body; Contractor;

Co-financier;

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

Executor or co-executor; Yes

Other (Please explain)

A.4. Gender Equality and Women's Empowerment

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

Access to resources can be a source of conflict in a precarious ecological context with soaring population growth – such as in the Lake Chad Basin and specifically the target provinces. This has consequences for ecosystems, and women play an important role in developing landscapes because they tend to have a sedentary lifestyle and they are major users of natural resources. Women are drivers of change.

Women's access to land is dependent on the agro-ecological zones which are regulated by customary rules, marital status and economic power. The main mode of access is the use of the family domain. In general, women have access to land but do not have control over it. They face challenges to access to polders and wadis that are owned by traditional chiefs and they have limited resources for off-season market gardening. They pay a fee to have the right to exploit spirulina. This situation of land discrimination requires the intervention of public authorities to facilitate and improve female access to production areas.

Women are users of degraded agro-pastoral zones around wadis, for grazing small ruminants or for growing rainfed crops such as pearl millet. Wadi area and pastoral lands are under the control of male heads of households and clan leaders.

Although they are the primary users, women do not have control over water and are little involved in fishing. They also have poor access to inputs, equipment and innovations. Women's activities need to be integrated into value chains which are profitable enough to enable re-investments that enhance productivity.

Women account for 75% of production. In addition to domestic chores, they devote a significant portion of their time to production, processing and marketing activities. They are poorly represented in decision-making circles in the farming sector, where they represent only 19% of decision-makers. Women are also poorly represented in local governance bodies such as traditional, administrative and military authorities, according to the Country Strategy Paper 2010-2014.

The project will improve women's access to wadi lands by negotiating with the traditional chiefs to release plots on new areas to be developed by women, so they can invest in and benefit from the yield of their own land. The project will help women improve the rearing of small ruminants by developing fodder chains and setting up areas to park livestock during the dry season.

The project will support women's groups around spirulina processing (equipment, training and supply chain contracts), fodder production and improved management of small ruminants (training and development of zones for small ruminant stalling), market gardening (access to land and training) and product drying (solar ovens and training). 60% of target beneficiaries are women and young people.

The project will strengthen engagement of women in LBODs by promoting their election and participation in decision-making bodies, so that their concerns are given due consideration in the CC adaptation agro-silvo-pastoral resource management investment plans (PCCAs). Women will also be beneficiaries and facilitators of farmer field-schools focusing on spirulina production, drip irrigation, rearing of small ruminants, food product drying/smoking and other processing activities.

Traditional chiefs and administrations will be sensitized and trained on gender issues and gender-based violence. Steps and strategies will be taken for their accountability, and their commitment to resolve and manage land-related community conflicts that affect women, minorities, refugees, returnees and displaced persons, and ensure equitable management and sharing of natural and financial resources, giving due attention to women and young people.

FAO Project Document - section 3.6.

Documents

Title

Submitted

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

Yes

If yes, please upload document or equivalent here

Please see the detailed description of project components 1 and 2 in the FAO Project Document (Section 1.3.2) and the logframe (Appendix 1).

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

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

Improving women's participation and decision making Yes

Generating socio-economic benefits or services or women Yes

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

Yes

A.5. Risks

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

RISK DESCRIPTION

CONSEQUENCE

RISK SCORE

MITIGATION ACTION

Action owner

RISK DESCRIPTION	CONSEQUENCE		RISK SCORE	MITIGATION ACTION	Action owner
	Likelihood	Impact			
Limited partnership-building constrains project implementation and durability of project results.	Under funding of the plans (PCCAs)	Medium	Medium	Advocacy for resource mobilization and partners' engagement	- GEF Focal Point - FAO
Conflicts between pastoralists and crop farmers, and between different groups of pastoralists have been on the rise in Chad, where livestock populations have increased dramatically over the last decade. Conflicts are both inter and intra-community.	Such conflicts can be further aggravated by security issues and prolonged droughts rendering pastures unusable, thus threatening the participatory multi-stakeholder land use planning mechanisms promoted by the project.	Medium	Medium	Putting in place mutually agreed land use rules in order to reduce conflicts between pastoralists and crop farmers, and between different groups of pastoralists. The project will mitigate this risk head-on through some of the main planned activities: building trust among different land user groups; adapting the regulatory framework with regards to land and natural resource tenure and use rights; establishing or restoring secure livestock mobility corridors and pasture grounds; and increasing livestock feed availability through the promotion of new fodder value chains.	- Local Bodies for Dialogue and Decision (LBODs)

