Enabling Land Degradation Neutrality and mitigation of greenhouse gas emissions in Cameroon?s Sudano-Sahelian agro-ecological zone

Part I: Project Information

GEF ID
10608

Project Type
MSP

Type of Trust Fund
GET

CBIT/NGI
☐CBIT
☐NGI

Project Title
Enabling Land Degradation Neutrality and mitigation of greenhouse gas emissions in Cameroon?s Sudano-Sahelian agro-ecological zone

Countries
Cameroon

Agency(ies)
FAO

Other Executing Partner(s)
Ministry of the Environment, Protection of Nature and Sustainable Development (MINEPDED)

Executing Partner Type
Government

GEF Focal Area
Land Degradation

Taxonomy
Land Degradation, Focal Areas, Sustainable Land Management, Restoration and Rehabilitation of Degraded Lands, Sustainable Agriculture, Improved Soil and Water Management Techniques, Sustainable Livelihoods, Income Generating Activities, Influencing models, Demonstrate innovative approache, Strengthen institutional capacity and decision-making, Stakeholders, Type of Engagement, Consultation, Partnership, Information

Dissemination, Participation, Communications, Awareness Raising, Behavior change, Local Communities, Indigenous Peoples, Private Sector, Individuals/Entrepreneurs, SMEs, Beneficiaries, Civil Society, Community Based Organization, Non-Governmental Organization, Gender Equality, Gender results areas, Knowledge Generation and Exchange, Access to benefits and services, Capacity Development, Participation and leadership, Gender Mainstreaming, Sex-disaggregated indicators, Women groups, Gender-sensitive indicators, Capacity, Knowledge and Research, Knowledge Generation, Workshop, Training, Seminar, Innovation, Learning, Theory of change, Adaptive management, Indicators to measure change, Knowledge Exchange, Peer-to-Peer, Field Visit

Rio Markers

Climate Change Mitigation

Climate Change Mitigation 1

Climate Change Adaptation

Climate Change Adaptation 1

Duration

60 In Months

Agency Fee($)

158,788.00

Submission Date

6/3/2020

A. Indicative Focal/Non-Focal Area Elements

Programming Directions	Trust Fund	GEF Amount($)	Co-Fin Amount($)
LD-2-5	GET	2,000,000.00	18,717,667.00
	Total Project Cost ($)	**2,000,000.00**	**18,717,667.00**

B. Indicative Project description summary

Project Objective

To enable land degradation neutrality (LDN) and mitigation of greenhouse gas emissions in the production landscapes of Cameroon?s Sudano-Sahelian agroecological zone.

Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount($)	Co-Fin Amount($)

Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount($)	Co-Fin Amount($)
Component 1: Improving the Sub-National Enabling Environment for LDN	Technical Assistance	**Outcome 1.1:** Capacity of the LDN Mechanism is advanced to the sub-national level	**Output 1.1.1:** Municipal LDN baseline, target setting, and mapping (6 sub-divisions within the 2 target regions ? North and Far North) **Output 1.1.2:** Analysis & participatory assessment of SLM practices & policies that avoid and reduce land degradation **Output 1.1.3:** Municipal LDN Monitoring System Design & Integration with Decision Support Systems **Output 1.1.4:** Inter-Ministerial Information Sharing System Design between the decentralized PNDP and centralized systems of MINEPDED, NOCC etc. **Output 1.1.5:** Strategy for LDN Municipal	GET	670,000.00	1,800,000.00

Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount($)	Co-Fin Amount($)
Component 2: Strengthening Initiatives in line with Municipal LDN Targets	Investment	**Outcome 2.1:** PADFAII project is strengthened to improve progress towards municipal LDN targets *Indicator*: Area of degraded agricultural land restored (ha.); *Indicator*: Area of landscapes under SLM in production systems (ha.); *Indicator*: Number of women in PADFA cooperatives receiving support for income generating activities;	**Output 2.1.1:** Trainings delivered on SLM practices to PADFA Cooperatives **Output 2.1.2:** Fertilizer tree nurseries developed on PADFA Cooperatives & business plans for women farmers to manage tree nursery business operations **Output 2.1.3:** Improved water, soil, and land management trainings, regular coaching, improved inputs, and delivery of adapted equipment for PADFA cooperatives	GET	1,030,000.00	15,917,667.00

Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount($)	Co-Fin Amount($)
Component 3: Monitoring & Evaluation and Knowledge Sharing.	Technical Assistance	**Outcome 3.1:** Effective and efficient results-based management and knowledge sharing. *Indicators*: Satisfactory or highly satisfactory performance rating in PIRs and final evaluation report. # Knowledge products shared through relevant platforms.	**Output 3.1.1:** Project monitoring and evaluation implemented and best practices shared.	GET	200,000.00	400,000.00
				Sub Total ($)	**1,900,000.00**	**18,117,667.00**

Project Management Cost (PMC)

GET	100,000.00	600,000.00
Sub Total($)	**100,000.00**	**600,000.00**

Project Management Cost (PMC)		
Total Project Cost($)	**2,000,000.00**	**18,717,667.00**

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

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount($)
Recipient Country Government	Ministry of the Environment, Protection of Nature and Sustainable Development (MINEPDED)	In-kind	Recurrent expenditures	1,300,000.00
GEF Agency	FAO	Grant	Recurrent expenditures	305,000.00
Donor Agency	IFAD	Loans	Investment mobilized	14,917,667.00
GEF Agency	FAO	In-kind	Recurrent expenditures	395,000.00
Recipient Country Government	Ministry of Agriculture and Rural Development (MINADER)	In-kind	Recurrent expenditures	1,000,000.00
Recipient Country Government	Ministry of Forestry and Wildlife (MINFOF)	In-kind	Recurrent expenditures	800,000.00
			Total Project Cost($)	**18,717,667.00**

Describe how any "Investment Mobilized" was identified

MINEPDED In kind contribution: Indicative in-kind co-financing from MINEPDED estimated at USD 1,300,000 will support implementation of component 1 and project management, including funding of the implementation arrangement structure, ensuring that the project is well executed and maximizes intended results. MINADER In kind contribution: Indicative in-kind co-financing from MINADER estimated at USD 1,000,000 will support implementation of component 2 on Strengthening Initiatives in line with Municipal LDN Targets. This component includes outputs whose activities are linked to those of MINADER. MINFOF In kind contribution: Indicative in-kind co-financing from MINFOF estimated at USD 800,000 will support implementation of component 1 and component 2 through MINFOF reforestation programme, which provides grants to municipalities and associations. Based on the scale of needs in terms of landscape restoration, this distribution provides for more than 40% of financial support for the northern part of the country, which covers the regions of Adamaoua, North and Far North. IFAD Investment loan: The loan was identified through early collaborative efforts between FAO and IFAD that identified the need for a partnership in order to address the land degradation challenges in Cameroon?s agriculture sector impacting agricultural productivity and delivery of environmental services. The loan was

mobilized through an agreement that a combination of the GEF-7 resources and a second implementation of the PADFA project could be combined to achieve this end. Note that the total PADFAII project is budgeted to be USD 47 million, and the GEF-7 project will partner with PADFAII through its ?Component 1? supporting cooperative?s sustainable production investments, and ?Sub-Component 2.4? supporting improved household nutritional status. Co-financing considers the PADFAII budget allocated for the North and Far North Regions only. The corresponding amount of co-financing equates to approximately US$ 14,917,667. FAO contribution: The total FAO co-financing contribution estimated at USD 700,000 will consist of the following FAO-led projects: (i) Technical Cooperation Programme facility ?Promouvoir l?agroforesterie et les Produits Forestiers Non Ligneux pour lutter contre les changements climatiques et l?ins?curit? alimentaire au Cameroun (USD 55,000)?; and (ii) The Green Climate Fund project ?Strengthening Cameroon?s capacities for increased resilience and mitigation potential through agroforestry? (USD 250,000); also USD 395,000 of staff time. The staff time includes national, regional and sub-regional support to the technical project components, and from Headquarters through technical staff participation in the Project Task Force. Additional opportunities for co-financing and partnership will be explored during project formulation. For example: UNCCD LDN Fund: Project preparation will explore a variety of approaches to microfinance provision for LDN, including providing support for the identification of creditworthy members of PADFAII cooperatives who will be receiving agroecological SLM trainings, screening of local micro-enterprises that are implementing land management practices in line with agroecological SLM approaches that help achieve LDN targets (particularly the fertilizer tree nursery business plan development support and associated technical trainings targeting women through Output 2.1.2), and exploring approaches for GEF/PADFAII service delivery that help de-risk lending to cooperative members. In this regard the UNCCD LDN fund is a valuable resource which can potentially help facilitate micro-lending for improved LDN outcomes through the fund?s mission alignment and greater flexibility of instrument offerings to MFIs (for example the ability to work with risk-sharing facilities, insurance guarantees, and blended financing etc.). Accordingly, the project will focus its efforts on delivering such assistance that can help unlock greater micro-lending for activities that contribute to the sustainability and durability of LDN.

D. Indicative 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	Amount($)	Fee($)	Total($)
FAO	GET	Cameroon	Land Degradation	LD STAR Allocation	2,000,000	158,788	2,158,788.00
				Total GEF Resources($)	**2,000,000.00**	**158,788.00**	**2,158,788.00**

E. Project Preparation Grant (PPG)

PPG Required

☐

PPG Amount ($)

50,000

PPG Agency Fee ($)

4,750

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount($)	Fee($)	Total($)
FAO	GET	Cameroon	Land Degradation	LD STAR Allocation	50,000	4,750	**54,750.00**
				Total Project Costs($)	**50,000.00**	**4,750.00**	**54,750.00**

Core Indicators

Indicator 3 Area of land restored

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
5000.00	0.00	0.00	0.00

Indicator 3.1 Area of degraded agricultural land restored

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
5,000.00			

Indicator 3.2 Area of Forest and Forest Land restored

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

Indicator 3.3 Area of natural grass and shrublands restored

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

Indicator 3.4 Area of wetlands (incl. estuaries, mangroves) restored

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

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)
41778.00	0.00	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)

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)
41,778.00			

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

Indicator 6 Greenhouse Gas Emissions Mitigated

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO?e (direct)	1047000	0	0	0
Expected metric tons of CO?e (indirect)	0	0	0	0

Indicator 6.1 Carbon Sequestered or Emissions Avoided in the AFOLU (Agriculture, Forestry and Other Land Use) sector

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO?e (direct)	1,047,000			
Expected metric tons of CO?e (indirect)				

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Anticipated start year of accounting	2022			
Duration of accounting	20			

Indicator 6.2 Emissions Avoided Outside AFOLU (Agriculture, Forestry and Other Land Use) Sector

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO?e (direct)				
Expected metric tons of CO?e (indirect)				
Anticipated start year of accounting				
Duration of accounting				

Indicator 6.3 Energy Saved (Use this sub-indicator in addition to the sub-indicator 6.2 if applicable)

Total Target Benefit	Energy (MJ) (At PIF)	Energy (MJ) (At CEO Endorsement)	Energy (MJ) (Achieved at MTR)	Energy (MJ) (Achieved at TE)
Target Energy Saved (MJ)				

Indicator 6.4 Increase in Installed Renewable Energy Capacity per Technology (Use this sub-indicator in addition to the sub-indicator 6.2 if applicable)

Technology	Capacity (MW) (Expected at PIF)	Capacity (MW) (Expected at CEO Endorsement)	Capacity (MW) (Achieved at MTR)	Capacity (MW) (Achieved at TE)

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	15,000			
Male	15,000			
Total	30000	0	0	0

Provide additional explanation on targets, other methodologies used, and other focal area specifics (i.e., Aichi targets in BD) including justification where core indicator targets are not provided

Area under improved practices: This includes bringing PADFAII cooperatives? 13,926 hectares of rice and onion cropland in the North and Far North in line with agroecological practices that benefit from SLM. It is conservatively estimated that this cropland is only 1/3 of total cooperative farmland. Since GEF7 SLM trainings also target these additional crop/pasture lands (which include other crops such as sorghum, cotton, or pastureland etc.) - an additional 27,852 hectares will also be improved through SLM. This brings the total areas under improved practices to be 41,778 hectares of rice, onion, and additional crop/pastureland. Greenhouse gas emissions mitigated: GHG reduction estimates have been calculated through EX-Ante Carbon-balance Tool (EX-ACT). This accounts for 41,778 hectares brought under agroecological SLM, plus an estimated 5,000 hectares of degraded land restored to cropland. These figures above are preliminary estimates which will be further refined during PPG stage. Project beneficiaries: GEF7 project beneficiaries is calculated through the number of beneficiaries in PADFA cooperatives. The PADFA project will support 20,000 farming households in the North and the Far North.

Part II. Project Justification

1a. Project Description

1. Project Description

Context:

1. Cameroon is a lower-middle-income country with a population of over 25 million with a land area of approximately 46 million hectares.[1] The country has five agro-ecological zones (AEZs): (i) Sudano Sahelian zone; (ii) High Guinea savannah; (iii) Western highlands; (iv) Humid forest: monomodal rainfall; and (v) Humid forest: bimodal. The country is composed of 10 regions divided in 58 departments. The proposed project?s area of intervention concerns the Sudano-Sahelian agroecological zone. See Map 1 in Annex B for geographical coverage of these zones.

2. The Sudano-sahelian is a semi-arid agroecological zone that covers the North and Far North Regions of the country, a combined area of about 10 million hectares (6,609,000 ha. and 3,436,300 ha., respectively)[2]. The agroecological zone comprises both natural habitats and agroecosystems. The vegetation is mainly steppe, large open grassland, woodland savannah, shrub land, prairies, and pasture. Common tree species include baobab, acacia, faidherbia albeda, and various palms. The zone?s soils include leached ferruginous, hydromorphic soils, alluvial soils, lithosols to vertisols and inundated soils.[3] Average rainfall for the region fluctuates between 400-1200 mm per year and temperatures range annually between 28-35 degrees Celsius. The rainy season lasts 4 to 5 months and dry season lasts for 7-8 months per year. The lower rainfall areas of this zone are mainly used for grazing. Cropping and crop?livestock systems dominate the areas with higher rainfall and low-lying areas where rainwater collects. The zone?s landscape is comprised of the northern lowlands plains slanting towards the highland plains like the Benoue basin and Tinguelin massif, Diamare plain and Chad plain (Logone plain with its ya?r?s) that meet in the West with the Mandara mountains (the highest peak in the region 1442m). Extensive flood plains ?Yaeres? can be found in both the Benue and Chad basins. The areas closer to the Lake Chad are characterized by highly erratic rainfall patterns. There are three Parks (Bouba Ndjida, Waza) containing lions, elephants, monkeys, buffalos and rhinos.[4]

3. The production landscapes of the Sudano-Sahelian zone play an important role in local livelihoods, primarily through the agriculture and livestock sector and forest sector. The production landscapes impact livelihoods most directly through the agriculture and livestock sector. In

the North Region, 73 percent of the population are farmers, cultivating an average land area of 2.3 hectares.[5] 81 percent of households? farm maize, 71 percent groundnuts, and 44 percent millet for food. Cash crops include cotton, rice and onions, where in some cases producers operate through cooperatives in out grower schemes. Crop yields in the North region fall in line with, or below, respective national averages. Almost half of the households are livestock herders[5] that depend on agricultural residues, local forests and grasslands for grazing and fodder. The Far North region has the highest proportion of farmers (80 percent of the population according to SODECOTON staff) cultivating an average land surface of 1.7 hectares. Here 47 percent of households produce millet, 39 percent sorghum, 38 percent groundnut. Cash crops include cotton, onion, and rice, with onion recognized as the most profitable for producers. SODECOTON, a formerly state owned and now privatized cotton corporation, operates in large parts of the agricultural basins in the northern regions, including over half of the available agricultural area of the Far North.[5] However, lower rainfall in part leads to lower yields in the Far North, where yields of all respective crops fall below national averages. These production landscapes are characterized by low food production relative to the high proportion of the population cultivating lands. The Far North region has the highest prevalence of livestock herders of any region in the country [5], and livestock maintains dependence on forested landscapes for forage. The regions? production landscapes also impact livelihoods through the forest sector, albeit to a lesser extent than agriculture and livestock. Beyond providing forage land for livestock, forests provide fuelwood for charcoal production ? the main source of energy for 95 percent of rural households.[6] Additionally, forests provide a variety of non-timber forest products (NTFP), including tamarind, shea, and baobab fruits.

