



Climate Resilient Growth and Adaptation in Democratic Republic of Congo

Part I: Project Information

GEF ID

9392

Project Type

FSP

Type of Trust Fund

LDCF

Project Title

Climate Resilient Growth and Adaptation in Democratic Republic of Congo

Countries

Congo DR

Agency(ies)

UNDP

Other Executing Partner(s):

Direction de Développement Durable / Ministère de l'Environnement et, Développement Durable (MECN-DD)

Executing Partner Type

Government

GEF Focal Area

Climate Change

Taxonomy

Climate Change, Focal Areas, Climate Change Adaptation, Livelihoods, Climate resilience, Least Developed Countries, Innovation, Ecosystem-based Adaptation, Land Degradation, Sustainable Land Management, Sustainable Livelihoods, Restoration and Rehabilitation of Degraded Lands, Sustainable Agriculture, Ecosystem Approach, Income Generating Activities, Demonstrate innovative approach, Influencing models, Transform policy and regulatory environments, Private Sector, Stakeholders, Individuals/Entrepreneurs, SMEs, Beneficiaries, Indigenous Peoples, Type of Engagement, Information Dissemination, Consultation, Civil Society, Academia, Community Based Organization, Non-Governmental Organization, Local Communities, Gender results areas, Gender Equality, Knowledge Generation and Exchange, Participation and leadership, Access to benefits and services, Access and control over natural resources, Capacity Development, Gender Mainstreaming, Sex-disaggregated indicators, Gender-sensitive indicators, Women groups, Knowledge Generation, Capacity, Knowledge and Research, Learning

Rio Markers**Climate Change Mitigation**

Climate Change Mitigation 0

Climate Change Adaptation

Climate Change Adaptation 2

Duration

60In Months

Agency Fee(\$)

783,037

A. Focal Area Strategy Framework and Program

Objectives/Programs	Focal Area Outcomes	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
CCA-1	Reduce the vulnerability of people, livelihoods, physical assets and natural systems to the adverse effects of climate change	LDCF	5,461,600	18,800,000
CCA-2	Strengthen institutional and technical capacities for effective climate change adaptation	LDCF	1,100,400	1,000,000
CCA-3	Integrate climate change adaptation into relevant policies, plans and associated processes	LDCF	1,680,500	197,000
Total Project Cost(\$)			8,242,500	19,997,000

B. Project description summary

Project Objective

Develop adaptation-enabling environment and improve agro-ecological production practices to prepare for and respond to the immediate and potential impacts of climate change in the forest and mountainous agro-ecological zones - Democratic Republic of Congo

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
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Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
1. Addressing adaptation challenges into national and provincial planning and budgeting processes	Technical Assistance	<u>Outcome 1:</u> Medium and long-term climate change risks and adaptation measures integrated into existing national and provincial development plans, policies and budgets.	<p><u>Output 1.1:</u> A NAP framework for the priority sectors of agriculture and rural development and water is set up.</p> <p><u>Output 1.2:</u> A knowledge management and stock-taking web-based information platform is established to organize social, economic, and environmental data relevant to CCA from a variety of sources, at the national level and including information from the provinces targeted</p> <p><u>Output 1.3:</u> Gender responsive climate change adaptation is integrated into the PDPs (and their budgets) of the provinces of North Kivu, South Kivu and Maniema</p> <p><u>Output 1.4:</u> Gender-responsive fully-fledged NAP pilots are implemented in South Kivu, North Kivu and Maniema</p>	LDC F	1,109,150	1,197,000

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
2. Enhancing productivity, sustainability, and resilience of rural farmers, in particular women and youth, in Eastern DRC	Investment	<p><u>Outcome 2:</u> Tested and adapted agroecological production practices address the foreseen impacts of climate change and advance the NAP process on the ground in North Kivu, South Kivu and Maniema</p>	<p><u>Output 2.1:</u> The landscape of three provinces is rehabilitated through an agroecological approach focused on sustainable land management, encompassing soil erosion control, water harvesting techniques and soil and water conservation</p> <p><u>Output 2.2:</u> The supply chain of locally adapted fertilizers and adapted seeds is developed for distribution channels in key production basins at an agreed cost between farmers' associations/cooperatives</p> <p><u>Output 2.3:</u> The production and dissemination of agrometeorological information is improved</p> <p><u>Output 2.4:</u> Women and young entrepreneurs develop financially sustainable business models related to the processing, conservation and marketing of agricultural products</p>	LDC F	5,859,850	18,800,000

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
3. Project monitoring, and evaluation and knowledge management	Technical Assistance	<u>Outcome 3:</u> Project Implementation is based on results-based management and application of project lessons learned in future operations is facilitated	<u>Output 3.1:</u> Project monitoring system providing systematic information on progress in meeting project outcomes and output targets <u>Output 3.2:</u> Project-related “best-practices” and “lessons learned” disseminated	LDC F	881,000	
Sub Total (\$)					7,850,000	19,997,000
Project Management Cost (PMC)						
					LDCF	392,500
Sub Total(\$)					392,500	0
Total Project Cost(\$)					8,242,500	19,997,000

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

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Amount(\$)
Government	Ministry of Environment and Sustainable Development	Unknown at this stage	15,897,000
Others	International Institute of Tropical Agriculture (IITA)	Unknown at this stage	4,000,000
GEF Agency	UNDP Country Office	Grant	100,000
Total Co-Financing(\$)			19,997,000

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

Agency	Trust Fund	Country	Focal Area	Programming of Funds	NGI	Amount(\$)	Fee(\$)
UNDP	LDCF	Congo DR	Climate Change		No	8,242,500	783,037
Total Grant Resources(\$)						8,242,500	783,037

E. Non Grant Instrument

NON-GRANT INSTRUMENT at CEO Endorsement

Includes Non grant instruments? **No**

Includes reflow to GEF? **No**

F. Project Preparation Grant (PPG)

PPG Required

PPG Amount (\$)