RISK DESCRIPTION	CONSEQUENCE	RISK SCORE	RISK SCORE	MITIGATION ACTION	Action owner
<p>Instability of political power (Ministers and Governors) and staff in the public administrations is a key concern in Chad, especially in areas vulnerable to insecurity. Large parts of territories are not covered by local administration while they are confronted to armed rebel groups. It is difficult to lead and apply policies and strategies over rural territories.</p>	<p>Staff trained may be outposted.</p>	<p>Medium</p>	<p>Medium</p>	<p>The project will finance technical assistance to transfer skills, tools and knowledge to local administration and offer incentives for 26 staff of technical services from Agriculture, Livestock and Environment. They will also benefit from strong capacity-building programs to develop the integrated approach and new CCA Agricultural / Livestock extension practices and technologies.</p>	<ul style="list-style-type: none"> - Project Steering Committee - National Project Coordinator
<p>Security concerns in Lac Province (but also to some extent in Kanem Province) limit the project's ability to implement field-level activities in the areas affected</p>	<p>Areas of intervention are not reachable by car and regional trade is affected by insecurity.</p>	<p>Medium</p>	<p>Medium</p>	<p>In Lac Province, the project will invest in ecosystem restoration and protection alongside major donor investments where security of project staff, partners and beneficiaries can be guaranteed. With the help of the UNDSS office in N'Djamena, FAO will monitor new security developments closely, enabling the project to adapt. If necessary, emergency / security plans will be developed by the project stakeholders including FAO and the responsible ministries.</p>	<ul style="list-style-type: none"> - FAO - National Project Coordinator

RISK DESCRIPTION	CONSEQUENCE	RISK SCORE	RISK SCORE	MITIGATION ACTION	Action owner
<p>Limited capacity of local government institutions, such as ANADER. Chad has never made a major decentralization effort, and limited capacity in provincial and local technical services – aggravated by staff constantly moving around – is a well-known constraint.</p>	<p>Technical and Financial Partners plan without consultation of the local administrations. Actions are not coordinated and integrated to better impact on communities.</p>	<p>Medium</p>	<p>Medium</p>	<p>The project will mitigate this risk by setting up Local Planning Units within Provincial Action Committees (PACs), and building on the decision-making and implementation capacity of civil society (e.g. customary land chiefs, producer organizations and their federations) and by fielding approaches based on dialogue and public-private partnerships.</p> <p>In addition, NGOs that will be contracted for execution in partnership with government agencies for project implementation will work intensively with government and integrate their action within the local Plans and gradually transfer skills to government counterparts.</p> <p>Furthermore, capacities of decentralized technical services and ANADER will be strengthened through vigorous capacity development programs, and ensuring their direct engagement (applying the capacities) in the execution of the project components.</p>	<ul style="list-style-type: none"> - Provincial Governors - Ministry of Land Use Planning - National Project Coordinator
<p>High costs and difficulties in intervening in remote locations undermine project impact. The Project intervention area (the four Provinces) is very large and transport infrastructure in most of the area is very limited. Hence it may be costly, impractical to intervene across the area.</p>	<p>Project areas are too concentrated creating inequitable access to opportunities and resources between sous-préfectures</p>	<p>Low</p>	<p>Low</p>	<p>This is considered low risk. First, the nature of this project is to deal largely with pastoralists, many of whom are semi-transhumants, hence difficulties in reach project stake-holders are integral to the project and overcoming these is part of the project design. Moreover, this only applies to a small percentage of project site. Finally, the project will often work with/through locally active organizations and this will increase outreach and lower costs.</p> <p>Digitalization of technical services by the use of tablets.</p>	<ul style="list-style-type: none"> - Provincial Action Committees - National Project Coordinator

RISK DESCRIPTION	CONSEQUENCE	RISK SCORE		MITIGATION ACTION	Action owner
Difficulty to engage women technicians and socio-economic skills for ANGMV and decentralized technical services	Lack of women empowerment and inequalities in implementation, access to resources and benefits.	Medium	Medium	Providing incentives for women. Dialogue at all levels and the project incorporating conditions for women participation in the planning and implementation of the provincial plans. Sensitization of local authorities and chiefs.	<ul style="list-style-type: none"> - Project steering committee - National Project Coordinator