4. Poverty and human development indicators of the sudano-sahelian zone are the most dire of any agroecological zone in Cameroon. The socio-economic conditions of the North and Far North regions are characterized by high poverty incidence, high household food in-security, high infant mortality, and low education levels.[1][1] As of 2014, the percentage of the population living in poverty[2][2] in the North and Far North Regions was 68 percent and 74 percent respectively. In 2014, the depth of poverty[3][3] was 28 percent in the North Region and 34 percent in the Far North Region ? by far the two highest in the country.[1] Mortality of children under five years old was 154 per 100,000 live births in the North Region and 173 per 100,000 live births in the Far North Region. The percentage of the population receiving no form education was 46 percent and 61 percent in the North and Far North Regions respectively ? over double that of any other region, with the exception of Adamawa.[1]

5. A high degree of gender inequality exists in the North and Far North Regions. Despite permanent access to natural resources, women are excluded from the right of ownership and decision making over land, which belongs to men. They mainly work in seed production, tree nurseries

and planting activities, while men tend to be involved in heavy work (sawmilling, logging, tree loading, cattle management) and to be employed by agribusiness and forest companies.[5] Hunting is an activity exclusively for men, but the marketing of the game belongs to women. The collection, processing, and marketing of NTFPs is done by women and children who are major players in the retail trade while men dominate the wholesale market for greater profit. In the agricultural sector, women are well represented in the production activities of weeding, seeding, treatment, harvesting, drying and sorting and they are vastly underrepresented in the activities of warehousing, transport, negotiation and sales. Income from crops and forest products collected by women is used for the daily management of the household. Women?s challenges with access and control of arable land and are due to traditions, religion, customs and the non-existence of appropriate protective legislations. Women?s participation in community forest management is not as important as men. Women are usually poorly represented in legal entities and in the management bodies, in which they rarely have positions of responsibility. Women are not often involved in the management of income, in community micro-projects or other lucrative activities related to community forests. The marketing of firewood and rattan is generally an activity mainly carried out by women and children, though men are involved to a lesser extent.

The Global Environmental Problem:

6. Land degradation is destabilizing the agro-ecological conditions of the Sudano-Sahelian zone. The Sudano Sahelian zone has been ecologically assessed to be the most fragile agroecological zone in Cameroon.[3] Land degradation in this zone occurs through a large number of biological, chemical, physical, and hydrological processes that combine to destabilize the equilibrium of the agroecosystem. These processes are extensively covered for the Sudan-Sahelian semi-arid zone in the 2019 IPCC Working Group reporting on desertification. However, it is understood from country-specific studies of the Sudano-Sahelian zone that mainly human-driven soil degradation and forest loss[4][4] in combination with erratic rainfall and heat stress is contributing to the loss of vegetation cover and the biophysical breakdown of soil properties that are accelerating land deterioration, biodiversity losses in the soil and environment, and a transition to significantly less fertile conditions.[6] This is leading to the development of infertile soils, called ?hard?? soils, the most striking sign of land degradation, characterized by vast expansion of bare land.[7] The zone?s most fertile soils, the lowland vertosol soils, are unfortunately impacted most by this process as they experience increased clogging and sealing from flooding during the rainy season.[6] Furthermore, natural hydrological change and anthropogenic hydrological change (mainly through poorly managed irrigation schemes) are also strong contributors to land degradation in the northern regions of Cameroon through their propensity to cause soil salinization.[6] There is an approaching threshold of degradation and denudation beyond which the mechanisms change scale, accelerate and become widespread.[6] As a result of land degradation, Cameroon risks agroecological collapse of the sudano-sahelian zone into unfertile arid conditions.

7. **Loss of land-based natural capital of the Sudano Sahelian zone is occurring at a concerning scale and decreasing provisions of valuable environmental services.** According to Cameroon?s Ministry of the Environment, Nature Protection and Sustainable Development (MINEPDED) the natural productivity of land in the North and far North regions is being lost at scale and at an increasing rate. In 2018, MINEPDED found that nearly 5 million hectares of land, or about 50 percent of the total land area of the North and Far North Regions, are highly degraded lands. SODECOTON, who surveys land suitability for cotton farming, reports over 400,000 hectares of ?hard?? soils, particularly occurring in the Far North region. However, degradation of these lands is not monolithic throughout each region. MINEPDED found that there were concentrated ?hotspots? of land degradation in select areas. In the Far North Region, the Diamar?, Mayo-Kani, Mayo Tsanaga, and Mayo-Danay districts were found to be degradation hotspots. In the North Region, Benou? and Mayo Louti districts were also found to be degradation hotspots. A subsequent study carried out by MINEPDED and GIZ for the AFR100 initiative found additional land degradation hotspots in the Garoua, Pitoa, and Gachiga municipalities of the North Region. According to MINEPDED deforestation has occurred on over 1 million hectares of land in sudano-sahelian zone. Deforestation hotspots in the North Region occur in the districts of Mayo Tsanaga, Vina, Benoue, Mbere, Mayo Danay, Mayo Kani, Mayo Louti and Mayo Rey. Throughout both regions, deforestation and forest degradation has occurred on most of the fertile flat lands, and the only remaining natural forests remain on steep hillsides. Associated with soil degradation and vegetation loss include the loss of biodiversity and increased greenhouse gas emissions, from reduced losses of soil organic carbon and above and below ground biomass. Furthermore, there is an associated loss of pollination and nutrient cycling, which in turn, results in lower yields of agricultural and forest products.

Table 1. State of land degradation in Sudano-Sahelian zone of Cameroon[2]

Regions	**Areas of degraded land (ha)**
Far North	3,316,770
North	1,663,410

8. **Poverty incidence across the Sudano Sahelian Zone is growing mainly as a result of land degradation-related productivity loss**. With over 70 percent of households in the two regions primarily dependent on agricultural production as a source of food and income, decreases in agricultural productivity are associated with increased poverty incidence and household food insecurity. According to MINADER, soil fertility is the limiting factor to increasing agricultural crop yields, recent crop yield declines across agricultural subsectors are likely a result of improper fertilizer applications, a lack of soil organic matter and soil erosion.[8] As a result, in the North and Far North, poverty and inequality levels have steadily increased over time relative to the rest of the country where poverty and inequality have declined. In the Far North region, the incidence of poverty increased from

56 percent in 2001 to 74 percent in 2014.[1] The regions that were the poorest in 2001 have become even poorer while those that were relatively well off have progressed the furthest. In the Far North region, the depth of poverty drastically increased from 19 percent to 34 percent and in the North region from 15 percent to 28 percent.[1]

Root Causes:

9. The direct drivers of land degradation include unsustainable agricultural practices, overharvesting of fuelwood for charcoal production, poor fire management, and water shortages. Such direct drivers are detailed as follows:[9]

(i) *Unsustainable agricultural and livestock practices*: Cropping systems are generally characterized by high nutrient losses (especially for nitrogen, phosphorus and potassium) and losses of soil organic matter (SOM). Long-term processes that adversely affect sustainability, such as decreased and eventual depletion of soil nutrient stocks, receive little attention from farmers. Inappropriate agricultural practices (e.g. monoculture crop production, non-adoption of soil-conservation management practices, overcutting of vegetation, unbalanced fertilization, and improper use of pesticides) contribute to nutrient and SOM losses and lead to increased water and wind erosion, further leading to soil physical degradation and to the decline of the soil production potential. Soil degradation from unsustainable crop systems has been studied and expressed both in the rainy and the dry season and loss of land ranging from 0.5 to 40Mgha?1yr?1 for the Sudano?Sahelian region.[6] One of the spontaneous responses to the decline of soil fertility is the extension of cultivated surface on lands sometime marginal, instead of increased or improved existing production methods. This is associated with new forest clearing and sedentary farms are still under development. The pastoral areas (which are mainly silvopastoral landscapes including forests and grasslands) are threatened by expansionary agriculture pressures and shifting cultivation, which tends to encroach on traditional transhumance corridors, mainly in the dry season. Overgrazing on grasslands and livestock encroachment into protected forests are the most common unsustainable livestock activities occurring in both regions.

(ii) *Overharvesting of fuelwood*: A growing demand for charcoal to meet household energy needs / urban energy demands and reduced forest resources have led to the overharvesting of fuelwood. Woodlots that supply fuelwood for cooking and charcoal have are not typically sited properly in relation to demand centers. A lack of demarcation of council forests has led to their overexploitation and degradation limiting the productivity of those forests for both future fuelwood supply and non-timber forest products. Furthermore, on-grid and off-grid energy sources are not widely available to offset the need for fuelwood.

(iii) *Poor fire management*: Uncontrolled bush fires for opening vegetated areas for agricultural or pastoral land, often set in the absence of firebreaks, cause accidental burning of trees and forests. Repeated clearing through use of fire on the same soils is contributing to soil nutrient loss and salinization of the soils through increased mineralization.

(iv) *Climate variability and change*: The North and Far North regions have long been known for high exposure to droughts and erratic rains causing water shortages that lead to reduced soil moisture and to soil and wind erosion. Analyses undertaken in the development of the National Adaptation Plan for Climate Change show a marked decrease in rainfall in the Sudano-Sahelian Zone for the period 1951 to 2006 ? a decrease of about 4 percent per decade[5][5], accompanied by average temperature increase of about 0.5?C per decade. In 2011 and 2012 the North and Far North were hit by a significant drought resulting in loss of lives, extensive damage to property with thousands of rural households affected. However, irrigation schemes in the absence of appropriate groundwater management capabilities has also contributed to water shortages through depletion of surface water and ground water resources. Such occurrences are decreasing agricultural and vegetation yields as well as disrupting the vegetation cycles of crops and plants. Regional climate change projections suggest that an overall decrease in the quantity of rainfall could exacerbate water shortages in many areas of the North and Far North. The quality of water will also be affected. An increase in temperatures, and greater dryness, are likely to result in the salinization of both water and soils. Yields, particularly of rainfed crops including rice, maize and groundnuts are projected to fall significantly by 2040[6][6].

10. The indirect drivers of land degradation primarily include population growth, land conflict, and climate change. Such indirect drivers are detailed as follows:

(i) *Population growth*: Population growth in the North and Far north are above 2.5 percent,[10] one of the highest rates compared to the other 10 regions of the country. Population growth is in many ways increasing the diverse set of pressures put on the land. It increases land degradation indirectly through increased demands for agriculture and livestock production, which is often carried out using unsustainable practices, resulting from increased food demands and increased demands for cash crops to support the livelihoods of a larger population group. Larger energy demands from this group leads to increased charcoal demands and thus increased degradation of forest resources for fuelwood. Recently the regions have seen an increase in refugee influx from neighboring countries that are adding to pressures on the land by contributing to population growth. As of August 2016, the United Nations Office for the Coordination of Humanitarian Affairs (OCHA) estimated that Cameroon was hosting

325,000 refugees from Nigeria and Central African Republic and was counting 157,000 internally displaced persons (IDPs), due to conflict-related insecurity. OCHA estimated the number of food insecure people in the northern regions to have increased from one million in 2014 to 2.4 million in August 2016.[1]

(ii) *Land conflict and insecurity*: In the North and Far North Regions, rural farmers? access to land is largely a function of their economic status, where many impoverished members of the community have the least access to productive land, and the fewer, relatively less poor have greater access to land with productive soils. As demand pressures mount on production lands and unsustainable management practices reduce their productivity and availability, the North and Far North Regions have experienced numerous cases of conflict regarding access to land and user rights. Disputes over who can cultivate on land and have access to pastures for grazing contributes broadly to various forms of inefficient land use. Reports of conflicts regarding crop degradation from livestock grazing on farmland, and crop encroachment into pastureland are increasing. Another example includes the presence of Boko Haram on the North and Far North borders with both Nigeria and Chad that have resulted in high levels of insecurity and violence, involving 2,276 fatalities in 2014-2015 alone, loss of livestock, and security risks affecting farming activities.[1] After several years of conflict, the border regions are inaccessible and the cultivation of tall-growing cereal crops???millet and maize mainly???have been prohibited by the army, even in certain non-border areas, for security reasons. This has led to a two-thirds reduction in regional agricultural production since 2014.[11] In Mayo Tsanaga and Mayo Sava, thousands of displaced farmers have taken advantage of the solidarity of others who lease them farmland, further contributing to existing conflicts of land. Such instances of conflict and threats over land use, combined with a weak land tenure regime, disincentivizes sustainable and productive investments in agriculture and livestock practices resulting in the prevailing existence of unsustainable land management practices on production lands.

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11. The relationship between the direct and indirect drivers of land degradation is exacerbating the problem of land degradation, creating a feedback loop of negative impacts on human livelihoods and the environment. Land degradation is reducing people?s access to productive landscapes and ecosystem services impacting their livelihood, nutrition, loss of natural capital, and agricultural production. In turn, land users are caught in a socio-economic trap where they have few other options or incentives to adopt sustainable land management measures and thus continue to degrade production landscapes at an increasing rate. This cycle of worsening and expanding land degradation and poverty is expected to continue until the Sudano-Sahelian agroecosystem has collapsed into arid conditions. Government assistance is warranted to help break this cycle by addressing the root causes and employing a mechanism that seeks to sustain and improve the stocks of land-based natural capital and the associated flows of ecosystem services, in order to support the future prosperity and security in the North and Far North Regions.

12. The Government of Cameroon has made plans to address the root causes of land degradation comprehensively through development of its Land Degradation Neutrality[7] (LDN) mechanism and achieving progress toward its LDN targets. The LDN mechanism is focused pro-actively on planning to achieve no net loss of land-based natural capital, rather than on regulating land degradation. The neutrality mechanism comprises the counterbalancing of anticipated ?losses? in land-based natural capital with planned ?gains?, to achieve neutrality. The mechanism assists land use decision makers to maintain or do better than ?no net loss? (as a minimum standard), so that losses due to land degradation can be counterbalanced by (at least) equivalent gains within the same land type. Cameroon seeks to achieve its national target for LDN following a municipal implementation approach, in having 90 percent of its municipalities in ?priority areas? combat land degradation and achieve neutrality. The North and Far North regions have been deemed highest priority areas in the country. Supporting the government will involve developing the LDN mechanism at the municipal level and making progress towards set municipal LDN targets. Thus, the proposed projects? approach to the root causes and underlying theory of change will fall in line with the LDN response hierarchy and logic model for effective implementation of LDN[8][8] as outlined in detail in the UNCCD?s Scientific Conceptual Framework for Land Degradation Neutrality. See Annex C for the proposed project?s theory of change.