200,000

PPG Agency Fee (\$)

19,000

Agency	Trust Fund	Country	Focal Area	Programming of Funds	NGI	Amount(\$)	Fee(\$)
UNDP	LDCF	Congo DR	Climate Change		No	200,000	19,000
Total Project Costs(\$)						200,000	19,000

Core Indicators

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

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
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0.00	6000.00	0.00	0.00
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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)
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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)
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Type/Name of Third Party Certification

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

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)
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	6,000.00		
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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)
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Documents (Please upload document(s) that justifies the HCVF)

Title	Submitted
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Indicator 5 Area of marine habitat under improved practices to benefit biodiversity (excluding protected areas)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
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Indicator 5.1 Number of fisheries that meet national or international third party certification that incorporates biodiversity considerations

Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
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Type/name of the third-party certification

Indicator 5.2 Number of Large Marine Ecosystems (LMEs) with reduced pollutions and hypoxia

Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (achieved at MTR)	Number (achieved at TE)
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0	0	0	0
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LME at PIF	LME at CEO Endorsement	LME at MTR	LME at TE
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Indicator 5.3 Amount of Marine Litter Avoided

Metric Tons (expected at PIF)	Metric Tons (expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)
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Indicator 11 Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Female		2,000		
Male		4,000		
Total	0	6000	0	0

PART II: Project JUSTIFICATION

1. Project Description

A. describe any changes in alignment with the project design with the original pif

Overall the project design is in alignment with the original PIF. The PPG mission has allowed for an in-depth analysis of the project context and the identification of the project intervention area within each of the provinces of North Kivu, South Kivu and Maniema. The different sections of the Project Description have therefore been considerably reworked in order to provide more details and refine the reasoning. Nevertheless, the overall project structure keeps components 1 and 2 and their respective outcomes, with only slight wording modifications. Outputs in those 2 components have also not been modified, but their order has been changed under component 2 in order to propose a more logical flow of activities at the provincial level. A third project component (and outcome) has been added to the overall project structure, with the objective to fully integrate results-based management, lessons-learning and outreach into project implementation and enhance those aspects in the project.

A.1. Project Description

1) Global environmental and/or adaptation problems, root causes and barriers that need to be addressed

1.1 Context

The Democratic Republic of Congo (DRC) is a central African country that extends over 2,345,000 km². The country covers the largest portion of the Congo River basin. DRC has been ranked as the second highest agriculture potential on the continent, with sufficient arable land, water resources, and labour force to meet the global food shortage[1]¹. Concurrent with DRC's potential strategic importance in global agro-businesses, it is also widely viewed, as for instance in the National Plan of Agricultural Investment (2013-2020), that investing in agriculture in the country will be one of the most effective approaches to reduce poverty in what has been ranked as one of the world's poorest country by the United Nations Human Development Index (UN-HDI). Indeed, in 2017, the DRC was ranked 176 out of 189 countries with 0.457 HDI[2]². From an economic standpoint, the country has recorded an average GDP growth of 6.5% between 2010 and 2017[3]³. However, the DRC has suffered enormous loss of life and livelihood due to nearly 2 decades of war and insecurity, that not only had tremendous impacts on human lives, but also on infrastructures, heavily affecting river and road transport infrastructures. DRC is now the second largest hunger crisis in the world after Yemen[4]⁴. Especially in the east of the country (including North Kivu and South Kivu), since 2016, the long running crisis as forced some 4.8 million internally displaced persons to flee from their villages and lose their agricultural livelihoods and jobs. According to the World Food Programme (WFP), the number of food-insecure

people almost doubled from 7.7 million in 2017 to 13.1 million in 2018, making access to food a daily struggle for a significant part of the Congolese population. An estimated 5 million children are acutely malnourished[5]⁵.

Geography and natural resources

DRC is the second largest country of Africa (after Algeria) and largest country in Sub-Saharan Africa.[6]⁶ It stretches over 4 climatic zones: equatorial climate in the basin, humid tropical climate in the north and south of the equator, tropical climate along the coast and mountainous climate in the east. The country is rich in natural resources, with a dense river system, mega-biodiversity, multiple potential sources of energy, numerous mineral deposits and a vast forest heritage of 152.6 million hectares. It is also characterized by a great diversity of landscapes, climates, soils and vegetation. This diversity also determines a great variability of production systems. The country comprises three major natural regions: (i) The central basin which extends over one third of the territory, with an alternation of equatorial forest and swamps. This region is the least populated of the country and is characterized by a very dense hydrographic network, with waterways navigable in places, a thick equatorial forest and numerous marshy zones; (ii) Trays bordering the central basin which are covered with large savannas and characterized by high population concentrations; (iii) mountainous areas in the East and Northeast with the highest population densities[7]⁷. While DRC has the world second largest rainforest, these forests are increasingly threatened by slash-and-burn agriculture and logging for timber, charcoal and fuelwood. The country also holds the highest rate of deforestation of humid forests among central African countries[8]⁸ Based on estimates of deforestation rate undertaken in 2011, the deforestation rate varies from 0.3 to 3.5% within the forested areas[9]⁹. A total of ~400,000 ha were deforested every year between 2000 and 2010.

Rainfed agriculture is the main source of income for the majority of the Congolese people. About 70% of the working population is practicing farming, although this sector only contributes 20% of GDP. The service and industry sectors employ 34% of the labor force and account for nearly 80% of GDP. DRC has nearly 80 million hectares of arable land, 4 million irrigable land, of which only 1% is cultivated. Its vegetation can support a livestock of 40 million head of cattle and its fish density is estimated at 700,000 tons of fish per year[10]¹⁰.