Environmental and Social Risk Classification : Low Risk

ESS Standard	Risk	Classification	Mitigation action	Indicator
ESS 1	Negative impact on natural resources; land tenure; result in a reduction of the adaptive capacity to climate change for any stakeholders in the project area?	Low	<p>The project aims for sustainable management of natural resources including through community dialogues to reduce conflicts and increased agricultural and fodder production.</p> <p>The project would support small-scale, highly water-efficient drip irrigation schemes in the ouadis in Kanem and Bahr al Gazal Provinces. The project's planned investments in stabilizing and restoring dune ecosystems near the ouadis would actually protect the ouadi ecosystem functioning.</p> <p>Regarding tenure, actually, the project activities would strengthen tenure rights through improved dialogue on land issues, land use plans in agro-pastoral areas and relevant laws and regulations in support of rights of access to natural resources. Also, the project will collaborate with FAO's regional project to further the application of FAO's Voluntary Guidelines on the Governance of Tenure in a number of Sahelian countries, including Chad, which is funded by Germany's International Climate Initiative (IKI).</p> <p>The project aims to increase resilience of ecosystems and local communities to climate change.</p>	
ESS 2	Negative impact on biodiversity, ecosystems and natural habitats	Low		
ESS 3	Non-sustainable use of genetic plant resources	Low	<p>Plant genetic resources for food and agriculture</p> <ul style="list-style-type: none"> The project will involve the importing or transfer of sesame seeds for cultivation adapted to the need of the market and West African buyers The project will import seeds from neighbouring Burkina Faso as the local stakeholders requested for this during the project preparation thus accepted by farmers and consumers. It is expected that the procurement, use and storage of these seeds will adhere to set FAO standards including ensuring that seeds are free from pests and diseases. To achieve the above, at implementation, the type of seeds will be agreed again with together the farmers and other stakeholders representing consumers and clearances for procurement of seeds will be sought from Plant Genetic Resources and Seeds Unit. It has also been established that saving of seeds is permissible in Chad. 	

ESS 4	Non-sustainable use of genetic animal resources	Low		
ESS 5	Management of pests and pesticides	Low	<p>Pest and pesticides management</p> <ul style="list-style-type: none"> · Pesticide use is not foreseen in the project, as integrated pest management (IPM) will actively be followed through the field schools. · However, in the event that the absolute need to use pesticides arises, guidance and clearances will be sought from Pest and Pesticide Management (AGPMC). 	
ESS 6	Resettlements and involuntary displacements	N.A.		
ESS 7	Promotion decent employment	Low	The project will promote decent employment when supporting rural livelihoods.	
ESS 8	Gender inequality	Low	The project specifically supports women empowerment and livelihoods, promoting their active engagement in land-use decision making and use.	Number of women supported by the project
ESS 9	Limited direct and informed participation of indigenous peoples Displacement of traditional and local uses of the forests	Low. N.A.		

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 Ministry of Agriculture will have the overall execution and technical responsibility for the project through a Project Management Unit (PMU). The PMU will be established in the office of the Directorate General (DG) in N'djamena. The main function of the PMU, following the guidelines of the Project Steering Committee, will be to ensure the coordination and implementation of the project as indicated in the annual work plans and budgets (AWP/Bs). The PMU will be composed of a National Project Coordinator (NPC), an international consultant as Chief Technical Adviser (CTA), monitoring expert and administrative and budget/operations officers.

Other national institutions will have an important role in project execution, with specific roles agreed during the validation workshop. These institutions are (i) the Provincial Action Committee (CPA)/Provincial Planning Unit (PPU); (ii) The National Agency for Rural Development (ANADER); (iii) The Great Green Wall National Agency (ANGMV); (iv) The High Council of Autonomous Communities and Traditional Chiefdoms (HC-CACT); and the Ministry of Land Use Planning (MLPH). Their engagement in project execution will also constitute a capacity development process, necessary for sustainability, replication and scale-up of project outcomes.

The Government will designate the National Project Coordinator (NPC). The NPC will be an expert from Ministry of Agriculture staff and will have the responsibility of supervising and guiding the Chief Technical Adviser on the government policies and priorities. He/she will also be responsible for coordinating the activities with all the national bodies related to the different project components, as well as with the project partners. He/she will be responsible for requesting FAO the timely disbursement of GEF resources that will allow the execution of project activities, in strict accordance with the Project Results-Based Budget and the approved AWP/B for the current project year.

A Project Steering Committee (Comité de pilotage (CP)) led by the Ministry of Agriculture, will be established. It will consist of five (5) focal points (GEF Focal Point and focal points from Ministries of Environment, Livestock, Land Development and Planning), Great Green Wall National Agency (1), representatives of NGOs and civil society (2) and co-financing partners (2), and the National Project Coordinator (1). The Steering Committee will make decisions in case of political or security difficulties and facilitate the integration of services and linkages between the project activities and the institutional frameworks.