Barriers to be addressed:

13. There are several main barriers to achieving LDN in the North and Far North Regions that will need to be addressed by the project. These barriers include the following:

1) A lack of project experience in ?avoiding and reducing? land degradation

14. Investment projects have focused significantly less on ?avoiding and reducing? losses of vulnerable high value production land compared to restoration and rehabilitation of already degraded lands. Some international environmental agreements including UNCCD, and the CBD and by extension the country?s commitments, such as the Bonn Challenge, AFR100, and past projects / programs, have promoted the FLR approach to addressing land degradation based on the success metric of number of hectares of ?restored? land. This has translated into Cameroon extensively developing reforestation projects on degraded lands. While this approach is extremely valuable to achieving increased gains in production land, it is only one half of the LDN approach, which also seeks to avoid and reduce losses of existing production land such that the net balance of land degradation is

greater than or equal to zero. The challenge with only pursuing a planting and reforestation approach is that there is little land user experience and institutionalized understanding on how to strategically address the direct and indirect drivers of land degradation that caused degradation in the first place. In the North and Far North regions, this is particularly true in the context of agricultural production. In the agricultural sector, promoting production land loss ?avoidance and reduction? needs more attention, and MINADER has had no involvement in working with MINIPDED and MINFOF on the LDN agenda to date. Municipalities with large food, livestock, and commodity production landscapes offer substantial opportunity to deliver on LDN targets in addition to those with mostly degraded forest land. Furthermore, the agricultural production landscapes offer opportunity for municipalities to leverage the LDN mechanism to address local pressures on the landscape, like poverty and food security. However, most support to this sector has been delivered under the objective of building agricultural resilience, mainly just to drought. Yet avoidance of land degradation involves more than this, as noted from the description of the global environmental problem. Avoiding agricultural land degradation will require mainstreaming more comprehensive methods to the agricultural production process in addition to improved water availability. These methods will need to focus on maintaining soil fertility, structure, and organic carbon. Currently there is little focus or knowledge being distributed to farmers on conservation agriculture, soil fertility management, agroforestry in combination with better water management. Given the extent of unsustainable practices being undertaken, agroecosystems remain a valuable piece of natural capital that is increasingly vulnerable to loss. In order to overcome this barrier and meet its LDN objectives, Cameroon will need to gain experience with avoiding and reducing loss of valuable production lands.

2) The absence of a sub-national enabling environment for LDN

15. While successful efforts have been made to set voluntary LDN targets and baselines at the national level, at the sub-national level the LDN mechanism has yet to be designed or implemented. Cameroon has set its national voluntary LDN target and baseline indicators through its GEF6 National LDN Target Setting project. However, sub-nationally, municipalities have not yet adopted LDN targets, baseline development, or begun strategically implementing projects that address production land losses. There is little understanding sub-nationally as to what lands, or how much land will need to be protected or rehabilitated. Given that there is no monitoring system in place for land degradation, it is not possible to quantitatively indicate the degree to which land-based ecosystem services and productive capacities are being negatively impacted. Current understanding of the degree of land degradation is only understood observationally and through anecdotal evidence of the growing presence of degraded production areas, the widespread use of unsustainable agriculture and livestock practices, and the associated decreases in production resulting from land degrading activities.

*3) Balancing production land ?gains?**[9]**[9] with ?losses?**[10]**[10] and land use planning remain a challenge*

16. It is difficult to assess the net change of available production land, *in terms of losses and gains*, because of a lack of LDN monitoring systems in the North and Far North regions. While it is seen that both land degradation and land restoration activities are occurring, there are no baseline indicators that are currently being collected to accurately quantify the balance in which they relate. Implementing such a monitoring system is a challenge because collecting on these indicators will require designing a monitoring system and developing expertise and capacity for collecting data (vegetation cover, soil productivity, soil organic carbon etc.) and making calculations and/or models to better understand where the land degradation balance stands in relation to neutrality. Overcoming this barrier will require the executing agencies of land management projects to start collaborating with land users to begin collection of LDN indicator data in a centralized system with access by municipal, regional and national planning bodies. Key institutions that would have to be involved include: MINADER, MINFOF, MIPEPDED, and the PNDP.

17. Planning for production land gains and losses is also challenged by lack of LDN decision-support services in existing municipal land use planning processes. Planning investment projects on the ground that aim to impact the land degradation balance towards a state where gains exceed losses, requires close coordination between land investment activities. Currently land planning structures in the North and Far North region rely on regional, municipal, and community planning structures through institutionalized groups like the PNDP[11][11]. However, given the absence of an LDN monitoring system, there is little understanding of a methodological approach to making decisions for landscape investments based on an LDN indicator criteria. Planning bodies will also need to improve their technical abilities to execute LDN-focused decision-making process and find synergies between their respective approaches? objectives and outcomes. Additionally, land degradation-focused investment decision making will need to finding synergies amongst the ongoing FLR efforts, within the broader context of an LDN approach. Given the relevance of some LDN indicators in setting a greenhouse gas reference emissions level for AFOLU sectors, opportunities also exist for land planning to also support synergies in achieving outcomes with Cameroon?s National REDD+ strategy.

18. More broadly, implementation of reforestation projects have not fully succeeded to restoring natural capital because they could not overcome barriers with communities? preferences for alternative land uses. Substantial anecdotal evidence shows that many plantation forests, that originally aimed at restoring lands, were actually cut down very quickly by agricultural

community members under the position that they wanted to use those lands for other purposes or that the type of trees planted were not suitable for their approach to agriculture / livestock production. For example, some communities cut the large plantations of ?Neem? trees (*Azachderca Indica*) because they grew too large and crowded out sunlight for crop growth and they preferred the smaller native fertilizer trees (faidherbia albeda etc. whose biological cycle is appropriate to growing crops in agroforestry systems), that dropped nutrient rich nitrogen fixing leaves during growing season and allowed ample penetration of sunlight. Farming communities reported that they would like to be the ones responsible for choosing plantation sites and wanted a choice of fertilizer trees to plant. Overcoming this barrier will require a process for communities to become involved with the selection and planting of desirable native plants including tree planting on their own siting terms and receiving tree options for doing so.

4) Agroecological SLM practices have low uptake amongst farmers and herders

19. Insecure user access to land and lack of ownership disincentivizes the long-term improvement of land management practices. Private ownership of land is very uncommon in the North and Far North. Most of the land is legally owned by the government and citizens are permitted to use it according to traditional appointments for land use and access. Traditional land appointments are central to driving insecurity of land access, as the approaches allow for traditional authorities to re-allocate land to different users on a short-term basis ? in some cases, season to season. Relatively poor farmers are easily displaced by wealthier farmers who curried favors with traditional authorities in exchange for increased land access rights, or by chiefs declaring requirements for sharing land with new refugees or maturing youth who want their own land to farm. The broad absence of statutory land tenure is not securely covered by customary tenure rights, and in addition the absence of legal titling, land access insecurity contributes to further ?a lacking sense of ownership? over land. The lack of a ?sense? of ownership amongst poor farmers, and the feeling that the land might not be theirs to farm in the future, provides no incentive for them to invest their time and labor efforts in protecting the land?s natural capital, as they risk not seeing any direct return on it. While this project will not aim to make a change to the legal system for land governance, it will seek to address this barrier of land access by convening chiefs and land users to commit to long term customary user rights specifically for the purposes of addressing prevalent land degradation challenges.

20. Agroecological SLM practices are in competition with chemical fertilizers, pesticides, and herbicides. Given the serious livelihood implications of widespread crop losses, farmers have reported a general skepticism and hesitancy to changing their traditional farming methods in favor of improved methods. However, it is widely understood from stakeholder consultations that changes will be needed in order to address growing food demands amidst diminishing soil fertility and associated crop yields. With regards to improving soil fertility for crop production, farmers essentially have two approach options to choose from: (1) agroecological SLM practices or (2) use of chemical fertilizers,

pesticides, and herbicides. During stakeholder consultations in the North and Far North, a concern arose over some farmers? keen interest in pursuing a chemical approach to improving soil fertility versus an SLM approach. Some stakeholders indicated that if they could afford chemicals, they would like to use them, and others that had used them noted initial satisfaction but long-term complications. The temptation for farmers to want to use the chemical approach relates to their known ability produce reliable short-term benefits in crop growth / pest and weed death, they are very easy to apply, and require little additional time or labor requirements compared to SLM. However, in the long term, the chemical approach dissolves soil structure contributing to erosion and poses major environmental threats to water resources and non-pest insect species, which are responsible for providing valuable environmental services for the agroecosystem. On the other hand, agroecological SLM practices, are financially less costly and conserve agroecosystem resources in the long term. However, with SLM practices, soil nutrient regeneration may take longer to realize and involve higher labor demands associated with the additional manual processes, like composting, mulching, weeding, and fertilizer tree breeding. Furthermore, stakeholder?s understanding of the long-term benefits of SLM were quite limited. This barrier will need to be addressed in order to achieve and sustain LDN, particularly as incomes rise from LDN activities, so will the affordability of chemical applications. Overcoming the attractiveness of chemical approaches will require a broad level change in farmer?s perceptions of the costs/benefits to each type of soil fertility improvement method. This will need to be done in a straightforward, practical and culturally sensitive way, involving endorsement of SLM from the agricultural cooperative or community and a collective commitment to abstaining from a chemical approach.

21. There is limited knowledge and a lack of information and training resources regarding SLM practices. In the agriculture and livestock sector, agroecological SLM practices are somewhat known, but not fully understood within their specific cropping systems. For example, during stakeholder consultations farmers overwhelmingly reported that they were aware of agroecological soil fertility management practices, like crop rotation, use of cover crops, use of livestock waste in fertilizers, intercropping, agroforestry etc. However, critical details for their effective implementation were not well understood. Some examples from farmers consulted included knowledge gaps around: which crops could be efficiently rotated together to maximize yields and conserve soil conditions, which cover crops should be used to improve soil conditions, how to mix organic fertilizer according to crop needs, how to restore land fallows quickly, how to implement nitrogen fixing trees to maximize outputs of their primary cropping systems etc. Furthermore, there was broadly a lack of understanding regarding the negative impacts of widely used unsustainable practices - like the use of set fires to clear field vegetation out for planting, continuous monocropping, overgrazing etc. As a result, there were many farmers that thought they were fully implementing SLM practices when they were not, and they were slightly disappointed with the perceived SLM approach considering their diminishing crop yields. The major barrier to this knowledge gap is that farmers reported not having access to information or training services that could help inform them of how to implement SLM practices effectively. There was a desire to also receive improved information services on pest and disease outbreaks much more quickly so that preventative SLM measures could be taken as opposed to pursuing a last-minute chemical treatment. Overcoming this barrier will require providing increased information services,

trainings and extension support to farmers on SLM and disaster risk management within the context of their specific cropping systems.

5) Supporting LDN objectives in the North and far North regions requires delicate handling of the rights of indigenous peoples, particularly with respect to the process of decision making over land use and natural resources

22. **Decision-making, and particularly the topic of land use and natural resource planning, will need to be addressed in a manner that reflects the indigenous leadership system and organizations for indigenous representation.** In the North and Far North regions, many of the communities are considered to be indigenous.[12][12] Their land and natural resources on which they depend are inextricably linked to their identities, cultures, livelihoods, as well as their physical and spiritual well-being. The regions? indigenous population?s decision-making processes subscribe to their customary leaders and organizations for representation, and it should be noted that these are distinct and mostly separate from those legally employed by the government as well as mainstream society and culture. Their legacy of inequality and exclusion has made indigenous communities in the North and Far North Regions more vulnerable to the impacts of climate change and natural hazards, including to disease outbreaks such as COVID-19. Vulnerabilities to the pandemic are exacerbated with the lack of access to national health, water and sanitation systems, the shutting down of markets, and mobility restrictions that have greatly impacted their livelihoods, food insecurity, and well-being in addition to those posed by land degradation. Hence, working in this area requires deep understanding of these indigenous issues and will need to address them throughout project preparation and design. The proposed project will aim to overcome this barrier by supporting extensive consultations with indigenous communities during project preparation and throughout implementation. Furthermore, decision making related to land use planning for LDN will be carried out by a local organization with experience and knowledge in working through issues related to the indigenous populations. As a primary measure, the FAO will also help ensure that project preparation and implementation undertake and follow the Free, Prior, and Informed Consent (FPIC) process.

Baseline scenario:

23. The Government of Cameroon acknowledges the above-mentioned challenges and is committed to providing an effective response to the prevailing deficiencies in managing land degradation in the North and Far North. The Government recognizes the need to enhance capacities for development of the subnational LDN mechanism and the urgent need to strengthen initiatives and coordination mechanisms to achieve LDN targets and sustainable rural livelihoods. Providing an effective response to these challenges is a priority for the country, for which reason it is directing towards the improvement of monitoring systems, sustainable, resilient and efficient agricultural production, as well as forest restoration initiatives, as detailed in the project baseline[13][13] described below.

24. Cameroon?s national baseline scenario directly aligning to the proposed GEF-7 project includes:

(i) *GEF-6 LDN Target Setting Project*: Cameroon has set its national voluntary LDN target and baseline indicators through its GEF-6 LDN Target Setting Project, executed by IUCN. Through this project Cameroon?s national voluntary LDN target is sought to be achieved at no net loss, and an additional 10% of the territory improved as a net gain. This value corresponds to about 12 million hectares nationally by 2030. Cameroon has made an international commitment to the UNCCD to achieving a 12-million-hectare production land gain, with no loss of production land. Cameroon seeks to achieve this target following a municipal implementation approach, in having 90 percent of its municipalities in ?priority areas? combat land degradation and achieve neutrality. In order to achieve this commitment, Cameroon, also developed its National LDN Strategy through the GEF-6 LDN Target setting project, and documented in the National Voluntary LDN Target Setting Report, in which it details specifics related to achieving its commitments, and recognizes the North and the Far North Regions as highest priority areas in the country for implementation of the mechanism. It should be noted that Cameroon does *not* yet have subnational targets set for the North or Far North or any other subnational jurisdiction in the country.

(ii) *The African Forest Landscape Restoration Initiative (AFR100)*: Cameroon committed to the AFR100 initiative in 2017, to bring over 100 million hectares of deforested and degraded landscapes across the country into restoration by 2030. AFR100 responds to the African Union mandate to bring 100 million hectares of degraded land into restoration by 2030. AFR100?s Forest Landscape Restoration (FLR) process is linked to Cameroon?s commitment to the Agenda 2030 (SDGs) and to its commitments to the three Rio-Conventions (UNFCCC, CBD, UNCCD). The initiative contributes to the achievement of domestic environment and development commitments, the Bonn Challenge, and LDN target-setting process among other targets. The proposed GEF-7 project will help combine lessons learned from Cameroon?s FLR initiatives in the North and Far North Region, including

MINEPDED?s Bamboo Embankment project, Green Sahel, The Restoration Initiative (TRI) project, the Great Green Wall Initiatives, amongst others.

25. The baseline activities that the project will build on in the North and Far North Regions include the following:

(i) *Programme National de Developement Participatif (PNDP)*: The PNDP was instituted in the North and Far North regions as a part of the second phase of the government?s Community Driven Development Program (CDDP) with support from the World Bank. It aims to improve delivery of specified services in targeted communities and extend the ongoing process of decentralization to new regions. The PNDP has undergone many funding iterations since 2003. Its design incorporates a variety of service delivery platforms to communities by instating coordination support at the community, municipal (council), regional, and national levels. Delivery of services to communities include the integration of land and resource monitoring systems, coordination with large out-grower operations, and integration of local and decentralized resource planning for rural sector projects. The PNDP is the main coordination mechanism for the association of council forest initiatives, such as reforestation through the Conservation Technology Information Center (CTIC) and the DPGT (Projet de Developpement Paysannal et de Gestion des Terroirs).

(ii) *Community Based REDD+ & Sustainable Agro-Pastoral Land Management projects*: The Community Based REDD+ project, funded through the GEF?s small grants program as a part of the Community Driven Development Program (CDDP), helped deliver grants directly to communities in the North and Far North to empower them to fully engage in the design, implementation and monitoring of REDD+ readiness activities, and develop experiences, lessons, and recommendations at the local level that can feed into national REDD+ processes. This project developed a methodology for forest monitoring that was coordinated through the PNDP. The proposed project will incorporate lessons learned from the design of this methodology for the purposes of LDN monitoring. A GEF-3 project, the Sustainable Agro-Pastoral Land Management project, under the PNDP, sought to reduce poverty and promote sustainable rural development by strengthening local governance and empowering communities in rural areas, including marginalized groups. The proposed project will incorporate lessons learned from the design of this Sustainable Agro-Pastoral Land Management project for the purposes of land use planning for LDN.