Demography and socioeconomics

DRC has an estimated population of 86.79 million in 2019. With its 2.345.408 km², the surface area of the country allows for a low average population density of 35.9 people per km². 80% of the people are Bantu, but there are more than 250 ethnic groups in the country. Other groups include the Central Sudanic/Ubangian, Milotic and Pygmy peoples. The official language of the nation is French, but Lingala, Kingwana, Kikongo, and Tshiluba are also common. The population structure is young, with a median age 18.8 years and nearly half of the population under 15 years old[11]¹¹. In 2014, 63% of the population was living below the poverty line[12]¹², mainly young people.

The overall coverage of basic public services – education, health, sanitation, and potable water – is very limited and piecemeal, with substantial regional and rural/urban disparities. Fertility remains high at almost 5 children per woman and is likely to remain high because of the low use of contraception and the cultural preference for larger families. The literacy rate reaches 77% of the total population but is much higher for men (88,5%) than for women (66.5%). At the same time, the gross school enrollment rate[13]¹³ in primary education is of 108% while it only reaches 46% in the secondary education[14]¹⁴.

With regards to health, DRC is currently struggling with the world's second largest Ebola epidemic on record, with more than 1,900 lives lost and 2,900 confirmed infections since the outbreak was declared on 1 August 2018, according to the World Health Organization[15]¹⁵. The outbreak is occurring in North Kivu, South Kivu and Ituri provinces. The maternal mortality is estimated at 693 for 100.000 live births, and the HIV adult prevalence rate was 0.7% in 2017[16]¹⁶

In addition, the gender inequality index stands at 0.710 in 2011, placing the DRC at 142nd place out of 146 countries, and sexual violence remains very high [17]¹⁷. In the rural areas in DRC, the inequality translates in a higher rate of poverty among the female headed-household (75.8%) than the mean-headed households (72.3%). Women vulnerability is increased by the Ebola outbreaks that affect the production and the measures on movement restriction[18]¹⁸. Women also have less access to the seeds and agricultural inputs due to their low purchasing power.

Improved water sources and sanitation are unevenly distributed. Only 52% of the population has access to an improved water source and 29% has improved sanitation facilities. There is a major geographic discrepancy in drinking water availability, with 79 percent of the urban population having access to drinking water against 29 percent of the rural and peri-urban population[19]¹⁹.

Impacts of climate change

According to the Intergovernmental Panel on Climate Change (IPCC, 2014), DRC will be affected by climate change in a variety of ways. With a probable increase in temperatures of 3°C to 5°C over the next century, the duration of the rainy seasons would become shorter and more unpredictable, with heavy rains, seriously impacting the country's main climate-sensitive economic sectors (agriculture, hydroelectricity, etc.). In addition, DRC's National Adaptation Programme of Action (NAPA) highlights that the expected increase in heavy rains, besides leading to infrastructure and human losses, are causing soil erosion, inducing a loss in soil efficiency and a decline in crop yields and in livelihoods. This increased uncertainty – combined with the prevailing low capacity to manage climate risks and the limited number of available coping mechanisms – is likely to create additional obstacles to achieving food security and social development among the poor, and particularly in rural communities.

Given the uncertainties on future climate and economic circumstances and the high risks that need to be accounted for, the country is investing in building the resilience of its economy and its people, in a proactive, medium-term approach, in order to reduce their vulnerability to climate risks as part of integrated planning. It is in this context that the National Adaptation Plan (NAP) process, funded by the Green Climate Fund (GCF), will support, in a pilot framework, the planning of adaptation at national and provincial levels (provinces of Kinshasa, Kwilu, Tshopo, Upper Katanga and Kongo Central) for priority sectors such as agriculture, rural development, coastal zone management, biodiversity, energy, transport, and water and sanitation. It is as part of this framework that DRC is developing this new project for resilient growth to climate change, with the support of UNDP and the financing of the Global Environment Facility (GEF), which will cover the 3 provinces that were not targeted by the GCF funded-UNDP advancing the NAP process: Maniema, North Kivu and South Kivu.

1.2 Root Causes

Specific target sites have been identified in the three provinces for the implementation of the project. The selection of the project sites was realized during the PPG mission using desk study and interviews in the three provinces. Five selection criteria were used. 1) Level of degradation of land and ecosystems (land degradation, silting of valleys, soil erosion, flooding, productive and vulnerable ecosystem degradation such as mountain and valley forest areas); 2) Evidence of practices that may be harmful to the environment and agriculture such as bushfires and deforestation; 3) agricultural potential of the different zones ; 4) Presence/absence of infrastructure and governmental services such as INERA, SNV, SENASEM, METTELSAT, or road infrastructure; 5) Proportion of women and youth involved in production processing and marketing of agricultural products. As a result of the analysis, three territories were identified due to high index values for each criteria:

- the Lubero territory, specifically the Bamate and Baswagha chieftaincies, in North Kivu
- the Kabare territory, specifically Mukada, Irhambi, Bugorhe, Bushumba, Cirunga and Kagabi, in South Kivu
- and the Kabambare territory, in particular the Lengeza, Mandefu, Pene-Fundi, Musamula, Punda and Mukalanga communities in the Maniema Province

1.2.1 Socio-economic context of rural populations in the provinces of Maniema, South Kivu and North Kivu.

These three provinces are all part of the post-conflict territories in eastern DRC. During decades the eastern provinces have been the epicenter of a regional war that has then morphed into a series of local insurgencies. Still today the presence of national and foreign armed groups, namely in the provinces of North and South Kivu, are residual patches of insecurity and destabilizes the rural areas^[20]²⁰.

As revealed by the field mission, the capacities of provincial state structures remain weak, the resources for basic social services are insufficient as well as the quality of education and health services are problematic. The population is very young. This is particularly true in South and North Kivu, provinces that are very densely populated and where the youth is also very dynamic. The population density in Maniema is lower.