The Food and Agriculture Organization of the United Nations (FAO) will be the GEF Implementing Agency for the proposed project, and as such, will provide project cycle management services as established in the GEF Policy. FAO will be responsible for providing oversight, technical backstopping and supervision of project implementation to ensure that the project is being carried out in accordance with agreed standards and requirements. Technical backstopping will be provided by FAO in coordination with the Project Steering Committee.

Based on consultations with the Government (Ministry of Agriculture and the GEF Operational Focal Point), given the fragile security situation in the Lake Chad region and lack of expertise at the national level and considering the absence of national and local institutions with fiduciary capacity and strong presence in the target provinces, it was recommended that FAO directly executes, together with partners, sub-components of the project. FAO direct execution of specific subcomponents is proposed with the main objective of supporting a learning-by-doing process for local institutions, which will play a major role in co-execution and in future scale-up (Please also see the GEF Council comment related to capacity of implementing partners – Annex B).

FAO will sign letters of agreements (LoAs) with implementing partners, transferring funds for the delivery of specific outputs. The main implementing partners identified during project preparation include:

- **Provincial Action Committee (CPA)/Provincial Planning Unit (PPU)** for the harmonization of approaches and local coordination of interventions (spatial and sectoral), for progress monitoring and evaluation. ULPs will consist of three agents who will also be in charge of the project's M&E system at provincial level. They will liaise with focal points at national level.
- **The National Agency for Rural Development (ANADER)** for the establishment of agro-pastoral field schools (APFSs) in partnership with decentralized technical services (DTSS) for popularization of techno-economic models adapted to CCs and markets and support to Agropastoral Field Schools.
- **The Great Green Wall National Agency (ANGMV)** for the execution of provincial five-year agro-sylvo-pastoral and freshwater Management Plans (PCCAs) with the participation of the LBODs, traditional well diggers and hydraulic companies. The PCCAs will be divided into annual plans. Multiparty agreements will be formulated annually and by province and agreed by local authorities (CPA) and the LBODs.
- **The High Council of Autonomous Communities and Traditional Chiefdoms (HC-CACT)** for awareness raising and advocacy among traditional chiefdoms, on the project and the interest in organizing themselves through LBODs to consult and decide on CC adaptation, CC adaptation extension and on the three national laws providing legal CC adaptation provisions.
- **NGOs** for LBODs' active management, consultation, regulation and investment planning improvement. They will help LBODs draft texts and annual plans and provide capacity-building actions to LBOD board members.
- **The National Focal Points (PF) under the responsibility of the GEF focal point** to capitalize on the integrated, cross-sectoral approach, facilitate implementation through their respective administrations (Agriculture, Livestock, Environment and Spatial Planning). The GEF focal point advocates for the project with TFPs to mobilize resources and diversify partnerships. The GEF project thus becomes a catalyst for CC adaptation funding.
- **Producers' and livestock breeders' federations** for (i) Mobilization of sedentary breeders'/agro-pastoralists' organizations to advocate for their adhesion to LBODs for a better management of natural resources (water, pasture and NTFPs); and (ii) Execution of value chain contracts for sesame, spirulina and fodder/ cattle feed and assistance to producers in the management of cereal and forage stocks.

Coordination:

The project will coordinate and share knowledge with and learn from relevant projects and initiatives through various channels/mechanisms. At provincial level these include: land user platforms (Local Bodies for Dialogue and Decision) and Provincial Action Committees, bringing together multi-actors including financial and technical partners with investments in the Lake Chad Basin and in Chad – partners such as the AfDB and IFAD. At national level, the integrated national team consisting of the GEF Focal Point and officers nominated from relevant administration and the Project Steering Committee will contribute towards knowledge sharing. The national team, in particular, will serve as an important link for coordination and knowledge exchange with relevant initiatives including the following GEF/LDCF and GCF investments:

1. Community-based Climate Risk Management in Chad. This project aims to strengthen the responsive capacity of vulnerable populations to better cope with climate shocks by responding earlier to warning signals and adopting financial risk transfer mechanisms. The project is led by UNDP with the Ministry of Agriculture serving as the executing agency.
2. Chad National Adaptation Plan. The project is intended to integrate climate change adaptation into medium and long-term planning and budgeting of climate-sensitive sectors. It is also led by UNDP with the Ministry of Environment and Fisheries as the executing agency.
3. GCF Readiness: Strengthening capacities and partnerships for assessing mitigation and adaptation opportunities and enabling their implementation in the forestry and land use sectors in the context of the Great Green Wall (GGW). This project is being implemented by the National Agency for the Great Green Wall (« Agence Nationale de la Grande Muraille Verte » ANGMV) with FAO's support. ANGMV is one of the main partners in the proposed LDCF and will be instrumental in coordinating these two projects.