(iii) *D?veloppement paysannal et de gestion de terroirs (DPGT)*: The DPGT project carried out the selection and propagation of assisted natural regeneration of the indigenous agroforestry tree faiherbia albeda. This tree was deemed suitable for promoting plantations on fields as they integrated well with agricultural operations. The tree drops its nitrogen rich leaves during the beginning of the growing

season, allowing for the crops to be fertilized and benefit from the ample amount of sun let through barren branches. It is also a suitable choice for cattle feed. The DPGT project has supported land restoration and rehabilitation efforts and has reportedly been very popular amongst beneficiaries. The proposed GEF-7 operation stands to gain significantly from the experience, best practices, and lessons learned from the DPGT project.

(iv) *R?silience des populations au changement climatique (REPECC)*: The objective of this program is to contribute effectively and sustainably to improving the resilience of populations to the effects of climate change. REPECC promotes improved use of irrigation equipment including water pumps in coordination with water resource availability to support agriculture and livestock activities while sustaining water resources. This program?s intervention areas include 7 councils in North region: Lagdo, Pitoa, Maga, Kousseri, Darack, Moulvoudai, Touloum. Given that there are some overlapping municipalities with the PADFAII cooperatives and the high degree of relevancy for addressing land degradation, substantial opportunities exist to mainstream best practices and lessons learned from the REPECC project into the proposed GEF7 project.

(v) *Project Development of Agricultural Commodities (PADFA)*: Rice and onions are an important commodity for production in the North and Far North regions as they tend to be grown on fertile soils that are vulnerable to soil nutrient depletion. Rice requires substantial water resources and play an important role in engaging women in the production process. Onions also engage women from cooperatives and contributes substantially to rural livelihoods as it is the most profitable crop for the Sudano-Sahelian region.[8] The PADFA project is funded by the International Fund for Agriculture Development (IFAD) with US $47 million and the Government of Cameroon with $US 8.7 million, and implemented by MINADER. The project?s development objective is to contribute to reducing poverty, and improving food and nutrition security of target populations, and links with the objectives of the NAIP. PADFA is of particular significance to the proposed GEF7 operation as it is providing support to rice and onion farming with the aims of (1) increasing production on family farms, (2) improving the preservation, processing, and marketing of products, (3) strengthening the climate resilience of and technical organization capacities of producers, and (4) improving the nutritional status of households. According to MINEPDED and GIZ?s AFR100 diagnostic report, PADFA farms are operating in areas that are highly vulnerable to land degradation. The first implementation of PADFA ended in 2017, and a second implementation (PADFAII) will operate for five years starting in 2020. The PADFAII project offers opportunities to help improve agricultural production while combining with GEF-7 resources to mainstream SLM interventions that address the underlying drivers of land degradation. The primary target groups consist of poor farmers organized in 111 cooperatives and micro-entrepreneurs working upstream and downstream of onion and rice sectors (seed companies, processors, traders, input suppliers and agricultural services). The total number of people affected by the project is estimated at 31,902 households, 216 642 people of which 50% women and 30% of young people. PADFAII is the key baseline co-financing project.

Proposed alternative scenario:

26. The proposed project will aim to advance the LDN mechanism to the municipal level in the North and Far North Regions, in line with the approach of the national LDN strategy, and support select municipalities in achieving set LDN targets. The proposed project will operate for 5 years, starting in 2022. The proposed project acknowledges that development of the LDN mechanism is a process, and iterative in its development. It will support an enabling environment that provides basic capabilities for LDN, which can be built upon in later iterations of the mechanism. Supporting achievement of set LDN targets will be fulfilled by strengthening production land development initiatives to address the direct and indirect drivers of land degradation to strategically maximize impacts within budgetary constraints. On the ground, the project will aim to address the described challenges in the agricultural sector, given the high significance and centralized nature of agriculture and livestock as a direct driver of land degradation. The proposed project will focus on developing the LDN mechanism in all municipalities within the select regional sub-divisions that the PADFAII operates. Project identification acknowledges the issue of Indigenous People as a sensitive issue in the North and Far North. As a primary measure, the FAO will help ensure that project preparation and implementation undertake and follow the Free, Prior, and Informed Consent (FPIC) process. As such, the proposed alternative scenario will include the following components, outcomes, indicators and outputs:

*Component 1: Improving the Sub-National Enabling Environment for Municipal**[14]*[14] *LDN*

Outcome 1.1: Technical capacity of the LDN Mechanism is advanced to the sub-national level. Advancing the National Strategy for LDN will require advancing Cameroon?s LDN mechanism to the sub-national level. This outcome seeks to improve technical elements of the municipal enabling environment for LDN. Component activities supporting this outcome will include advancing: (1) LDN baseline, target setting, and mapping to the jurisdictional level of the municipality (or ?council?). This will help municipalities understand the extent of land degradation in their jurisdiction, the locations of valuable land vulnerable to loss / eligible for restoration, and targets for conserving and/or restoring production lands; (2) identification, prioritization and technical understanding of SLM practices and policies that will help achieve those targets at the municipal level; and (3) technical design of the LDN monitoring system and information sharing system methodologies, and their integration with existing land use and terrestrial planning systems. The monitoring systems methodology will help Cameroon

understand how to monitor and balance production land ?gains? with ?losses? and share and distribute critical data related to this process with national-level ministries. Component 1 is a technical assistance component. Co-financing will mainly be in the form of technical teams from MINEPDED, MINADER, MINFOF and local service providers who will support implementation of activities and delivery of outputs. In order to achieve this outcome, the following outputs will be produced:

(i) *Output 1.1.1*: *Municipal LDN baseline, target setting, and mapping:* LDN data indicators[15][15] will be collected at the municipal level in order to assess each municipalities? land degradation baseline and set municipal LDN targets. This will be done by following the UNCCD Scientific Conceptual Framework for LDN.[12] Data will be collected through multiple sources, such as official statistics and earth observation, land use and management practices and surveys. This will provide a scientific basis to define municipal LDN targets and will also allow the development of an inter-sectoral strategy and the required interventions to achieve and monitor progress towards set LDN targets. This output will include municipal maps outlining the areas of the municipality where valuable production lands exist, which lands are vulnerable to loss, and which lands will need to be targeted for rehabilitation/restoration. The summary LDN baselines, targets, and maps will be delivered in the Sudano-Sahelian SLM Practices & Policies document resulting from Output 1.1.2. All municipalities (Councils) will be covered for the regional sub-divisions where PAFDA cooperatives operate. In the North this relates to Benoue; in the Far North this relates to: Mayo Tsanaga, Diamare, Mayo Danay, Mayo Louti, and Mayo Kani sub-divisions. It should be noted that Cameroon does *not* have sub-national targets yet set for jurisdictions, including the North and Far North Regions. The purpose of this Output however is to help Cameroon advance in this endeavor by making progress towards municipal LDN baseline and target setting within municipalities of the North and Far North as this is the preferred approach stated in the National LDN Strategy. FAO will also undertake the FPIC process to help ensure this output is created in an equitable and fair manner.

(ii) *Output 1.1.2*: *Participatory Assessment of existing and new SLM Practices & Policies:* Practices and policies (including those SLM-friendly) that effectively address the direct and indirect[16][16] drivers of land degradation in sudano-sahelian production landscapes will be assessed, prioritized, and documented. SLM practices will be identified based on the review of the latest research indications and successful project experiences of their historical implementation, either in Cameroon or in other similar Sudano-Sahelian landscapes. This will include a review of practices and policies for soil fertility management, conservation agriculture, water management, fire management, livestock management, council forest management practices, agroforestry, fodder production etc. The review will identify a ?package? of farming practices that can be delivered through the PADFAII cooperative?s extension and input program (PAFDAII Component 1). While this will apply to onion and rice cultivation it will also address the *additional* crops and livestock measures that contribute to PADFAII cooperative

members? livelihoods. For example, as PADFAII cooperative members certainly grow onion and rice, but they are also involved with the cultivation of millet, sorghum, cotton and other crops as well as involved with management of livestock. The agroecological SLM practices promoted through this SLM package will address all of these agriculture and livestock activities alongside such provisions for rice and onion. This will also include a review of suitable new crops for promotion that could improve climate resilience, nutritional status, generate incomes etc. As a part of this review, the assessment will include a ?participatory? assessment where stakeholders are consulted on their preferences as primary implementers for various SLM practices and incorporating these preferences into prioritization criteria. The review will also include review of practices and lessons learned from former or ongoing landscape projects including those outlined in the ?Baseline Scenario?. For example this includes lessons from SODECOTON?s demonstration plots that do not leverage chemicals for cotton farming but rather a conservation farming approach (including rotations with other Sudano Sahelian crops, no-till techniques, and cover cropping techniques) that have been uniquely studied and demonstrated to reduce degradation rates of the harde soils.[17][17] Optimal SLM practices and policies will be selected based on the biophysical and socioeconomic context of land users within each municipality through a participatory process with the range of stakeholders and service providers. Uptake measures will be explored for long term promotion through the identification of relevant support mechanisms, incentives, policy instruments and the PNDP?s inter-sectoral council-level land use planning tools. The deliverable associated with this output will be a Sudano-Sahelian SLM Practices & Policies document, with associated training materials for municipal stakeholders (short instructional guides / leaflets, instructional posters for cooperatives etc.). FAO will also undertake the FPIC process to help ensure this output is created in an equitable and fair manner.

(iii) *Output 1.1.3*: *Municipal LDN Monitoring System Design & Integration with Decision Support Systems:* A municipal-level monitoring system design will be created in order to capture changes in LDN data indicators enabling accurate monitoring of changes in the LDN baseline. This will help municipalities manage production land ?gains?, in part delivered through FLR projects (MINEPDED?s Bamboo Embankment project, Green Sahel, The Restoration Initiative (TRI) project, amongst others) with observed ?losses? resulting from land degradation. The system will include a formal methodology for LDN baseline monitoring in relation to established municipal targets, including the roles and responsibilities of relevant actors as well as the integration with information sharing systems communicating baseline changes and appropriate response actions amongst relevant stakeholders. It will also monitor ?leakage? of land degradation displaced to other municipalities. It will also include a reporting process that aggregates municipal LDN data, to the region sub-divisional, regional and national levels, and integrate data on productive land ?gains? and ?losses? with respective decision-making bodies. However most directly, the monitoring system methodology will coordinate decision making for LDN in line with the PNDP processes. It will find synergies with existing PNDP methodologies for collecting land use, land use change, and forestry (LULUCF) data at the council level. This will integrate with the REDD+ monitoring system that operates through linkages with PNDP actors. The established municipal monitoring system design will inform the design of

Cameroon?s National LDN monitoring system and inform progress towards its National LDN / AFR100 targets. Since the country does not currently have a national LDN monitoring system, there is no formalized process for collecting LDN indicator data in relation to its set national target. The municipal monitoring system?s methodology will be mainstreamed and formalized through a documentation update to the National LDN Strategy, as an approach to help develop a national methodology for LDN monitoring through its aggregation.

(iv) *Output 1.1.4*: *Inter-Ministerial Information Sharing System Design:* An inter-ministerial information sharing arrangement will be designed for the municipal LDN target monitoring system to communicate LDN indicator data with the National Observatory for Climate Change (NOCC), MINFOF, and MINADER. Given that LDN monitoring comprises collection of soil carbon and land cover change indicators, an information system will be designed for the PNDP to share this data with the NOCC to update Cameroon?s national GHG inventory reporting to the UNFCC and progress towards it?s Nationally Determined Contribution (NDC). Moreover this information sharing system will be designed to help the NOCC, MINFOF, and MINADER with their plans to set regional GHG reference emission levels for the North and Far North in the land use, land use change, and forestry (LULUCF) sector as well as the agriculture sector, in line forthcoming agricultural methodological guidance from the IPCC, in fulfillment of the aims of the National REDD+ Strategy. The information sharing system will also aim to communicate in reverse of this order as well, where information from the national level is communicated to municipalities. This will include information relevant to investment planning and also critical informational data, or notifications that can improve SLM practices. For example, the information sharing system will allow for the NOCC to provide climate, weather, and pest & disease outbreak warning notifications, as well as updates and recommendations for the agricultural calendar to municipalities to distribute through community networks to farmers. It should be noted that this output is only concerned with information sharing to support parallel development initiatives that help national strategies that simulatanously address the objectives of LDN. It should be noted that this does not constitute an official activity of REDD+, it is simply an information sharing request per the request of the NOCC.

(v) *Output 1.1.5 Strategy (with associated funding identified) for LDN Municipal Model Scale-up to 90 percent of Municipalities:* In delivering outputs 1.1.1 the proposed project only supports LDN baseline assessment and target setting in 6 regional subdivisions (Benoue, Mayo Tsanaga, Diamare, Mayo Danay, Mayo Louti, and Mayo Kani) containing a total of 21 municipalities. This leaves 4 remaining regional sub-divisions uncovered in the Sudano Sahelian zone, with 27 municipalities. However, since Cameroon?s LDN strategy would require LDN in 90 percent of municipalities in the North and Far North, additional measures must be taken to fund LDN baseline assessment and target setting for municipalities in these remaining regional sub-divisions. Furthermore, in delivering Outputs 1.1.2 and 1.1.3, the proposed project only supports *design* of the monitoring, decision support, and information sharing systems ? it does not fund their full operation or cover capacity needs for implementation. The reason for this is that these systems are very expensive to operate and staff at the municipal level and would require funds substantially far outside the GEF-7 STAR allocation for the

land degradation focal area. The proposed project will support the development of a plan (or scale-up strategy) and identification of funding from MINIPDED, MINFOF, and MINADER and other sources, to scale-up the municipal LDN model in at least 90% of municipalities in the North and Far North.

(vi) *Output 1.1.6*: *Delivery of municipal LDN Workshops:* For each municipality there will be a workshop series that convenes representative farming community members, lead farmers, women?s group representatives, traditional authorities, and municipal PNDP representatives. The workshops will involve discussing the land degradation problem, reviewing LDN baseline assessment and set targets, providing trainings, and discussing the SLM practices & policies promoted in the Sudano-Sahelian SLM Practices & Policies document. The groups will also be educated on the potential agricultural, environmental, and health hazards of using chemical fertilizer, pesticide, and herbicides, and a discussion component will compare the short and long-term costs/benefits in relation to the SLM practices. As a critical measure, the groups will agree together as to what practices they will uptake and reinforce this agreement with a collective commitment to making sure their communities carry out SLM practices broadly together. The workshops will also be presented with a land degradation map of their municipality (or of the regional sub-division where their municipality is located) and traditional leaders will discuss which community members or member groups have long term (5-10 year) land management access rights. As a primary measure the workshops will ensure that women?s access rights are recognized and equally prioritized alongside men?s. The workshop will document the municipal and customary agreements and share copies with the community members, chiefs, and PNDP. As a critical measure in light of the ongoing global COVID19 pandemic, these workshop gatherings will only convene according to the guidance and instructions for gatherings in line with the rules and procedures set forth by Cameroon?s Ministry of Health. These workshops may be leveraged to also disseminate information about COVID19 measures, both broadly and/or with specific focus on pertinent measures related to any project outputs. These LDN workshops may also be used for targeted messaging on COVID19 to indigenous populations as it has been noted that they are particularly vulnerable given lack of access to health services and often excluded from messaging systems that seek to target mainstream society and culture.