Agriculture and livestock are two critical sectors as they are the main source of income of the population in the area. People practice rainfed subsistence agriculture with few external inputs and tools. Farmers in the project area are engaged in traditional slash-and-burn agriculture on small areas. This itinerant agricultural system remains the main mode of production for all households in the three provinces and is also very demanding in terms of land. Due to increased population density, the same plots are slashed and burned more frequently, progressively destroying forests and soils. The agriculture system is therefore dominated by unsustainable traditional practices combined with a growing demographic pressure, exacerbating soil erosion and fertility losses, which in turn increases vulnerability to climate variability and change.

The combination of crops, an ancient practice well known to Congolese farmers, remains the most dominant practice. The main combinations found in the three provinces are described in the table below:

Combination types	Crops
2 crops	Cacao + rice Coffee + beans Sorgho + Maize Manioc + Maize Manioc + Rice
3 crops	Manioc + Beans + Maize Coffee + Beans + Maize Manioc + Maize + Soja Banana + Taros (<i>Colocasia esculenta</i>) + Beans

With regards to livestock, the main species and types of animals being raised in the intervention zone include local breeds of pigs and rabbits; improved breeds of goats, sheep and poultry are also raised in the provinces. Cattle is raised but to a lesser extent than the other types of animals. The herds are raised entirely in traditional mode, which implies that the animals do not receive any particular care.

In general, the PPG mission has revealed that the scarcity of land, the density of population together with the difficult access to land ownership are major challenges for the agricultural systems, undermining food security and exacerbating poverty. In the provinces of North Kivu, South Kivu and Maniema, land acquisition is through the customary chief with signature of a contract granting the assignee the right of enjoyment. Very often landowners do not have official title deeds. Access to land is thus made even more complicated because of the duality between public power and customary power over the granting of agricultural land.

With more than 17 million inhabitants across the 3 provinces and an average annual growth of 3.2%, the project area will have a large market to cover.

North Kivu



Figure 1: Carte administrative de la province du Nord Kivu

(Source : www.caid.cd)

The province of North Kivu has a population estimated at about 6.6 million inhabitants in 2015[1], of which 88% live in rural areas with a density of more than 100 inhabitants per square kilometer[2] compared to an average of 35.9 for the DRC. 58% of the population is under 19 years old[3].

The province is ranked 10th out of 11 provinces according to the Human Development Index of the Provinces of DRC. It is well positioned in terms of per capita income compared to other provinces but is lagging behind in the health and education sectors. This estimate is based on qualitative assessments of rural poverty by NGOs. It is estimated that 70% of the poor in the province live in rural areas. 23% of the total population of North Kivu lives in the urban areas, with a high concentration in the cities of Goma, Beni and Butembo (each of which has about 500,000 inhabitants).

It should be noted that 25% of the displaced people in the DRC are from North Kivu, within which the most affected territories are Beni, Lubero, Rutshuru and Masisi[4].

The main ethnical groups are (i) the Bantu who constitute the majority of the population and are usually farmers, breeders, fishermen or artisans; (ii) the pygmies who are mostly found in the forests where they live from hunting and harvesting of forest products; and (iii) the Nilotics who are breeders or artisans.

The terrain is very rugged, formed by plains, plateaus and mountain chains, as North Kivu is part of the Virunga Mountains. The altitude varies from less than 800m to more than 2.500m. The mountainous climate and volcanic soil are favorable to agriculture and forestry.

In recent years, the agricultural sector has been growing at 40% of GDP. Rainfed and family farming accounts for 87% of agricultural GDP, fishing 1% and livestock 12%. According to the results of the field mission, the main food crops are cassava, maize, potatoes, beans, bananas, sweet potatoes, peanuts and rice. The industrial crops are coffee (arabica and robusta), tea, oil palm, cinchona, sugar cane, papain and tobacco. Rearing large and small livestock is also an important activity in NK.

In the absence of strong industrial demand, agriculture has fueled the tertiary sector, which accounts for 50% of GDP, mainly through the trade link (which accounts for 97% of the tertiary sector), while the non-commercial, under-funded tertiary sector accounts for only 3% of the entire tertiary sector.

It should be noted that since August 2018, confirmed cases of Ebola Virus Disease continue to be reported in NK.

South Kivu:



Figure 2: Carte administrative de la province du Sud-Kivu (Source : www.caid.cd)

The province of South Kivu has a total area of 65.518km² and is bordered by the provinces of Maniema and NK, as well as Tanganyika. It is also limited to the East by Rwanda from which it is separated by the Ruzizi River and Lake Kivu, Burundi and Tanzania, separated from Lake Tanganyika.

The terrain is characterized by the chain of Mitumba Mountains. As for NK, the mountainous climate and volcanic soil are favorable for agriculture and forestry.

The population as estimated at 6,871,194 in 2016, an annual growth rate of 6.7%. The average density is very high with 105.6 inhabitants per square kilometer. 57.2% of the population is under 19 years old[1]. The ethnography of the province counts a variety of ethnic groups including: Bembe, Bafulir; Bahavu, Bashi, Bavira and Batwa.

SK considerable agricultural potential and large areas suited to pastoralism. The major commodities produced in the area include the main commercial crops (rice, sugarcane, cassava, and maize, grown by smallholders and large-scale farmers in the Ruzizi River Plain). Local herders and pastoralist groups that come down from the plateau produce livestock in the mid-lowland extension of the Ruzizi River Plain (a seasonal grazing area for cattle). The numerous abandoned fishponds in the Ruzizi River Plain indicate that aquaculture used to be important. Fishing is also practiced in Lake Tanganyika. However, its fisheries resources have strongly declined over the past two decades due to overfishing and unsustainable practices.

This part of the country is also endowed with forests that can produce timber and non-timber products.[2]

As for NK, years of conflicts have heavily undermined the rural development of the province. In addition, the province is prone to natural disasters such as floods and landslides that led to massive population displacements and loss of livelihoods. Moreover, the province faces a glaring shortage of basic agricultural infrastructure including processing units, storage facilities and dilapidated agricultural feeder roads.