Detailed description of institutional arrangements and coordination provided in the FAO Project Document section 2.

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 (LDCF/SCCF)?

The project strengthens environmental and land governance and political dialogue by promoting integration of technical units and consultation of users to strengthen peace, security and the socio-economic development of territories.

The project helps to organize resource users in LBOD in order to develop agro-sylvo-pastoral and freshwater production systems in their territories. The development is conditioned by consultation between users and traditional chiefdoms to decide on the area to be invested, the type of development/infrastructure, costs, user rules, beneficiary participation to works and/or costs. The beneficiaries will define use rules for each area, which will be codified in resource management charters, including Land and Water. LBODs will be responsible for enforcing the rules in collaboration with local authority systems (traditional leaders and judicial and police/army authorities). This approach empowers beneficiaries (nomadic agro-pastoralists, families and communities) in the management of territories and natural resources. Inter-user and inter-canton conflicts are expected to decrease thanks to dialogue and improvement of local regulatory systems.

The project improves socio-economic conditions for women and youth by developing their livelihoods and markets and by supporting transformations in their agro-silvo-pastoral and freshwater production practices. Women and young people will become important actors in the livestock feed, spirulina and dried products sectors. The project works towards improving the access of women, young people and marginalized groups to land and strengthening their rights and representational power in local public and private organizations. It promotes the recruitment of female technicians and people trained in socio-economics to ensure that technical topics meet their needs and that women and youth organizations are represented in LBODs.

The project will develop the technical capacities of local technical agents and farmer-facilitators. It supports technical innovations and practices in parent farmer field-schools with demonstrations of techno-economic models adapted to CCs and markets.

Drip irrigation saves labour as it is an autonomous watering process. This is a solution to a challenging constraint in the dry season. The communities can carry out two cycles of irrigated crops (October - January and February - June) which makes it possible to double the market gardening production. Drip irrigation combined with solar water pumps will revolutionize irrigation in arid conditions, under the condition putting in place sustainable financial mechanisms to support their dissemination and develop markets and take measures to avoid unsustainable levels of water extraction.

Producers of the sesame, livestock feed, spirulina, dried food products value chains will increase their production and their income, and membership bases for producer federations are enlarged. Sector alliances with the private sector to execute contracts are promoted in collaboration with the banks and ongoing initiatives (Sesame Project, OLAC PR, etc.).

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.

The project will share knowledge with and learn from relevant projects and initiatives through various channels/mechanisms. At provincial level these include: land user platforms (Local Bodies for Dialogue and Decision) and Provincial Action Committees, bringing together multi-actors including financial and technical partners with investments in the Lake Chad Basin and in Chad – partners such as the AfDB and IFAD. At national level, the integrated national team consisting of the GEF Focal Point and officers nominated from relevant administration and the Project Steering Committee will contribute towards knowledge sharing. The national team, in particular, will serve as an important link for coordination and knowledge exchange with relevant initiatives including the following GEF/LDCF and GCF investments:

1. Community-based Climate Risk Management in Chad. This project aims to strengthen the responsive capacity of vulnerable populations to better cope with climate shocks by responding earlier to warning signals and adopting financial risk transfer mechanisms. The project is led by UNDP with the Ministry of Agriculture serving as the executing agency.
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3. GCF Readiness: Strengthening capacities and partnerships for assessing mitigation and adaptation opportunities and enabling their implementation in the forestry and land use sectors in the context of the Great Green Wall (GGW). This project is being implemented by the National Agency for the Great Green Wall (« Agence Nationale de la Grande Muraille Verte » ANGMV) with FAO's support. ANGMV is one of the main partners in the proposed LDCF and will be instrumental in coordinating these two projects.