(vii) *Output 1.1.7:* *Innovative micro-financing mechanism/tools for SLM:* The purpose of this output is to ensure that the PADFA cooperative members carrying out the activities needed to help achieve set LDN targets are: linked with innovative microfinancing mechanisms. The indicator measuring success of this output delivery includes evidence of a tool developed for PAPDFA member target groups. . To achieve this, the proposed project will develop synergies with microfinancing institutions (MFIs) in Cameroon and will work with IFAD to achieve this - as the PADFAII project also seeks to align its support for cooperatives through established lending programs with MFIs. The exact approach that the proposed project will pursue will be a result of negotiations that occur during the project preparation phase (PPG phase). Project preparation will explore a variety of approaches to microfinance provision for LDN, including providing support for the identification of creditworthy members of PADFAII cooperatives who will be receiving agroecological SLM trainings, screening of local micro-enterprises that are implementing land management practices in line with agroecological

SLM approaches that help achieve LDN targets (particularly the fertilizer tree nursery business plan development support and associated technical trainings targeting women through Output 2.1.2), and exploring approaches for GEF/PADFAII service delivery that help de-risk lending to cooperative members. In this regard the UNCCD LDN fund is a valuable resource which can potentially help facilitate micro-lending for improved LDN outcomes through the fund?s mission alignment and greater flexibility of instrument offerings to MFIs (for example the ability to work with risk-sharing facilities, insurance guarantees, and blended financing etc.). In support of this, MINADER, as a key implementation to both PADFA and GEF projects has agreed to support linked arrangements with MFIs with the co-financing resources provided to the project and listed in Table C. Accordingly, the project will focus it efforts on delivering such assistance that can help unlock greater micro-lending for activities that contribute to the sustainability and durability of LDN.

Component 1 is a technical assistance component. Co-financing will include technical teams from MINEPDED, MINADER and MINFOF who will support implementation of activities and delivery of outputs. It is also expected that additional co-financing will be mobilized for scale-up of the LDN municipal model.

Component 2: Strengthening initiatives in line with municipal LDN Targets

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27. This project component will serve as an exemplary approach for ?avoiding? loss of vulnerable agro-ecosystems to achieve LDN. It will also serve as representative approach for how farmers and pastoralists specifically can become engaged in land rehabilitation and restoration for the benefit of future agriculture and livestock activities. As such it will help make evident to stakeholders how the LDN targets can be achieved through on the ground interventions in agriculture and livestock sectors. The proposed project acknowledges that there are two major agricultural initiatives, PADFA and SODECOTON, that are operating extensively on agricultural lands in the North and Far North that are vulnerable to loss from land degradation. This project component will aim to support PADFA directly with project funds, through the resilience-focused follow-up project PADFAII, to achieve LDN.

28. Outcome 2.1: PADFAII project is strengthened to improve progress towards municipal LDN targets. The proposed project will strengthen PADFA operations in the North and Far North Regions to address land degradation drivers. While PADFAII is a large program, this outcome will specifically build on the PADFA operations related to providing farmers with trainings and inputs through their established cooperative?s structures. The proposed GEF-7 project will co-finance this outcome, by linking with PADFA?s ?Component 1: Support for Rice and Onion Production?. This includes building on PADFA?s farming extension services and farming input delivery systems

implemented through the cooperative program that PADFA funds. However it should be noted that while the PADFAII focus is specifically on primary production support to rice and onion farmers, the rice and onion cropland is only a small part of the overall land associated with each PADFA cooperative. The GEF funds effectively leverage this PADFAII onion and rice cooperative structure as a delivery platform, through which additional cooperative land susceptible to land degradation (i.e. ?non-onion? / ?non-rice? cropland, pastureland, etc.) can be also be addressed and brought in line with LDN objectives. The proposed project will aim to provide improvements to agroecological soil health on PADFA cooperatives through: (1) trainings on SLM practices to promote their uptake, (2) installing fertilizer tree nurseries in support of agroforestry practice uptake on farms, and (3) support for improved water management. Outputs associated with this outcome will leverage the PADFA cooperative infrastructure to deliver results that are applicable to rice and onion farming but more importantly to the *other* crops beyond rice and onion that the farmers are growing. This is an extremely critical feature of the project design as this approach allows for greater resultant impacts with respect to land degradation as the cooperative members? additional cropland beyond those dedicated to rice and onion are brought under SLM. Through this approach, additional staple crops that the farmers are cultivating (such as millet, sorghum, groundnut etc.) as well as cash crops (like cotton) are addressed simultaneously alongside rice and onion through the PADFA component 1?s production support that runs the cooperative extension and input delivery program. The rational for co-financing with the PADFA initiative stems from the vulnerability of these rice/onion, and more importantly the additional cooperative crop and pasture land, to land degradation threats[18][18], and will be critical for securing LDN in the municipalities in which they operate. However, it should be noted that focusing on onions and rice cooperatives also provides considerable opportunities to engage women farmers and to increase livelihoods as simultaneous co-benefits to LDN target achievement. As a result, this project outcome will aim to impact *all PADFA cooperative production lands*.

(i) *Output 2.1.1*: *Trainings delivered on SLM practices to PADFA Cooperatives.* Trainings on SLM practices will target PADFA cooperative members through a ?training of trainer? approach, where lead farmers are trained on SLM and extend that knowledge to their peer farmers in the cooperative. SLM trainings will include conservation agriculture techniques on croplands (complementing crop rotations, low-till / no till, strategic cover crops etc. in line with the agronomic needs of the rice and onion cropping systems), soil fertility management techniques on croplands (best practices for integrated crop residue / manure mulching practices, agroforestry etc.) and improved fodder production for nearby pasture lands. The trainings will also provide advisory on rehabilitation and restoration ecology practices for already degraded lands, including ?harde? soils. Examples of this include advisory support for planting nitrogen-fixing fertilizer trees, planting nutrient regenerative vegetation (grazing grasses and tree shrubs), and practicing farmer-managed natural regeneration (FMNR). Ultimately the trainings will be delivered to cooperatives as a package of best practice trainings based off the Sudano-Sahelian SLM Practices & Policies document generated through Output 1.1.2. PADFAII?s budgeted training program for rice and onion farmers includes the organizational structure for delivery of trainings through cooperatives in addition to the training program itself. This is an important baseline ?co-

financing? activity that the proposed project will build on, to integrate SLM and also provide trainings to farmers on crops beyond onion and rice aimed at achieving increased LDN outcomes. Thus, the GEF activity will help strengthen PADFA?s delivery of SLM practices on onion and rice farmland *and* also train farmers on practices that scale SLM practices (like agroforestry etc.) to cultivation land for other crops. FAO will also undertake the FPIC process to help ensure this output is created in an equitable and fair manner.

(ii) *Output 2.1.2*: *Fertilizer tree nurseries and fodder species developed on PADFA Cooperatives & support for women farmers to manage tree nursery business operations.* This output involves the women members of the cooperative receiving advisory support for the development of nitrogen fixing tree nurseries on each PADFA cooperative, collecting seeds and raising seedlings to mature transplant size, and coordinating their distribution to field sites for plantation. This approach will allow trees to be planted by farmers in locations that are preferable to them and their community ? decreasing the likelihood that they will eventually be cut down. The fast-growing fertilizer trees will be raised in tree nurseries that are fully funded and set up by the proposed project. Each tree nursery will generate an estimated 10,000 seedlings[19][19] per year for planting on the cooperatives. According to MINEPDED this will be done very affordably at a cost of about US$ 2,000 per established tree nursery. Planting will initially target the cooperative?s lands producing rice and onion (either amidst crops or through hedging - as instructed by an agronomist) and extend to other crop-type producing lands within the cooperative. Relevant fast-growing local species, which also serve as suitable for cattle feed, include, faiherbia albeda, moringa, caliandra, lucena lucosephala, amongst others. The experiences, lessons learned, and best practices from the DPGT project will be coordinated into the technical design of the delivery model for this output. After the PADFA cooperative?s production lands are suitably supplied with fertilizer trees, the surplus tree seedlings will be made eligible for sale to other farmers within their regional sub-division. This will create an additional income stream for the women cooperative members, while also creating an incentive to for extending the planting area of fertilizer trees beyond the cooperative. The project will support them in this process by providing trainings on tree nursery business operations management and business plan development in the establishment of micro, small or medium enterprises (MSME). MSME business plan development will develop revenue stream strategies for the women cooperative members mainly through sales of seedlings, but also support them with understanding affordable processing methods for new and diversified agroforestry products. For example, using moringa tree plantations to make nutritious infant-safe food products[20][20], such as vegetable powders, soups, baby foods etc. This will be complimented by the PADFAII project, sub-component 2.4?s trainings on innovative food technologies for high quality nutritional products, and its establishment of processing centers for the production of complimentary infant foods. The tree nursery trainings will be delivered to cooperatives during tree nursery set up, and in follow up consultations. With both MINIPDED and MINFOF having technical expertise and local implementation experience in setting up these tree nurseries, co-financing from these partners will support nurseries establishment. Additional trainings and support regarding nursery management and operations may also be provided

by MINEPDED and MINFOF from their co-financing. However delivery of business plan development will use a local service provider with technical advisory provided by the FAO co-financing. Note that this will be delivered separately from training packages detailed in Output 2.1.1. FAO will also undertake the FPIC process to help ensure this output is created in an equitable and fair manner.

(iii) *Output 2.1.3*: *Improved water management trainings, drought tolerant seeds[21]*[21], *and equipment delivered for PADFA cooperatives.* This output relates to improving the drought response capacity of crop-livestock systems. This will be achieved through the provision of advisory support for improved rainwater collection methods, advisory support for the delivery of water to crop beds through dugout irrigation channels, improved irrigation management with relation to groundwater resources, as well as best practices and lessons learned from MINEPDED?s RIPECC project. Through the PADFAII project, component 1, cooperative members will also receive improved drought tolerant seeds and water pumps. The combination of this technical assistance and investment support will enable growers to farm for longer timespans throughout the dry season, improve livestock health and hydration, and increase water availability for raising tree seedlings in nurseries *?* ultimately making the cooperatives less dependent on erratic rainfall. The water management trainings will be delivered within the SLM training packages detailed in Output 2.1.1 and based off of the Sudano-Sahelian SLM Practices & Policies document generated through Output 1.1.2. FAO will also undertake the FPIC process to help ensure this output is created in an equitable and fair manner.

Component 3: Monitoring and Evaluation and Knowledge Sharing

29. Component 3 is intended for the purposes of monitoring and evaluating the project ensuring effective results-based management and knowledge sharing. The activities that this component will fund include: (i) conducting of mid-term and final evaluations, (ii) the monitoring of the global environmental benefits, co-benefits and costs of SLM practices (iii) the development and dissemination of knowledge management products and (iv) communication and dissemination of information, in order to share experiences and promote uptake of successful lessons at local, regional and national levels. MINEPDED agreed that, if needed, it will support this component with the public financing provided for project management costs. Accordingly this accounts for the US$ 600,000 in additional project management costs associated with co-financing oversight. The output associated with this component, Output 3.1.1, will be the delivery of ongoing project monitoring and evaluation per a mid term review and final evaluation. The indicator associated with this output is a satisfactory or highly satisfactory performance rating in PIRs and final evaluation report.

Alignment with GEF focal area:

30. The proposed project aligns directly with the two core objectives of GEF-7?s land degradation focal area: (1) Supporting on the ground implementation of SLM to achieve LDN; and (2) Creating an enabling environment to support voluntary LDN target implementation. Through the project?s first component, the enabling environment for LDN is strengthened by building on the GEF6 National Target Setting project by advancing Cameroon?s capacities in executing LDN mechanism to the sub-national level. Through the project?s second component, it directly strengthens projects on the ground with support for SLM so that LDN targets can be met. The identified project follows the UNNCCD COP?s recommended delivery mechanism through focal area investments in integrated land management and restoration of degraded production landscapes, sustainable management of dryland landscapes, diversification of crop and livestock systems, creating an enabling environment to support voluntary LDN target implementation, and voluntary LDN target setting. The proposed project is fully aligned to GEF-7 focal area element LD-2-5[22][22].

Incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and co-financing;

Table 2. Incremental cost reasoning and expected contributions from the baseline

Problem	Business-as-usual approach	Incremental Cost Reasoning

Land degradation	PADFA implementation without SLM technical assistance would lead to partial attainment of its objectives i.e. increased production of target commodities, improved conservation, processing and marketing of products and improving household nutrition. Without SLM, these would not be sustained. PADFA on its own does not address the accelerating soil erosion, declining soil fertility, deforestation & vegetation loss. This situation, would continue.	With GEF-funded interventions, municipalities will learn how to address the direct and indirect drivers of land degradation, particularly those stemming from the agriculture and livestock sectors. Agroecology principles will be applied to productive value chains and varied agroforestry activities will be upscaled to achieve a greater diversity of sustainable agricultural production. Furthermore, the capacity developed at the municipal level in leveraging the LDN mechanism will enable land LDN to be achieved through improved land planning an accelerate uptake **beyond rice, and onion croplands**. Public awareness and training and extension activities will be carried out to disseminate agroecological SLM practices. Without the GEF intervention, an opportunity to integrate an approach for ?avoiding? loss of vulnerable agro-ecosystems to achieve LDN into ongoing and planned investments (i.e. PADFA) would be lost.

Global Environmental Benefits:

31. As land degradation leads to the de-stabilization of the Sudano-Sahelian zone, threatening productivity and ecosystem services, upon which people?s livelihoods rely, this project will attempt to address the root causes of the problem at scale. The project aims to avoid, reduce, and reverse land degradation following the LDN hierarchy of these three intervention approach types. GHG reduction estimates have been calculated through EX-Ante Carbon-balance Tool (EX-ACT) to be approximately 1,047,000 tCO2e. This accounts for 41,778 hectares brought under agroecological SLM, plus an estimated 5,000 hectares of degraded land restored to cropland. These figures above are preliminary estimates which will be further refined during PPG stage.

Innovation:

32. The proposed project will be innovative for Cameroon in several ways. In contrast to the numerous FLR restoration projects that Cameroon has carried out in the past (mainly in the forest sector), this project will be the first government project that intentionally addresses the land degradation challenge by supporting interventions in the agriculture and livestock sectors. Furthermore, this approach is being pursued within the context of the LDN mechanism, which has never been deployed sub-nationally before. While there have been a host of activities that have supported the PNDP and other planning groups, this project is the first to attempt using a mechanism to balance production land ?gains? with production land ?losses?. Moreover, the project will introduce agroforestry fertilizer trees at scale introducing beneficial species like moringa, whose nutritional and environmental benefits are not well known to farming households in the North and Far North Regions. Their innovative implementation alongside farming activities presents new opportunities for municipalities to support income generating activities for women while simultaneously addressing the dire household food security and nutritional concerns, particularly for infants under the age of five. This project aims to promote these innovations by operating at scale in the most unstable agroecosystem in the country ensuring that their benefits are realized and deliver meaningful results for local livelihoods and the environment. Finally, innovations in microfinance, including the financial tools and mechanisms delivered through Output 1.1.7 will be introduced by the project. While microfinance is not necessarily a new tool in Cameroon, it is a new concept to smallholder farmers and pastoralists in the North and Far North regions, where access to finance has historically been largely constrained and unavailable to the poorest, particularly women. This project takes a new and innovative approach to introducing a micro lending mechanism in these regions that not only targets smallholders and women, but also links this tool with the LDN objectives and SLM.