Some additional obstacles come to constrain the development of the agricultural sector, including;

- the problem of access to land, especially in densely populated mountainous South Kivu;
- limited access to quality inputs and agricultural credit;
- poor farming practices, types of farming and inadequate fishing techniques;
- the disrepair of both national, provincial and local roads[3].

Agriculture remains therefore characterized by subsistence agricultural production, based on food crops, industrial and livestock that are uncompetitive on the local and sub-regional market.[4]

Also, it should be noted that SK has large deposits of minerals such as gold, cassiterite, coltan, wolframite, diamond, tourmaline, copper, cobalt, ruby, emerald, sapphire, aquamarine, manganese, limestone, as well as oil and methane gas. Only gold is industrially exploited by the company BANRO and the rest is artisanally mined[5]. This also has significant consequences in terms of land degradation in the province.

Maniema:



Figure 3: ADMINISTRATIVE MAP OF THE PROVINCE OF MANIEM (Source : www.caid.cd)

In Maniema, the total population is estimated at 4.1 million in 2017, with a growth rate of 3.3% per year. The urban population represents 43% against 57% in rural areas. The density is low (16 inhabitants / km²) compared to the national average and to North and South Kivu. Also, Maniema is inhabited only by Bantu people.

According to the Provincial Development Plan of Maniema, there is a deterioration of the profile of poverty in the province in 2012 compared to 2005. The incidence of poverty reached 62.9% in 2012 compared to 59.4% in 2005. Moreover, according to the National Report on Human Development (2016), the life expectancy at birth in Maniema is 50.2 years in 2016 when it was 54.6 years in 2012[1]. Maniema is part of the areas most affected by HIV, with a prevalence rate of 6.4%[2]. The province also counts 306 000 displaced people, mostly living in the Kabambare territory (south east of the province) that have fled the conflicts between the Congolese military and the Mai-Mai Malaika armed group at the end of 2016 over the access the Kabambaré miner.

The province has a great potential for natural resources, particularly in terms of agricultural and fisheries resources, but is one of the poorest and most affected by war and food insecurity. Indeed, apart from the poor road conditions that is limiting considerably the opportunities for agricultural production and economic development, the low agricultural productivity can be attributed to poor access to agricultural management services, extension, research and financing as well as the absence of an appropriate incentive framework for

private investment due to the persistence of macroeconomic imbalances that paralyze development in general and that of agriculture in particular, particularly the policies of negative protectionism of the agricultural sector conducted before political liberalization : marketing and price control policy, combined with cheap food imports in order to keep urban consumer prices as low as possible.

The basic public services such as health centers and schools are also inadequate and underequipped. In addition, the high cost of medical care and schooling limits access to these services by the population. The rate of access to drinking water is 32.9% in Maniema, while the national average is estimated at 52%.

According to the PIRAM project document (2013), inheritance is the dominant land acquisition method (52%) in all Maniema production basins, followed by assignment by the village head or community leader (22%) and the allocation by the State Services (16%), the other modes of land tenure are insignificant (10%). Despite the high availability of land resources in Maniema, access to land is inequitable especially around large cities.

In sum, the land situation in the project area is characterized by the following factors:

- Scarcity and difficult access to land, especially at high altitude and in densely populated areas;
- Ownership of land by large concessionaires and perennial crops. These lands are generally under-exploited due to lack of agricultural credit;
- Erosion at high altitudes, landslides and landslides, especially on steep slopes and around mining sites;
- Endless land-based conflicts between communities, some of which end up in court;
- Loss of soil fertility;
- Strong demographic growth leading to competition in accessing land;
- Insecurity.

1.2.2 Climate vulnerability

Changing climate patterns

As highlighted by the climate simulations based on satellite data realized during the PPG, **climate change trends** indicate that the temperatures anomalies had a declining trend between 1950 and 1990. As from the 1990s, the figure shows a sudden upward trend (see figure below), with an intensification in the last 30 years.

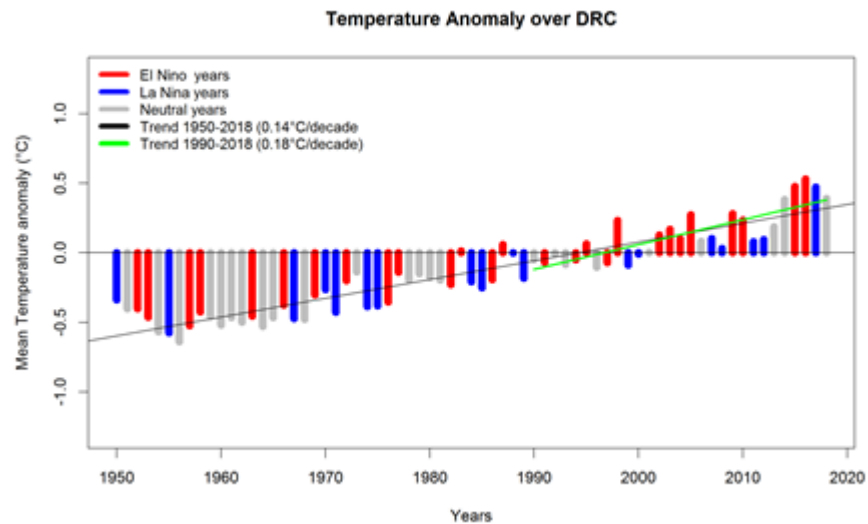


Figure 4: Temperature anomaly over DRC (Source: Meteorological expert report, elaborated with the Climate Anomaly Monitoring System)

Indeed, the current climate trends indicate a small increase in temperature (0.05°C per decade) between 1901 and 2013 which was stronger over the last 30 years (0.17°C per decade). The scarcity of meteorological observations and limited information on the country's climate variability result in information on rainfall patterns and trends being contradictory. While some studies indicate no substantial overall change in rainfall, other find some too significant changes. Interannual analyzes coincide on that rainfall regimes are disturbing the evolution of the seasons and dry sequences. Observation demonstrates that the project region is confronted with shorter wet seasons and longer dry periods.[1].