The table below shows the proposed knowledge management plan with main products to be shared with stakeholders:

Type of Knowledge	Key deliverables and responsible organization/consultant	How to disseminate / share the knowledge	Cost	time line
Planning process	<u>Manual for Climate Change Adaptation Plan</u> (1) explaining the methodology for planning through the use of Landsat images and consultation with the main stakeholders including LBODs and ANGMV.	General Directorate of Land Planning, Housing Development and Urban Planning will disseminate the manuals to the four Designated Land Planning units, ANGMV and the integrated national team led by the GEF Focal Point.	3 Weeks x 2 consultants	The first year before the design process

Type of Knowledge	Key deliverables and responsible organization/consultant	How to disseminate / share the knowledge	Cost	time line
	Leaflets (4 pages) and national radio broadcasts to disseminate the Climate Change Adaptation Plans and the main project results per year	The integrated national team led by the GEF focal point is responsible for disseminating the leaflets to technical and financial partners including NGOs, provincial administrations and LBODs	1 national expert - Communication x 15 m/d x 400 USD/day + Editing + 2 radio broadcasts / year x 4 years	Within the life of the project
		One day workshop per year at the national level to inform resource mobilization	5000 USD / workshop x 4 years	
Ecological monitoring	Monitoring reports on the main results of adaptive measures on cultivated, pastoral and agropastoral zones, and on water (quality and quantity) ANGMV and Lake Chad Basin Commission.	Annually reports are disseminated by email to the General Directorate of the Ministries in charge of Environment, Agriculture, Livestock, and the national integrated team of FPs by Email.	-	Within the life of the project
	Virtual site for the ANGMV mapping service			
Conflicts on natural resources	Mapping of the conflicts by cantons is annually updated by DLPs and Governorates	The maps are disseminated in the Governorates, justice, police	USD for Editing	Within the life of the project
LBDOs	Exchange trips on lessons learned with other initiatives in Chad	4 members of LBDO x 4 LBDO in Mayo-Kebbi	National Trip per member	Year 3 and 4
	Documentary film (30 mnts max.) National expertise - Communication	The film is shown to canton chiefs, rural groups, local administration, HC-CACT and ANGMV to sensitize on the concertation and dialogue approach	3400 USD	Year 3 and 4
	Leaflets for the Charters	Dissemination of Land/water use rights and rules	6000 USD for editing	Year 2, 3, and 4

Type of Knowledge	Key deliverables and responsible organization/consultant	How to disseminate / share the knowledge	Cost	time line
Lessons learned on technical innovation and in practices	National workshop to capitalize lessons learned on the integrated approach for extension services and digitalization of public services	Main technical and financial partners, representatives of the four Delegations and national administrations	7000 USD for two days	Year 4
	20 video Tutorials are produced for farmers and facilitators (200)	Dissemination to farmers and herders' organizations and other partners/initiatives.	25 000 USD	Year 2 and 3
	Leaflets on adaptive techniques (2 pages) PMU		6000 USD for editing	Within the life of the project
	Documentary film (30 mnts max.) on APFS approach National expertise - Communication	The film is shown to producer's organizations, provincial administration, HC-CACT and ANGMV to promote concertation and dialogue for land users	3400 USD	

A communication strategy to complement and support the implementation of the knowledge management plan will be developed in the first year of the project – as described in section 1.7.3 in the FAO Project Document.

B. Description of the consistency of the project with:

B.1. Consistency with National Priorities

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

The project is fully aligned with the National Adaptation Action Plan (NAPA, 2010) and contributes to its implementation on four of the ten priority areas: (i) water control and management for CC adapted agropastoral activities; (ii) development of intensive and diversified crops adapted to extreme climate hazard; (iii) soil preservation and restoration infrastructure for the development of agricultural activities; (iv) improvement of intercommunity pasture areas to reduce the risk of conflicts related to migratory movements of pastoralists. The project will also incorporate several new adaptation options of the agricultural and livestock breeding sectors identified in the second national communication to the UNFCCC (2012), entitled "promoting

and disseminating new agroforestry techniques: assisted natural regeneration (ANR)[1]; value agro-industrial by-products and agricultural residues for livestock feed. All these priorities have been renewed in Chad's National Strategy for Combating Climate Change (SNLCC) in 2016. Finally, the project will also contribute to the adaptation priority contained in the Intended Nationally Determined Contribution (CPND, 2015) to safeguard pastoral resource use rights, transhumance improvement through community grazing areas, to the creation and extension of fodder banks.[2]²

The project also takes into account several other national plans and strategies, including: (i) the National Development Plan (PND, 2017-2021) - which promotes economic diversification by targeting the sectors of agriculture, livestock breeding and fishing; (ii) the National Livestock Development Plan; (iii) the National Food Security Program; (iv) the National Plan to Combat Desertification (PNLCD, 2006); and (v) the National Action Plan for the Great Green Wall (PANGMV, 2010).