Sustainability:

33. The keys to sustainability across the project components are ownership, successful delivery of results, and communication of successful practices amongst stakeholders. In order for the LDN mechanism to be sustained in practice beyond the life of the project requires stakeholders in municipalities to see its value and to take ownership of managing production land gains and losses. The proposed project aims to promote municipal stakeholder ownership of the mechanism through the LDN workshops that associate its use with access to land. By providing trainings and capacity building, technical understanding of the LDN mechanism and the activities on the ground that help achieve LDN targets are knowledge that are institutionalized amongst stakeholders. One of aspects of the project is capacity building of producers grouped in agricultural cooperatives on agricultural techniques that increase productivity and are adapted to climate change. As local stakeholders begin to understand that the production land that they have agreed to use is at risk or can be significantly improved, they will be incentivized to sustain the SLM trainings and other promoted practices and policies that maximize its agroecological potential. For land managers to continue with the SLM practices that they were trained on through the proposed project, it is important that they deliver livelihood benefits and ecosystem

services for municipal populations. This has been ensured through project design?s extensive training program and identification of practices, like agroforestry nursery development delivered through Output 2.1.2, that contribute to increased incomes amongst impoverished stakeholder groups. This feature is a critical measure to ensuring sustainability of the project in line with the theory of change. Also, for these successful results to be sustained at scale, and amongst new generations of farmers, the project creates communication platforms and communication documentation, and delivery is ensured through the tools created. Finally, the financial sustainability of the project will be ensured through established linkages with microfinance institutions. This is a straightforward rationale that is detailed earlier in Outcome 1.1.7 description.

Potential for scale up:

34. The project holds significant potential for scale up, particularly in three main areas. The project?s potential for project scale up lies in: (1) developing more advanced iterations of the LDN mechanism in the North and Far North; (2) expanding use of the municipal LDN mechanism in other regions of Cameroon; and (3) in supporting initiatives beyond PADFA. First, as mentioned earlier in paragraph 25, the LDN mechanism is not a set deliverable but an iterative process that builds in sophistication on top of a basic premise of land use planning. Later iterations can include development of more robust monitoring system of land degradation indicators, direct integration with community land management structures, and more sophisticated information systems for balancing gains and losses. For more details on later iterations of the mechanism, reference the UNCCD?s Scientific and Conceptual Framework for LDN. Secondly, another way in which the project could be scaled is to take the working municipal level model designed through this project and scaling it into other regions. Adamawa for example would be a suitable next scale up region as it is considered semi-Sudano-Sahelian, has similar direct and indirect drivers of land degradation, and similar socio-economic challenges to the North and Far North relative to other regions of the country. Finally, this project only has the financial capacity to work with PADFA, however pending more resources for scale up, the project would also aim to influence other producers in other value chains.

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[1] For comparisons across agro-ecological zones and regions, see graph one in paragraph 8

[2] Here defined as living on less than US$1.95 per day

[3] A measure of how far the average individual is from the poverty line. A poverty gap of 34 percent means that cash transfer equivalent to 34 percent of the poverty line would be needed to lift every poor person out of poverty.

[4] Activities detailed in paragraph 9

[5] Cameroon National Adaptation Plan, 2016.

[6] IFAD Country Strategic Opportunities Programme 2019-2024.

[7] As defined by the UNCCD COP: ?a state whereby the amount and quality of land resources necessary to support ecosystem function and services and enhance human security remain stable or increase within specified temporal and spatial scales and ecosystems?

[8] See the UNCCD?s LDN response hierarchy and logic model in Annex B

[9] Meaning reversal of land degradation by rehabilitating and restoring already degraded land

[10] Meaning the loss of production lands? ability to sustain productive purposes and deliver ecosystem services

[11] Programme National de Developement Participatif ? a body of MINEPAT responsible for coordinating development activities amongst the communities, municipalities and traditional authorities through Cameroon?s progressive decentralization process.

[12] Though the Constitution of Cameroon does not define exactly to what ethnic groups this applies

[13] Note that there are many additional baseline activities relating to land development in North and Far North Regions. For the purposes of this PIF, the baseline activities listed are those which the project will most directly build upon.

[14] ?Municipal? level as referenced by the National LDN Strategy refers to MINEPAD?s jurisdictional level of ?council?

[15] In order to estimate the proportion of degraded land over total land area (SDG indicator 15.3.1), the UNCCD COP adopted the following three sub-indicators: trends in land cover, land productivity and soil organic carbon.

[16] To the extent possible, i.e. there is little that can be done about global climate change

[17] Specifically this involves rotating cotton with sorgum, alphalpa, onion, garlic; implementing no till sowing, and testing cover crop solutions etc.

[18] The areas of their operation were reported as potential hotspots for land degradation in MINEPDED & GIZ?s AFR100 land degradation diagnostic report

[19] A reference value provided by MINEPDED?s Regional Focal point (North Region)

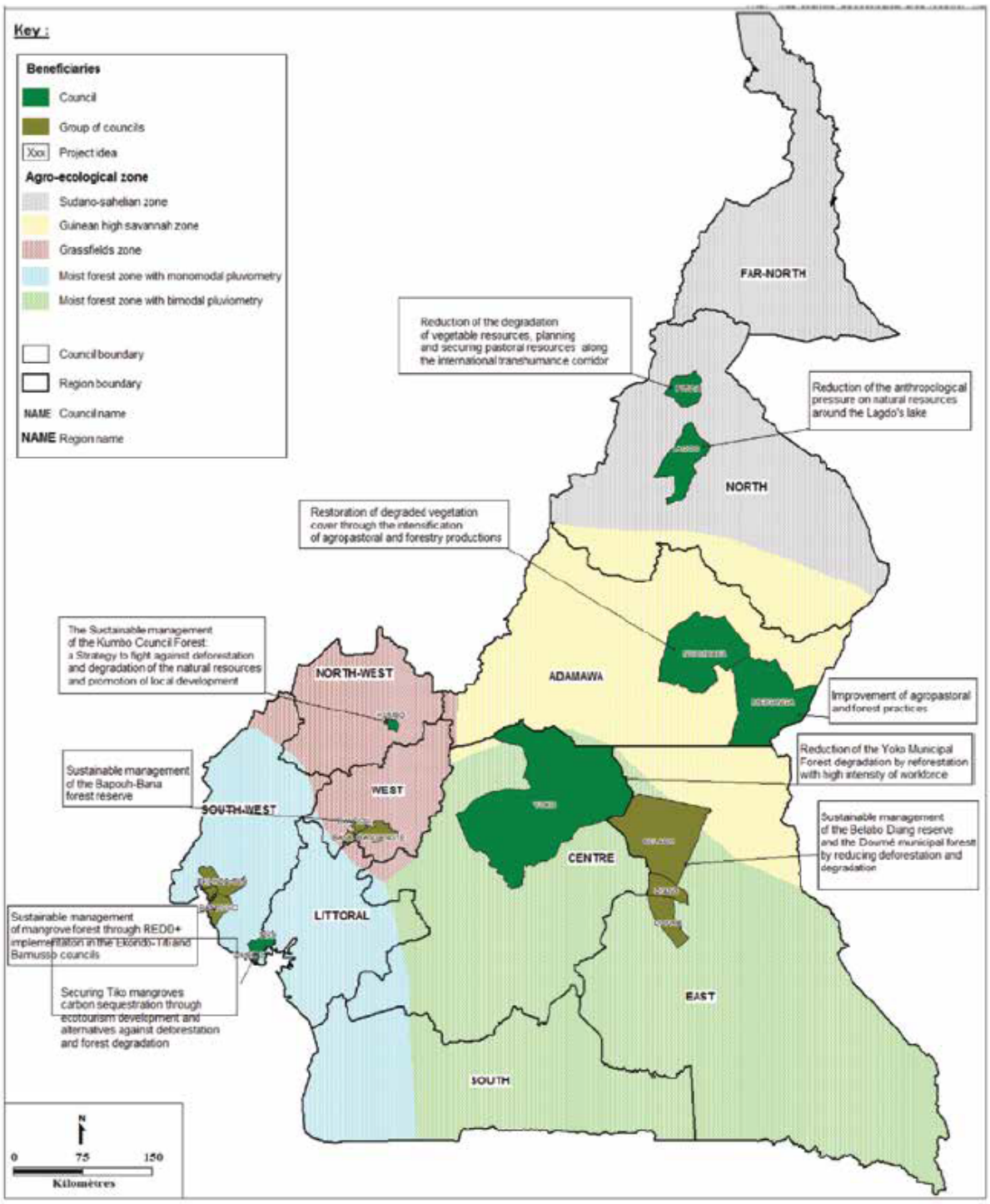
[20] Moringa products are deemed to be healthier than Kale with 2x the protein, 3x more calcium and 4x more iron, making it one of the most nutritious high fiber foods in the world. Moringa is also a nitrogen fixing agroforestry tree.

[21] Specifically this is referring to hybridized, non-GMO, drought tolerant rice varieties provided by PADFA. However the project will also scope opportunities during preparation for similar climate-resilient seeds beyond rice.

[22] LD-2-5: Create enabling environments to support scaling up and mainstreaming of SLM and LDN

1b. Project Map and Coordinates

Please provide geo-referenced information and map where the project interventions will take place.


Key :
Beneficiaries
Council
Group of councils
Xxx Project idea
Agro-ecological zone
Sudano-sahelian zone
Guinean high savannah zone
Grassfields zone
Moist forest zone with monomodal pluviometry
Moist forest zone with bimodal pluviometry
Council boundary
Region boundary
NAME Council name
NAME Region name
FAR-NORTH
NORTH
ADAMAWA
NORTH-WEST
WEST
SOUTH-WEST
LITTORAL
CENTRE
EAST
SOUTH
Reduction of the degradation of vegetable resources, planning and securing pastoral resources along the international transhumance corridor
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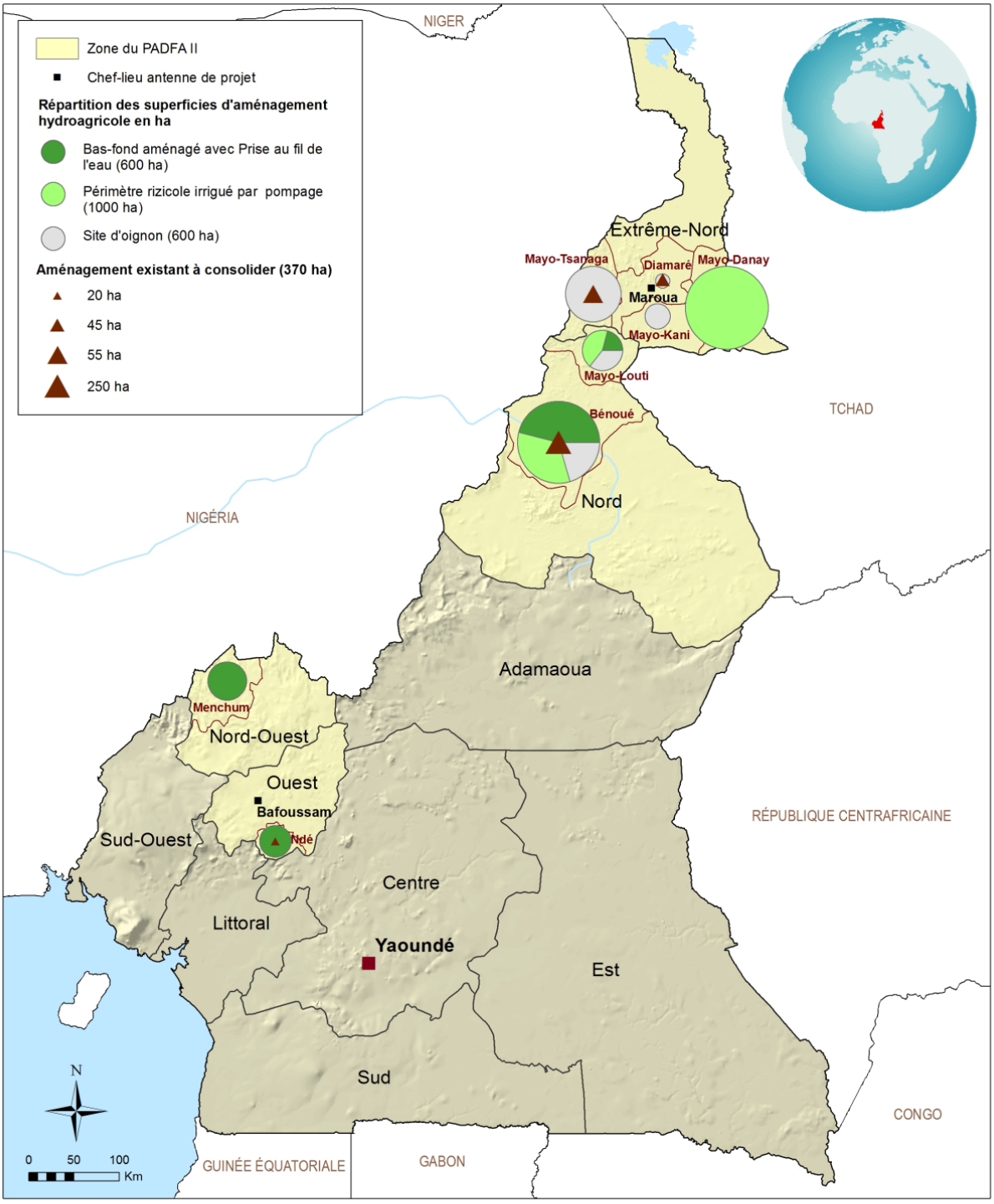
Projet d'Appui au Développement des Filières Agricoles - Phase II (PADFA II)

Rapport de conception



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FIDA *Source: FIDA* | 17-01-2019

2. Stakeholders

Select the stakeholders that have participated in consultations during the project identification phase:

Indigenous Peoples and Local Communities Yes

Civil Society Organizations Yes

Private Sector Entities Yes

If none of the above, please explain why:

In addition, provide indicative information on how stakeholders, including civil society and indigenous peoples, will be engaged in the project preparation, and their respective roles and means of engagement.

The proposed PIF is a result of a series of stakeholder consultations at national level and with communities in the target regions. The project will engage indigenous peoples and local communities, civil society organizations, and private sector entities. The following categories of stakeholders are listed and described below. Note that Annex F contains greater detail on these stakeholders including, a list of stakeholders consulted during project preparation and information about missions, meetings, or consultations, number of people etc. Please also see the section 6 on coordination on how stakeholders will be engaged in design and implementation.

(i) *Local communities*: this group of project stakeholders will be involved in a variety of ways. Through delivery of Output 1.2.1 the project will convene workshops where community members, farmers, traditional authorities and women?s organizations meet to understand the land degradation challenges in their municipality, measures they can take to address the problem, and receive access to land for sustainable management. Through delivery of Output 2.1.2 women and farmers in local community cooperatives will be engaged directly as recipients of SLM trainings, agroforestry business plan advisory trainings, and through the establishment of agroforestry tree nurseries on their cooperative?s lands.

(ii) *Civil society organizations*: Local non-governmental organizations will be engaged in the proposed project in two ways. Through delivery of Output 1.1.6 they will be tasked with organizing the LDN workshops that organize municipal members for the purposes of addressing their land degradation challenges. Through delivery of Output 2.1.1 and Output 2.1.2 they will be engaged by being tasked with delivering trainings to lead farmers on SLM practices and by supporting rice and onion cooperatives with the establishment of, and trainings for, fertilizer tree nurseries.

(iii) *Private sector entities*: The project will engage a range of private sector entities including micro-finance institutions**.** As a result of Output 2.1.2 women will be trained on establishing SMEs. These enterprises will be involved with several types of for-profit tasks, including the sale of seedlings to customers in their communities and the sale of food products from agroforestry trees (such as the moringa tree). The restoration techniques used by SODECOTON will be mainstreamed into the project?s SLM package as necessary following an in-depth screening of this during project preparation

phase. While SODECOTON will not be directly involved in project operations, they will be engaged on issues surrounding knowledge management. Additionally, through the inclusion of microfinance in the operation, notably through Output 1.1.7, private sector MFI?s will be engaged. The extent and approach to this MFI engagement will be better known after the PPG phase identifies a desired mechanism for three project to leverage.