Climate projections predict a significant increase in temperatures and in the frequency of heat waves[2]. The projections variation range between 1 to 2°C at a horizon 2050 and 1.5 to 3°C by 2100 under the low emission scenario, according to the studies carried out for Third National Communication to UNFCCC[3]. They also indicate a clear upward trend in the current and potential evapotranspiration for the horizon 2046-2065, with an increase of 10 to 15% in comparison with the historical baseline. With regards to the rainfall trends, the studies indicate a significant disturbance in the seasonal distribution of rains over the 2046-2065 and 2081-2100.

Temperature scenarios

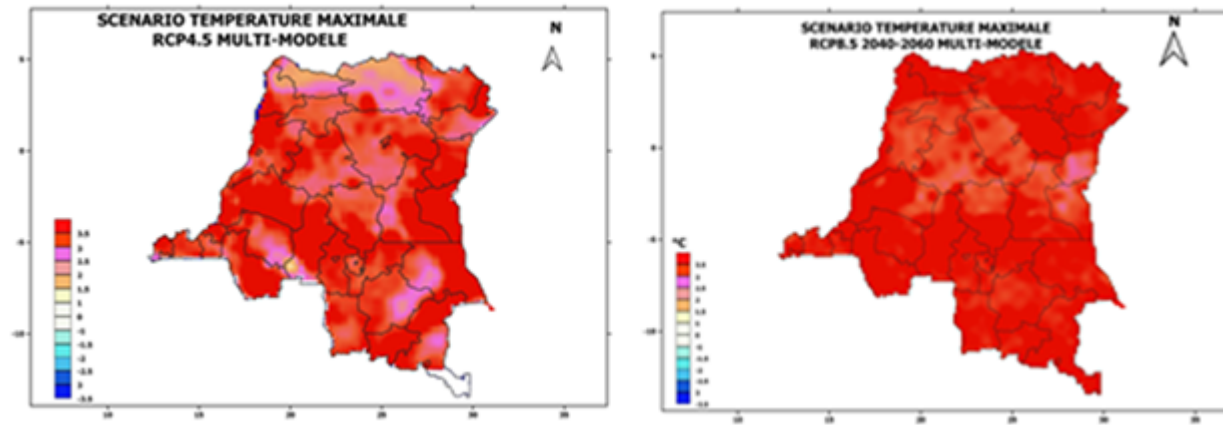


Figure 6: mAXIMAL tEMPERATURE sCENARI rcP 4.5 (low emission) and 8.5 (High Emission)

Precipitation scenarios

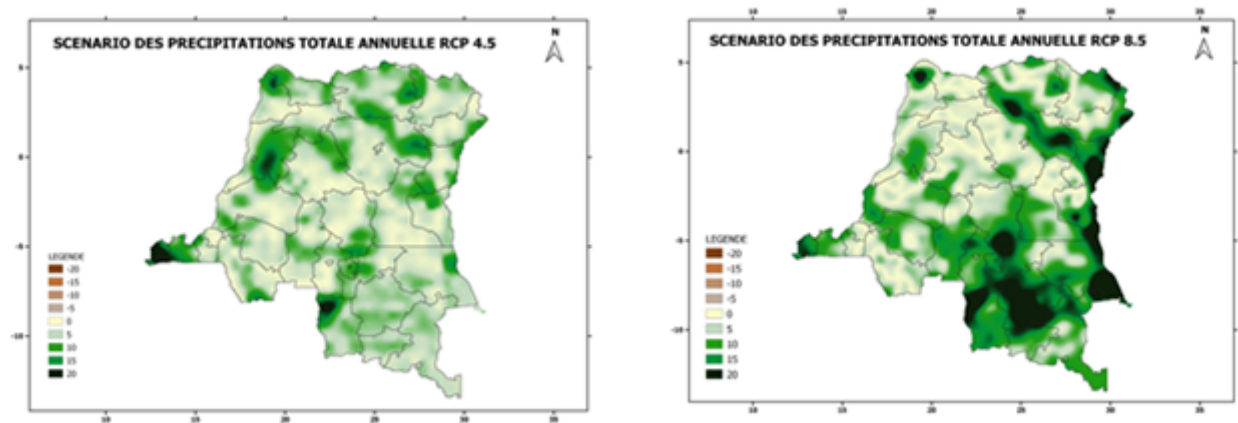


Figure 8: Total Annual precipitations scenario RDC p 4.5 (low emission) and 8.5 (high emission)

The climate change scenarios, as shown in the above maps, foresee an increase in the parameters especially for the temperatures (increase of 2 to more than 3 ° C in the three provinces). The two scenarios show that the rainfall will increase by 5 to 10%, for North and South Kivu and could reach 20% according to the worst scenario.

In a nutshell, the main projections for the period 1990-2100 for the north eastern DRC, as revealed by a study conducted by the GIZ and the Climate Service Center in 2013, are:

- the number of cold days and nights will decrease (6-10%) while the number of hot days and nights will increase;
- (13-58% for days, 33-86% for nights);
- more dry spells are expected during the rainy season (up to 108% more);
- duration of the rainy season is likely to decrease (changes estimated between -6% and +2%);
- during heavy rain events, rainfall intensity is likely to increase by 3-27%.