With respect to alignment with the LDCF GEF strategy in relation to CC adaptation, the project will contribute to all three objectives, namely: (1) Reducing the vulnerability of people, their livelihoods, physical assets and natural ecosystems to the negative impacts of CC; (2) Strengthening technical and institutional capacity for effective adaptation to CC, and (3) integrating CC adaptation into relevant policies and plans, as well as related processes.

[1] Original french title: « Promouvoir et vulgariser les nouvelles techniques agroforestières : régénération naturelle assistée (RNA) »

[2] See <https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Chad%20First/CPDN%20TCHAD%20Version%20officielle%2028%20sept%202015.pdf>

C. Describe The Budgeted M & E Plan:

Project oversight will be carried out by the Project Steering Committee (PSC) and FAO. Oversight will ensure that: (i) project outputs are produced in accordance with the project results framework and leading to the achievement of project outcomes; (ii) project outcomes are leading to the achievement of the project objective; (iii) risks are continuously identified and monitored and appropriate mitigation strategies are applied; and (iv) agreed adaptation benefits are being delivered.

FAO will provide oversight of GEF financed activities, outputs and outcomes largely through the annual Project Implementation Reports (PIRs), periodic backstopping and supervision missions.

Day-to-day project monitoring will be carried out by the Project Management Unit. Project performance will be monitored using the project results matrix, including indicators (baseline and targets) and annual work plans and budgets. At inception the results matrix will be reviewed to finalize identification of: i) outputs ii) indicators; and iii) missing baseline information and targets. A detailed M&E plan, which builds on the results matrix and defines specific requirements for each indicator (data collection methods, frequency, responsibilities for data collection and analysis, etc) will also be developed during project inception by the M&E officer.

Type of M&E Activity	Responsible Parties	Time-frame	Budget in USD
Inception Workshop	FAO Country Office	Within two months of project document signature	15,000
Project Inception Report	Project Manager	Within two weeks of inception workshop	Project manager staff time.
Supervision visits	FAO	Annually	GEF Agency fee.
Monitoring field missions	PMU staff, consultants and FAO		61,900
Project Progress Reports (PPR)	Project manager and M&E officer	Annually	PMU staff time.
Project Implementation Review report (PIR)	Drafted by PMU finalized by FAO (Lead Technical Officer and Budget Holder). Approved and submitted to GEF by the FAO-GEF Coordination Unit.	Annually (July)	PMU staff time and Agency fee.
Co-financing Reports	Project Management Unit	Annually	Staff time.
Project Steering Committee Meetings	Project Management Unit	2X year	30,000
Mid-term review	Consultant, FAO-GEF Coordination Unit.	Project mid-term	20,000

Type of M&E Activity	Responsible Parties	Time-frame	Budget in USD
Final evaluation	External consultants, FAO Independent Evaluation Office	At least three months before operational closure	40,000
Terminal Report	Project Manager	Within two months of project closure	7,000
Translation of MTR and TE reports into English/French	FAO country office		5,000
Total Budget			178,900

PART III: Certification by GEF partner agency(ies)

A. GEF Agency(ies) certification

GEF Agency Coordinator	Date	Project Contact Person	Telephone	Email
Alexander Jones	2/24/2020	Mansour N'Diaye		FAO-TD@fao.org
Jeffrey Griffin	3/16/2020			

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).

Project Results Framework Matrix is described in Appendix I, page 73 in the attached FAO 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).