3. Gender Equality and Women's Empowerment

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

35. The proposed project will include gender-responsive measures to address gender gaps noted in paragraph 5. The projects results framework will include gender-sensitive indicators. Gender gaps will be closed by the following response measures[1]:

(i) *Closing gender gaps in access to and control over natural resources*: Through delivery of Output 1.1.6, women will be involved in LDN workshops that will focused on looking at degraded land maps of their municipalities, and receiving user rights from their community chiefs, and other traditional authorities, for the management of degraded or vulnerable production lands. As a condition of participating in the workshop, chiefs and traditional authorities will need to acknowledge before hand that they will agree to prioritize land allocation equally amongst men and women. This will help close the gender gaps that were identified and detailed in paragraph 5 with respect to women?s access to natural resources.

(ii) *Improving women?s participation and decision-making*: Through delivery of Output 1.1.6, women will the LDN workshops will give women an equal role in discussing the types of SLM practices that the farming communities within the municipality will adopt. Their participation in these workshops will also enable them to have equal say in decision making regarding land use planning for LDN.

(iii) *Generating socio-economic benefits or services for women*: Through delivery of Output 2.1.2, women will be given responsibility for managing the fertilizer tree nurseries and eligible for collecting revenue generated from seedling sales beyond their cooperative. Additionally, women on the rice and onion cooperatives will receive trainings to develop these tree nurseries as MSMEs, extending the range of their NTFPs beyond seedling sales, towards high nutrition food products that are infant safe. The project will support women with development of business plans, trainings on processing methods, and support for processing facilities associated with their established businesses.

[1] Note that further details on gender mainstreaming will be detailed during the PPG phase.

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

closing gender gaps in access to and control over natural resources;

improving women's participation and decision-making; and/or Yes

generating socio-economic benefits or services for women. Yes

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

Yes

4. Private sector engagement

Will there be private sector engagement in the project?

Yes

Please briefly explain the rationale behind your answer.

36. The proposed project will engage private sector in the project activities. As a result of Output 2.1.2 women will be trained on establishing SMEs. These enterprises will be involved with several types of for-profit tasks, including the sale of seedlings to customers in their communities and the sale of food products from agroforestry trees (such as the moringa tree). The restoration techniques used by SODECOTON will be mainstreamed into the project?s SLM package as necessary following an in-depth screening of this during project preparation phase. While SODECOTON will not be directly involved in project operations, they will be engaged on issues surrounding knowledge management. Additionally, through the inclusion of microfinance in the operation, notably through Output 1.1.7, private sector MFI?s will be engaged. The extent and approach to this MFI engagement will be better known after the PPG phase identifies a desired mechanism for three project to leverage.

5. Risks to Achieving Project Objectives

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

37. The proposed project acknowledges that there are risks to implementing this type of project. Overall risk of this project is considered ?medium?. These risks are listed in the table below, alongside their assessed risk level and corresponding risk mitigation measures:

Risk	Level	Risk Mitigation Measures
Choice of commodity related value chains (onions, rice)	Medium	Rice and onions are an important commodity for production in the North and Far North regions as they tend to be grown on fertile soils that are vulnerable to soil nutrient depletion. Rice requires substantial water resources and play an important role in engaging women in the production process. Onions also engage women from cooperatives and contributes substantially to rural livelihoods as it is the most profitable crop for the Sudano-Sahelian region. Cooperative farms are operating in areas that are highly vulnerable to land degradation. As mitigation measures, the project will train cooperative members in restoration techniques to improve soil productivity.
Implementation and execution of REDD+ projects in Cameroon	Medium	On August 20 and 21, 2020, FAO participated in a dialogue meeting between Cameroon Government, development partners, civil society organization (CSOs), indigenous peoples and local communities for successful REDD+ implementation in Cameroon. The resolutions of this dialogue will be used by GEF-7 project. In addition and during the PPG phase, an in-depth analysis of the context of REDD+ in Cameroon with potentially consequences on the way to implement and execute projects (financial management) will be made. Lessons learned and recommendations from this analysis will be used for the proper implementation of the GEF-7 project. Also, the project will be implemented in accordance with GEF requirements with a clear difference between implementing agency (FAO) and executing agencies. The financial management capacities of implementing agencies will be assessed during the PPG phase.

COVID-19 situation in the North and Far North regions	Medium	During project preparation and implementation, World Health Organization and Cameroon Government measures will be closely monitored and adhered. To minimize the risk of exposure and infections, whenever possible, consultations will be conducted remotely and through national experts and partners. Communication on the project will integrate sensitization of communities on COVID-19 prevention. Regarding change in Government priorities and potential impact on project co-financing, the risk is low, given that the bulk of this co-financing has already been secured ? IFAD loan for the PADFAII project. Opportunities to build-back better will be further explored during PPG.
Gender mainstreaming in the project	Low	Information on the importance and need to promote gender equality and the empowerment of women have been described in Paragraph 5 of the PIF (status of women in agriculture in the considered regions, and analysis about the inequalities due to gender (access to land, credits, training; governance, decision making systems...) and section 3 with gender-responsive measures to address gender gaps noted in paragraph 5. Details on gender mainstreaming will be detailed during the PPG phase.
Climate change: climate change adversely affects productivity of farmland as dry seasons become longer and rains become more erratic.	Medium to high	While climate change is certainly expected to negatively impact the production landscapes in Cameroon in the future, this project is fully centered around addressing this threat as it is also a core threat to land degradation. Through Output 2.1.3: improved water management trainings, drought resilient rice and onion seeds, and water pumping equipment will be delivered on cooperatives to greatly mitigate the risks associated with drought. Furthermore, the project will focus on providing SLM trainings that sustain the soil biome enabling the biophysical conditions of the soil to adapt to longer dry seasons and erratic rains. Further assessment of the risk and identification of risk mitigation actions will be undertaken during PPG.

Chemical products: as farmers? incomes rise from livelihood improvements, chemical fertilizers, pesticides, and herbicides will become more affordable, and farmers may choose to abandon SLM practices in favor of chemical approaches to farming	Medium	While the project does acknowledge the attractiveness of chemical fertilizers, pesticides, and herbicides as both a barrier and a risk, this will be mitigated throughout the course of the project in the LDN workshops, delivered through Output 1.1.6 and the SLM trainings to cooperative members in Output 2.1.1.
Traditional Authorities: Women may continue not to be granted access to land by traditional authorities and continue not to play a role in making decisions about land use.	Medium	The LDN workshop delivered through Output 1.1.6 has been designed to mitigate this risk. Not only will the traditional authorities be included in the LDN workshops, but the workshops will produce signed documentation of the agreements reached, where they will have in writing the conditions of the decision. However, despite the recognized legitimacy of this document, this will not be a legal document, so it would be possible for the chiefs to go back on their decisions and change their minds. Thus this risk level remains at ?medium?.
Political Risks: Changes in political circumstances and government priorities	Low	Broad stakeholder engagement throughout the project preparation and the continuation of this engagement during the implementation will ensure continued political support for the project.

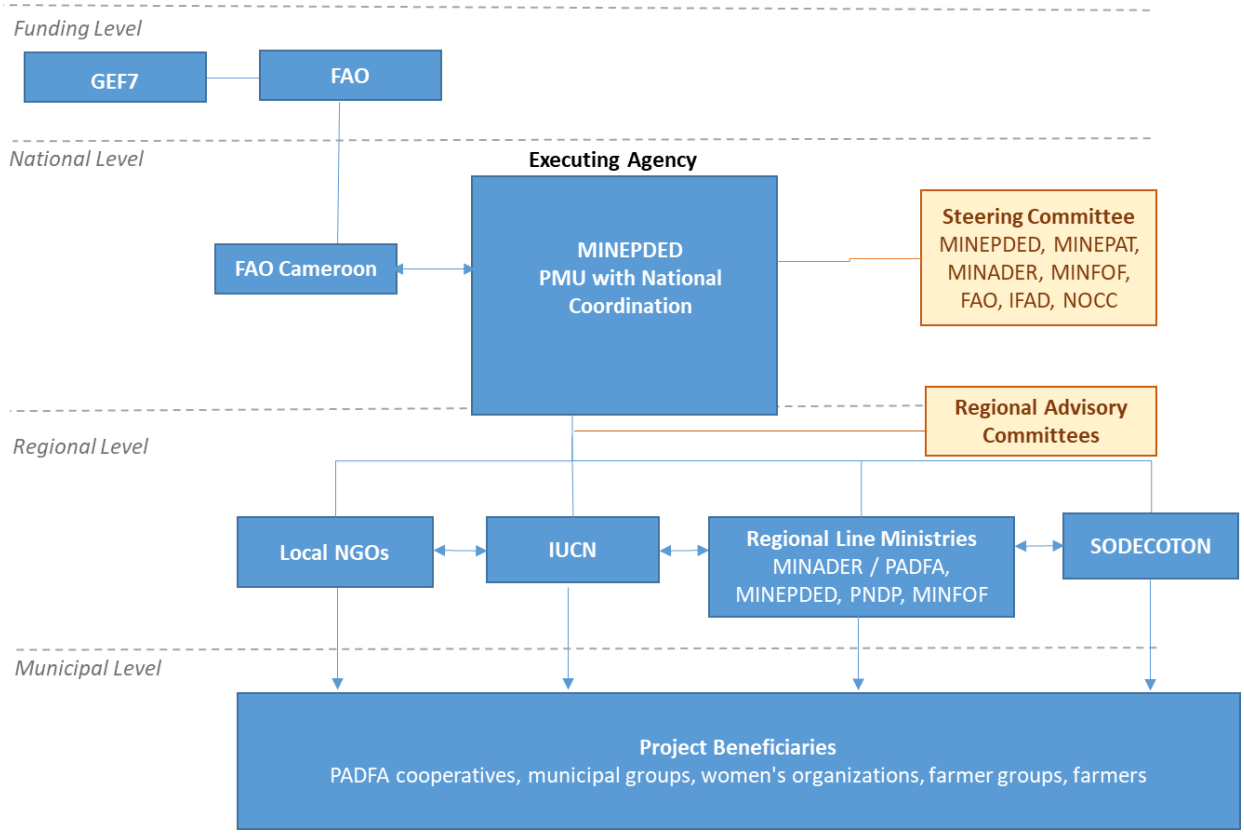
Security Risks: Terrorist activity may flare up give the presence of Boko Haram, negatively impacting agriculture and livestock production, and disincentivizing	Medium	Security risks in the Far North Region will be attempted to be mitigated through proper siting of agricultural rehabilitation and restoration away from conflict zones. This activity will result from delivery of Output 1.1.6. However, given the spontaneity and inconsistency of insecurity, this risk is very difficult to mitigate, and thus remains at a medium level.

6. Coordination

Outline the institutional structure of the project including monitoring and evaluation coordination at the project level. Describe possible coordination with other relevant GEF-financed projects and other initiatives.

40. Project coordination will occur through a common hierarchy used for MINEPDED?s new environmental projects. Through the following institutional arrangements in Diagram 1 below, the project?s implementation will be coordinated. FAO will be the implementing agency. MINEPDED will be the Executing Agency with support from partner agencies. The capacity of MINEPDED to execute will be assessed during the PPG phase. The arrangements of the project are currently at ?PIF-level? concept stage and coordination amongst implementation agencies will be further developed and/or refined during project preparation.

Diagram 1: *Institutional arrangements for project coordination*



(i) *Funding level coordination*: The FAO is the GEF implementing agency responsible for coordination of the project in line with the funding requirements of the GEF-7 focal area for land degradation. FAO will bear the responsibility of ensuring that the project is designed to meet the donor criteria, is implemented according to the operational policies agreed upon with the GEF, and is monitored and evaluated periodically to ensure the project is on track to deliver its intended outcomes. The FAO will provide coordination support through leading the identification and project design processes (including supervisory of the PPG activities. During implementation, FAO will be responsible for monitoring project results, compliance with agreed work plans, monitoring of risks and compliance with the conditions set out in Agreements signed with partners.

(ii) *National coordination*: National coordination of the project will follow the latest implementation arrangements preferred by MINPEDED for environmental projects as described in Diagram 1 above. At this level, MINEPDED will set-up a project management unit (PMU) to advise on project implementation processes, manage implementation issues, and to coordinate implementation with the regional agencies. The role of the PMU will be to ensure proper oversight of implementation amongst the regional level actors in line with national objectives: regional line ministries, executing agencies, and local non-governmental organizations (NGOs) and/or civil society groups. The Steering Committee, comprised of representatives from associate rural development line ministries (MINEPDED, MINFOF, MINEPAT, MINADER, FAO, IUCN, FIDA, NOCC, etc.), will be formed to coordinate MINEPDED?s decision alongside other inter-ministerial priorities. For example, this will give NOCC the opportunity to coordinate on project activities, such as the design of an information sharing system that shares LDN data indicators with the NOCC to be used for setting reference

emissions levels, and conversely, the opportunity for NOCC to coordinate distribution of important data to MINIPDED to share with relevant actors at the regional / municipal level (for example on agricultural calendars, drought forecasts, pest / disease outbreaks etc.).

(iii) *Regional coordination:* Under the general oversight of FAO, regional coordination of the project will be led by MINEPDED. They will play a substantial role in carrying out technical assistance and coordination of the project within the North and Far North Regions. MINEPDED will be responsible for coordinating the regional level technical work (Regional SLM Practices & Policies document etc.) and coordinating actors that will carry out execution at this level. Regional line ministries, local NGOs, will also be engaged at the regional level with technical and operational coordination support from MINEPDED. It is foreseen that IUCN will also provide support to execution. Coordination will also occur through representative regional advisory committees for the North and Far North, with members including technical service representatives of regional organizations, traditional authorities, and women?s organizations and producer group representatives. Implementation arrangements will be confirmed during project design.

(iv) *Municipal coordination*: At the municipal level, the main actors interfacing with the farmer groups, cooperatives, traditional authorities etc. will be local NGOs, Regional line ministries (including PADFA / MINADER), and.

Collaboration with SODECOTON will be through knowledge sharing, rather than direct engagement in the implementation of GEF project activities.

39. Beyond the implementation structure detailed above, the project will also aim to coordinate activities with the FLR initiatives. This project acknowledges the validity of the other FLR within the context of LDN for their ability to compliment municipal LDN objectives in delivering production land ?gains?. Such projects include the reforestation initiatives lead by GIZ, The Restoration Initiative (TRI), MINEPDED?s Bamboo Embankment project, the council forest work led by CTIC, the CARE initiatives. Interesting possibilities of coordination with other following projects and initiatives will be developed: i) Strengthen Agricultural Innovation Systems to promote economically profitable, ecologically sustainable and socially equitable agricultural and livestock production systems in the North region of Cameroon. This project has ICRAF, IRAD, Cirad and CIFOR as implementing partners. It is funded by the European Union and will start at the end of 2020; ii) Great Green Wall Initiative; iii) Cameroon's Forest Investment Plan (FIP, 2017); iv) National Forest Plantation Development Program (PNDPF 2018); v) National Action Plan to fight Desertification (PAN-LCD, 2006); vi) National Participative Development Program (PNDP); vii) African Forest Landscape Restoration Initiative (AFR 100) 12 million hectares of forest landscapes and degraded areas to be restored by 2030; viii) National plan for the development of non-timber forest products.

7. Consistency with National Priorities

Is the Project consistent with the National Strategies and plans or reports and assesments under relevant conventions?

Yes

If yes, which ones and how: NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, INDCs, etc

40. With the institutional arrangements described in paragraph 40, the project will maintain consistency with national priorities. The institutional arrangements allow for the PMU to ensure that the project is designed and carried out in accordance with MINEPDED?s national priorities, policies, and national programs. The project?s Steering Committee at the national level, including MINEPAT, MINADER, MINFOF, NOCC and others, will ensure that the project is also carried out with consistency to the national priorities and commitments overseen by these ministries.