Table 1: Projected changes in temperature and precipitation, short-term and long-term, for DRC northeast (Haut-Congo, KIVU, MANIEMA)

Observed mean values and projected changes of temperature based variables (Fig. 7 below two units are mentioned (°C) refers to the observations and the 2 nd to the changes)		Observed 1961-1990	Projected changes			
			Low emission scenario		High emission scenario	
			2036-2065	2071-2100	2036-2065	2071-2100
Surface air temperature (in °C)	YEAR	24.1	+1.4 to +2.1	+1.5 to +2.7	+1.8 to +2.7	+3.6 to +5.1
	DJF	24.1	+1.4 to +2.0	+1.5 to +2.6	+1.9 to +2.5	+3.6 to +4.8
	MAM	24.6	+1.4 to +2.2	+1.6 to +2.8	+1.9 to +2.7	+3.7 to +5.4
	JJA	23.4	+1.4 to +2.3	+1.7 to +3.0	+2.0 to +2.9	+3.8 to +5.6
	SON	24.1	+1.4 to +2.0	+1.5 to +2.5	+1.7 to +2.4	+3.6 to +4.6
Cold nights (in %)		-	-9 to -8	-10 to -8	-10 to -9	- -10
Cold days (in %)		-	-8 to -5	-9 to -6	-9 to -6	-10 to -9
Hot nights (in %)		-	+31 to +52	+33 to +67	+47 to +64	+75 to +86
Hot days (in %)		-	+12 to +23	+13 to +31	+17 to +31	+33 to +58

Observed mean values and projected changes of precipitation based variables (Fig. 8 below two units are mentioned (mm) refers to the observations and the 2 nd to the changes)		Observed 1961-1990	Projected changes			
			Low emission scenario		High emission scenario	
			2036-2065	2071-2100	2036-2065	2071-2100
Total precipitation (in mm and %)	YEAR	1716	0 to +6	-1 to +8	-1 to +6	0 to +11
	DJF	336	-5 to +14	-4 to +16	-5 to +9	-7 to +26
	MAM	489	-2 to +8	-3 to +8	-3 to +6	-1 to +13
	JJA	339	-10 to +11	-10 to +14	-9 to +11	-10 to +13
	SON	549	-2 to +6	-3 to +9	-1 to +7	-1 to +17
Rainfall during rainy season (in mm and %)		1086	-1 to +6	-2 to +8	-4 to +8	-4 to +15
Dry spells during rainy season (number and %)		2.4	-2 to +61	0 to +66	+5 to +78	+10 to +108
Duration of rainy season (in days and %)		159	-3 to +1	-4 to +2	-4 to +2	-6 to +1
Intensity of heavy rain events (in mm/d and %)		31	+3 to +10	+3 to +14	+4 to +13	+6 to +27
Frequency of heavy rain events (in % of all days)		1.9	0 to +1	0 to +2	0 to +2	+1 to +3
Maximum 10day rainfall sum (in mm/10d and %)		278	0 to +12	+4 to +18	+3 to +14	+12 to +36

Source: GIZ, WUR, CSC (2013)

Climate hazards

These changes will translate into variations in seasonal patterns and will be characterized by an intensification of the hydrological cycle leading to a general increase in floods and landslides events due to more extreme rainfall peaks and drought episodes[1]. There is also a risk of increased water-borne diseases, and severe soil erosion leading to soil loss and reduced yields. The increasing uncertainty affecting the agricultural sector - combined with low adaptive capacity - will increase barriers to food security and social development[2] and are likely to severely affect local populations, in particular in the mountainous provinces of North Kivu, South-Kivu and Maniema. According to the Intergovernmental Panel on Climate Change (IPCC) in 2014, not only will the agriculture sector be affected by these changes but so will the hydroelectricity sector.

The ND-GAIN Country Index that captures a country's Vulnerability to climate change and other global challenges, and its Readiness to improve resilience, ranked in 2017 the DRC 177 with a high vulnerability and low readiness index. It has both a great need for investment and innovations to improve readiness and a great urgency for action. The DRC is the 12th most vulnerable country and the 5th least ready country. The Index also indicated that the country not only has a very low agricultural capacity but also a high vulnerability of fresh water supplies in the context of climate change. Health indicators as well are reported low due to a low number of medical staff and high vulnerability of the health sector to climate change, in terms of the spread of communicable diseases and provision of health services. In addition, the country has a low capacity to acquire and deploy transportation improvements, especially in rural areas[1].

At provincial level it is interesting to note that modeled projections identify a likely increase in the frequency of fire weather occurrence in the eastern region, including an increase in temperature and greater variance in rainfall. In areas already affected by wildfire hazard, the fire season is likely to increase in duration, and include a greater number of days with weather that could support fire spread because of longer periods without rain during fire seasons. Climate projections indicate that there could also be an increase in the severity of fire. Indeed, in all three provinces of the project area, wildfire hazards are classified as high, according to the information provided by the ThinkHazard! Tool[2]. This means that there is greater than a 50% chance of encountering weather that could support a significant wildfire that is likely to result in both life and property loss in any given year.

Likewise, with regards to temperatures in all three provinces, the increase in the next fifty years will be slightly lower than the worldwide average, but still significant. Therefore, the ThinkHazard! tool classifies the extreme heat hazard as medium, meaning that there is more than a 25% chance that at least one period of prolonged exposure to extreme heat, resulting in heat stress, will occur in the next five years.

Finally, model projections are inconsistent in their estimates of change in drought hazard, which influences water scarcity. While in North and South Kivu water scarcity is classified as medium meaning that there is up to 20% chance droughts will occur in the coming 10 years, Maniema has a very low risk of water scarcity and a high risk of occurrence of river flooding[3].