Comments	Response
Council: Germany	

Comments	Response
<p>●Although the proposal is strong in outlining the complementary function of the project to already ongoing projects such as FAO itself, the World Food Programme or the EU, the proposal would benefit for a due reflection of other activities to strengthen the resilience of agricultural production , for example by the EU (through EEF, IcSP, EUTF) .</p> <p>●Germany welcomes the intention to closely involve the Lake Chad Basin Commission (LCBC) to ensure that the challenges of climate change are addressed through regional cooperation reflecting also national strategic priorities. However, Germany would welcome a more explicit reference to already ongoing activities of the LCBC, especially those with adaptation relevance, and how this project will be aligned accordingly.</p> <p>●Germany appreciates the outline of co-financing elements as a key element of a successful project implementation. Whereas the proposal explores in a clear way the support of international partners, it is less clear how the prominent role of ANADER can be ensured. The proposal acknowledges the related risks by assessing the limited capacities of local and national institutions as high. However, Germany would highly appreciate a stronger consideration of risk mitigation measures given that a significant share of the co-financing will come from ANADER. In addition, the project aims at establishing innovative agricultural production approaches (FFS) in rural areas, which depend on an appropriate level of partner capacities.</p> <p>●Closely linked to the question of limited national and local institutional capacities is the high relevance of local NGOs in the regions for implementation which are already actively involved in other internationally-funded activities. Germany would welcome consideration of potential risks of overwhelming capacities of these partners being active in harsh environments such as Lac, Kanem, Hadjer Lamis, or Barh el Gazal</p>	<ul style="list-style-type: none"> · A thorough analysis of ongoing and planned projects in the project provinces was undertaken. With some of the projects identified at PIF stage closed, and new investments under implementation, the baseline assessment has been updated. This information, including linkages with the proposed project, is presented in detail in section 1.2.2 (pages 21-26) in the attached FAO Project Document. · This has been done (section 1.2.2 noted above). Specifically, collaboration with LCBC is foreseen in the implementation of activities related to restoration and ecological monitoring of degraded agropastoral lands with the Great Green Wall National Agency (ANGMV). · The project has given important consideration to the need to strengthen the capacities of the decentralized technical services and ANADER, through vigorous capacity development programs, and ensuring that direct engagement applying the capacities in the execution of the project components. An important lesson from implementation of similar projects and FFS is that sustainability depends very much on the capacities of institutional extension services and recurrent investments in these. · For this reason, and to enhance impact and sustainability intended results, the project will be anchored within local and national institutions – of course engaging still with relevant NGOs, as their participation and experience is essential to the project.

Comments	Response
STAP	
<p>•STAP's main concern lies in the multiple components of the project relying on natural spirulina production to increase the resilience to climate change impacts of vulnerable populations, particularly women. In light of FAO website statement on Spirulina production that: "In order to reproduce naturally in the open, [spirulina] needs a very specific environment - such as that of the brackish water pools that form on the northeastern shore of Lake Chad at the end of the rainy season. It also needs daytime temperatures of 35-37°C dropping to 15-20°C at night" (FAO 2010, http://www.fao.org/news/story/en/item/44388/icode/), it is surprising to find no mention of the potential impacts of climate change on the ability to naturally produce spirulina. While literature is sparse in terms of climatic requirements for natural spirulina production, this statement is supported by a number of studies such as Li and Qi 1997, Belay 1997, Wu et al. 1998, which mention optimal growth temperatures of 35-38°C for spirulina.</p>	<p>· This comment has been very useful in re-designing this aspect.</p> <p>With the lake areas (lake, river, pond and groundwater) receding and the water tables falling, leading to the reduction of freshwater resources, such as spirulina, the production of which has become more seasonal in many places. However, it remains an important food supplement and a significant source of cash income for the region's population, especially the poorest women. Small-scale projects implemented recently by FAO and SOS Sahel have succeeded in tripling spirulina revenue of participating women's groups.</p> <p>The dependence on spirulina in the project has been reduced, favoring a diversification of income-generating activities for local populations, and women in particular. Three other promising value chains in addition to Spirulina have been identified: sesame in Hadjer Lamis, Forage and livestock feed in three provinces (BEG, Kanem and Lac) and finally, dried vegetables (BEG, Kanem and Lac).</p>
<p>•2. On p.17, it is mentioned that the project will address 6 NAPA priorities. However, this ambitious goal is not well supported by the interventions currently proposed in the document.</p>	<p>· Chad NAPA priorities are quite broad objectives. However, a closer look at them against project key results, only 4 will be addressed.</p>

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

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

PPG Grant Approved at PIF: \$ 150,000			
<i>Project Preparation Inputs</i>	<i>GEF/LDCF/SCCF Amount (\$)</i>		
	<i>Budgeted Amount</i>	<i>Amount Spent Todate</i>	<i>Amount Committed</i>
Salaries – professional	7,000	0	
Local consultants	45,000	30,804.14	
International consultants	39,000	34,442.07	
Contracts	2,000	0	
Travel .	30,000	36,904	
Consultation workshops	24,000	13,884	
Expendable procurement	3,000	26,664	
Total	<u>150,000</u>	<u>142,698.21</u>	0

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)

ANNEX E: GEF 7 Core Indicator Worksheet

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

ANNEX: Project Taxonomy Worksheet

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

<input type="checkbox"/>

Submitted to HQ

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