(i) *Cameroon LDN target setting report.* **The GEF-7 project will contribute to reaching the LDN target at the municipal level.** The twelfth session of the Conference of Parties (COP) of the United Nations Convention to Combat Desertification (UNCCD), held in Ankara, Turkey in October 2015, endorsed SDG target 15.3 and the concept of land degradation neutrality (LDN) as a strong vehicle for driving the implementation of the Convention. It invited all UNCCD country Parties to formulate voluntary targets to achieve LDN and requested UNCCD bodies to provide ?guidance for formulating national LDN targets and initiatives? and to facilitate ?the use of the UNCCD indicator framework as a contribution to the monitoring, evaluation and communication of progress towards the national LDN targets?. In response to the decisions taken by the UNCCD COP.12, the Global Mechanism (GM) of the UNCCD established a LDN Target Setting Programme (TSP), which aims to support countries to define national LDN targets and associated measures.

The determination of LDN targets for Cameroon is based on the baseline situation in terms of land degradation, trends and factors of land degradation but also integrates the initiatives and commitments made to fight against land degradation in the areas of agriculture, forestry, environmental protection and economic development. Cameroon's LDN targets are at the national, municipal and specific levels. The GEF-7 project will contribute to reaching the LDN target at the municipal level. This target underlines that at municipal level, LDN is reached in at least 90% of municipalities within priority areas to fight land degradation.

(ii) *National Action Plan for the Fight against Desertification*: The proposed project contributes to the implementation of all four priority intervention areas to stop land degradation in the North and Far North of Cameroon as laid out in the *National Action Plan for the Fight against Desertification* 2014-2015. They are identified as i) the promotion of sustainable management and use of land; ii) improvement and maintenance of vegetation cover; iii) integration of income generating activities to the protection of the environment; and iv) capacity building of all stakeholders. The *National Action Plan for the Fight against Desertification* 2014-2018 suggests solutions to stop land degradation in the North and Far North of Cameroon. In response to the plan?s first priority intervention area, the promotion of sustainable management and use of land, the project will provide guidance and facilitate the operationalization of a sustainable landscape management system. The restoration of degraded land through agroforestry techniques will contribute to the second priority intervention area: the improvement and maintenance of the vegetation cover. The project will further contribute directly to the two remaining priority intervention areas by building capacity of stakeholders at the municipal levels.

(iii) *National Agricultural Investment Program (NAIP)*: Cameroon?s NAIP aims to increase the total rice production of 163 000 tons in 2013 to 750 000 tons in 2020 which requires a technological leap in production, post-harvest management and marketing, while improving the resilience of farmers to climate change. Regarding the onion that is mainly produced in the North and Far North regions of up to 345,000 tons in 2013, important national needs are now met by imports. Onion production is subject to conservation constraints, access to water for production and quality inputs for intensification. This provides opportunity for the GEF7 project to support the NAIP through its second component, strengthening PADFA cooperatives with rice and onion farming.

(iv) *Plan de Convergence*: The proposed project will align with the ?Plan de Convergence? of COMIFAC 2015-2025, which has been adopted by Cameroon. This plan promotes sustainable and consultative management of forest resources and the establishment of a network of representative protected area systems and agroecosystems for livelihood and global environment conservation. The proposed project will contribute to several priority areas of the COMIFAC plan, including Axis 3 relating to the conservation and sustainable use of biodiversity; Axis 5 relating to socio-economic development and multi-actor participation; Axis 6 relating to sustainable financing; and to Cross-Cutting Axis 1on training and capacity building and Cross-Cutting Axis relating to communication, awareness raising, information and education.

(v) *Poverty Reduction and Strategic Paper (PRSP)*: The proposed project aligns with the *Poverty Reduction and Strategic Paper (PRSP)* of the government of Cameroon, drafted in 2009. The policy identifies food insecurity, and unsustainable utilization of natural resources as major challenges to rural sector growth and underlines that changes in ecosystems and declining soil fertility, among other factors, deteriorate the productive environment. Land degradation thus represents a fundamental challenge to bolstering economic growth, sustaining rural livelihoods, and reducing the incidence and severity of poverty as well as biodiversity loss. It is at this critical point that a comprehensive land management policy embodying all the sectoral Ministries is urgently needed if the government intends to address this problem. The intervention of GEF7 at this point, and the sub-national development of the LDN mechanism will be a substantial incremental value to solving the issues of land use, land management, poverty and long-term agroecological management in Cameroon.

(vi) *Cameroon?s Vision 2035, Readiness Preparation Proposal (R-PP), National REDD+ Strategy , and Cameroon Rural Development Strategy*: The proposed project will build municipal capacity and expertise in sustainable agriculture and forestry practices, to sustain impacts over the long term, addressing goals of the Cameroon Vision 2035 plan, Cameroon?s R-PP. The project will help restore degraded land through SLM practices and agroforestry techniques, conserving soil and water resources, and help build resiliency to climate change, in line with strategic priorities for sustainable agriculture. The existing Rural Development Strategy prioritizes food security, green agriculture, improving management of protected areas, and implementation of Environmental and Social Impact Assessments (ESIA) for integrated ecosystem management. The *Growth and Employment Strategy Paper (GESP*) focuses on biodiversity promotion and conservation as one of the targets to achieve Sustainable Development Goals (SDG), in particular the *Goal 1* relating to the ending of poverty in all its forms everywhere, and *Goal 5* relating to gender equality an empowerment of women and girls. The National Protected Areas and Wildlife Strategy and the Biodiversity Vision for Cameroon both put emphasis on

the protection of mountain, coastal and marine ecosystems that are insufficiently represented in the protected areas network. The National Plan for Environmental Management (PNGE) seeks to develop policies, strategies and actions for environmental protection and rational management of resources to contribute to sustainable development, and identifies five priority areas: Participatory Land use Management, Sustainable Management of Natural Resources, Restoration of Degraded Land and Improvement of Soil Fertility, Capacity Building, and Concerted Management of Shared Resources at the sub-regional level. Cameroon has produced its 5th Report to the CBD and its 2nd Report to the UNCCD. With the support of UNEP and the GEF.

8. Knowledge Management

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

41. Knowledge transfer will come mainly as a result of the project components 1 and component 2. Component 1, through the Sudano-Sahelian SLM Practices and Policies document, and associated training and instruction materials, will serve as a reference guide for improving knowledge gaps that exist amongst current land managers. This document?s findings will be shared in the LDN workshops, and also on the ground with local cooperative members. Component 2 will which build upon a multi-layered train-the-trainer structure that benefits local CSOs, landscape management boards, producer organizations and producers themselves. While technical assistance enables change towards more sustainable agroecological practices, the project will dedicate time and resources to strengthen CSOs in their organizational capabilities. Organizational strengthening will provide continuity well beyond the lifetime of the project and allow CSOs to grow their impact within their field of expertise. Modules developed by the project will be handed over to CSOs to widen the reach of these activities, as well as shared within forums and with policy makers for a potential replication more broadly in Cameroon. Component 3 will incorporate the development of knowledge products to share results and best practices coming out of the project, through relevant existing platforms.

9. Environmental and Social Safeguard (ESS) Risks

Provide information on the identified environmental and social risks and potential impacts associated with the project/program based on your organization's ESS systems and procedures

Overall Project/Program Risk Classification*

PIF	CEO Endorsement/Approval	MTR	TE

Medium/Moderate

Measures to address identified risks and impacts

Provide preliminary information on the types and levels of risk classifications/ratings of any identified environmental and social risks and potential impacts associated with the project (considering the GEF ESS Minimum Standards) and describe measures to address these risks during the project design.

Supporting Documents

Upload available ESS supporting documents.

Title	Submitted

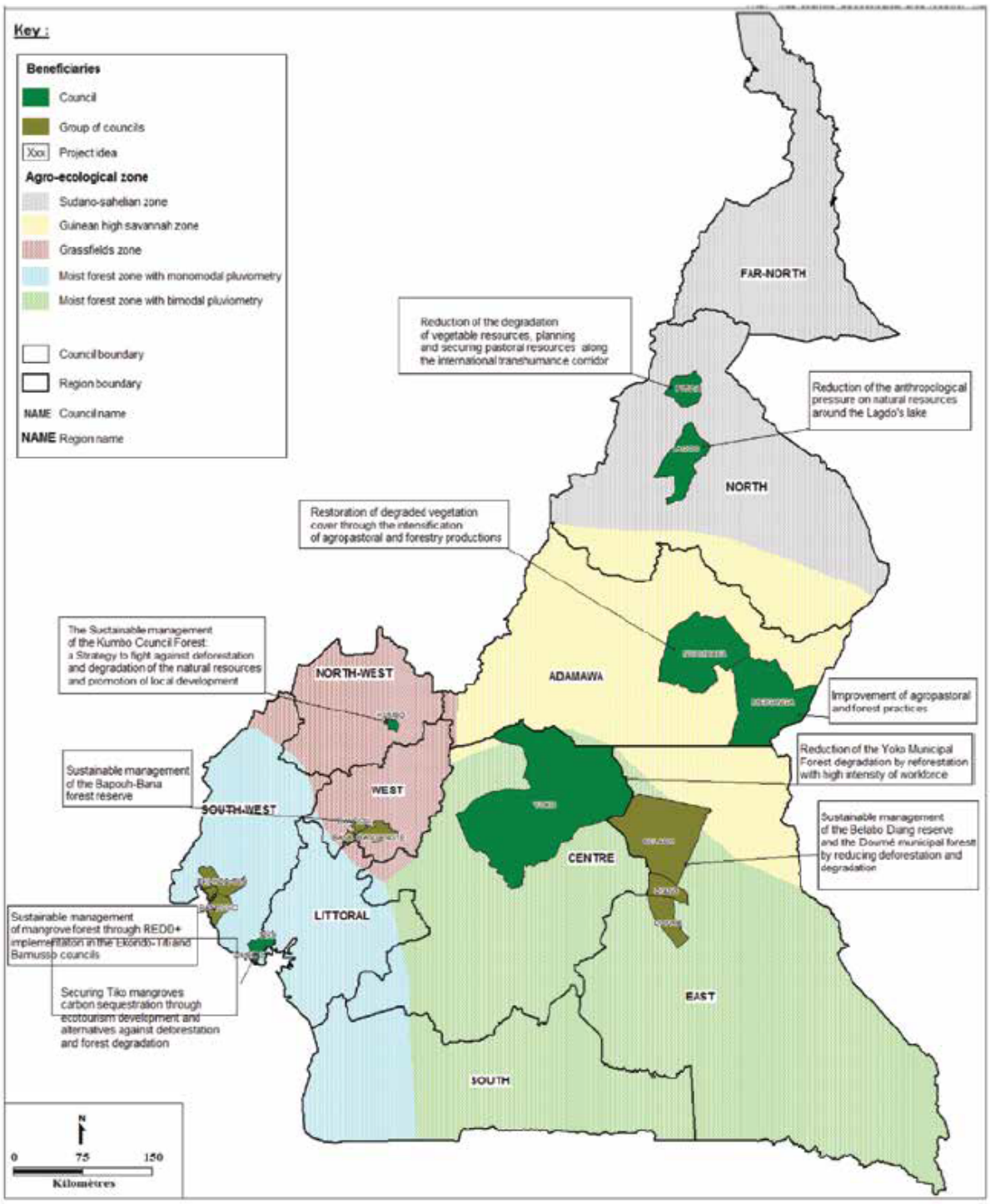
Part III: Approval/Endorsement By GEF Operational Focal Point(S) And GEF Agency(ies)

A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S): (Please attach the Operational Focal Point endorsement letter with this template).

Name	Position	Ministry	Date
Dr. Unusa Haman	GEF Operational Focal Point	MINISTRY OF ENVIRONMENT, PROTECTION OF NATURE AND SUSTAINABLE DEVELOPMENT	11/10/2020

ANNEX A: Project Map and Geographic Coordinates

Please provide geo-referenced information and map where the project intervention takes place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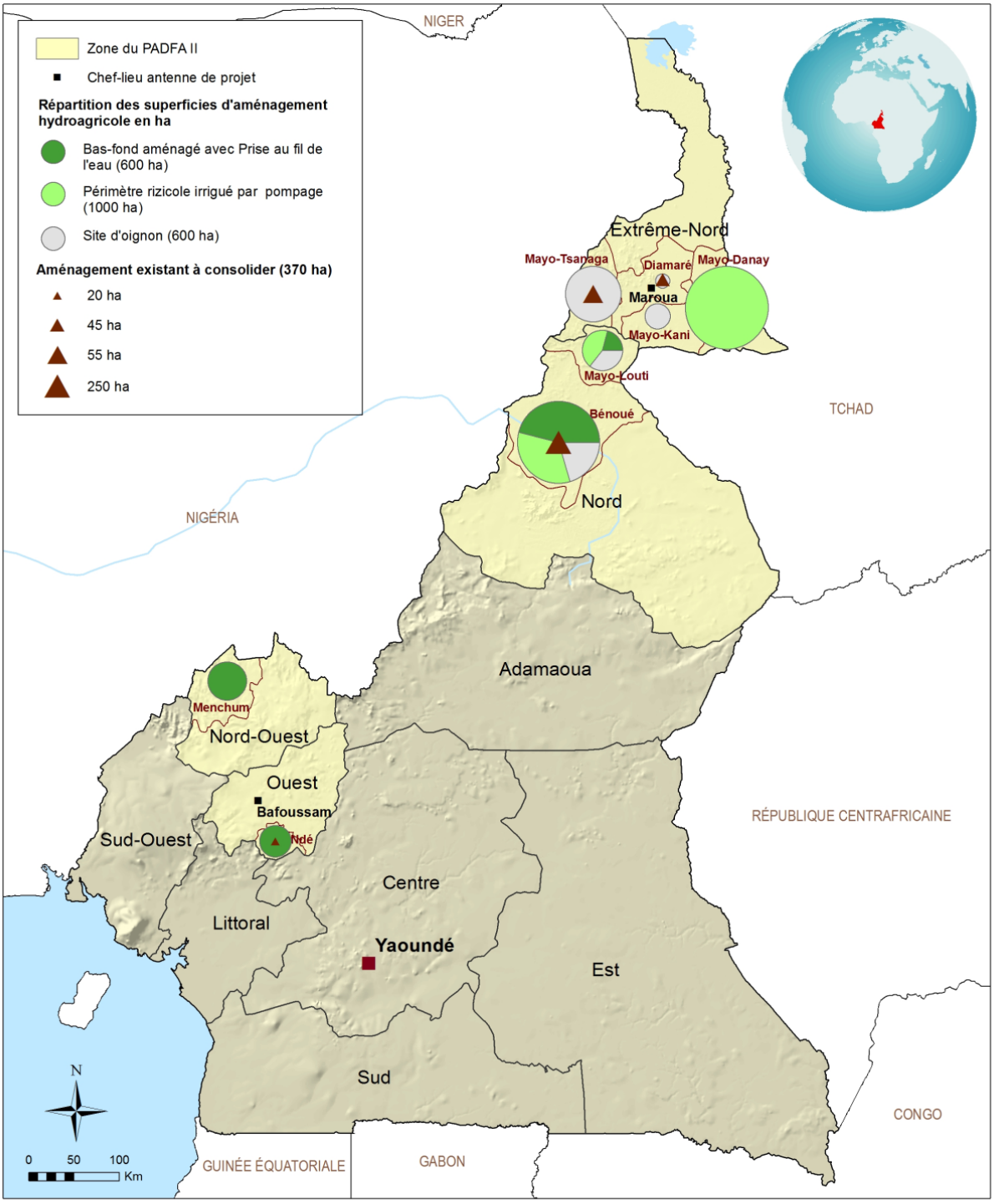

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FIDA *Source: FIDA* | 17-01-2019