Impacts on economic sectors and ecosystems

Climate change impacts can already be observed in the vulnerable sectors, in particular in the agriculture since it is directly influenced by climate. Production systems in the regions, which are highly dependent on rainfall, are affected by climate variations in many different ways:

- According to the farmers met during the PPG mission, rainfall variations mainly result into a decrease in precipitations at key moments of the production cycle, resulting in a decrease of agricultural yields and a decrease of farmers' productivity.
- Changes in the agricultural calendar have also been observed. The planting season is currently shifted from September to October (season A) and from February to March (season B). Also, the dry season is getting longer. According to the farmers met, while it used to start in June, it is now observable already in May.
- Climate induced hazards such as hailstorms and floods are reported to occur either more frequently or with more intensity and may cause significant losses in terms of destruction of habitats, loss of material goods, harvests, seeds or food stocks, deterioration of basic community infrastructure with important consequences on the health and security of the communities.
- The degradation of grazing lands and the extension of transhumant stays in the reception areas can also be ultimately attributed to climate change and often result in conflicts between transhumant and native people from transit and reception areas. Transhumance is due in major parts to deficits in fodder and water resources. The calendar, the itinerary followed, and the times of stay depend on the availability of the pastoral resources of the zones of attachment, transit and reception. The difficulties related to this mobility include access to water, aggression and theft of animals, the damage of the fields, among others. In the pastoral farming system practiced in the region, animal feed comes mainly from the exploitation of natural pastures through herd management at pasture and transhumance. However, due to climate variability, the availability and productivity of natural pastures vary in time and space. The decrease in forage biomass and the gradual decline in the nutritional value of natural pastures in the dry season lead to nutritional deficiencies in animals.[4]
- As a result of the loss of land productivity, the farmers tend to migrate to urban areas such as Goma and Bukavu.

Based on the participatory workshops and field interviews conducted during the PPG phase, the different causes of the local agroecological vulnerability have been identified. They include:

- Low agricultural yields for both food crops and market gardeners in an environment with important signs of increasing degradation.
- Difficulties in the supply of good agricultural and livestock inputs, including seeds, tools and good quality livestock.
- Weaknesses in the mastery of agricultural techniques that are well adapted on degraded or eroding soils.
- Prevalence of many diseases that destroy both crops and livestock.
- Lack of organization and structuring of farmers and pastoralists into agricultural cooperatives aggravating the difficulty of access to inputs and capital.
- Extensive deforestation activities for firewood, charcoal and timber production.
- Lack of exploitable plots while the population increase, the land concentration in the hands of a small number of landowners, and the soil erosion exacerbate the land pressure.
- Seasonal and climatic disturbances that reduce or destroy agricultural production
- Difficulties in selling agricultural products to the market caused by the poor condition of agricultural feeder roads and the isolation of certain production areas.
- Weak integrated management and maintenance activities, polluting cultural practices in watersheds and erosion threat in catchment areas that threaten water resources.

1.2.3 Administrative and legal weaknesses

In addition, the **administrative and legal context is very** degraded. DRC remains a fragile state and progress is still to be made in political and economic governance, as well as in security, stability in the eastern part of the country where the situation stays unstable due to the constant threat of raids of the rebel army groups and local militias[5].

Limited capacities of the national institutions

The national structure in charge of the rural development is mainly constituted of [6] :

- The Presidency of the Republic that is involved in the agricultural and rural sector through: (i) the National Service mobilizing youth and farmers in development and reconstruction actions to reduce food insecurity and poverty; and (ii) the General Directorate of General Strategic Reserves, which aims to build stocks of strategic products to cope with crisis situations.
- The Ministry of Agriculture that intervenes through its provincial inspections and through specialized services such as the National Agricultural Extension Service (SNV), the National Service for Agricultural Statistics (SNSA), the National Seed Service (SENASA), the National Fertilizer and Related Input Service (SENAFIC), the National Agricultural Mechanization Service (SENAAMA) and the National Rice Program (NRP).
- The Ministry of Fisheries and Livestock intervenes through its provincial inspections and through specialized services such as the National Veterinary and Livestock Input Service (SENIVEL), the National Aquaculture Service (SENAQUA), and the National Service. development and promotion of fisheries (SENADEP).
- The Ministry of Rural Development contributes to the improvement of living conditions and social well-being in rural areas. In addition to traditional normative services (studies, evaluation and planning, rural engineering, rural economy, community development, agricultural feeder roads and general services), it acts on the ground through its specialized technical structures which are in particular: the National Service of rural hydraulics (SNHR), the Direction of the agricultural service roads (DVDA), the National Service of rural information (SNIR), the National Service new and renewable energies (SNEN), the National Service for Urban and Peri-urban Horticulture (SENAHUP), the National Service for Rural Housing (SNHRU), the National Service for Appropriate Technologies (SENATEC), the National Animal Traction Service (SENATRA), the Rural Youth Leadership and Retraining Service (SENRJR), the National Service for Cooperatives and Farmers' Organizations (SNCOOP) and the National Center for Integrated Rural Development (CNDRI).
- The Ministry of environment and Sustainable Development is involved in the agricultural and rural sector through its provincial divisions and specialized services in the fields of sanitation, reforestation, promotion and valorization of the wood value chain, forest inventories and development, nature protection and conservation, environmental information, forest stock rebuilding, adaptation and techniques of wood energies and the promotion of the fauna and flora of the DRC. It is currently implementing a priority agenda to revitalize the forest sector with support from donors.
- Agronomic research is mainly carried out by the National Institute for Agricultural Research and Research Studies (INERA), which currently has five stations and five research centers located in the country's major agro-ecological complexes. In the project area, there is a research center (Walungu in South Kivu) and two experimental stations (Ndihira in North Kivu and Kibangula in Maniema). Although the INERA stations are critical players in the agricultural sector, particularly at provincial level, they significantly lack resources as well as staff. A lack of communication with the Ministry of Agriculture is also undermining the functionality of the institute. In general, the stations in the provinces experience the same difficulties. They are unfortunately poorly equipped, not very functional with operating budgets virtually non-existent. Institutional support (graduation capacity in terms of climate change), technical (equipment) and logistics is needed to revitalize these services and operationalize the Goma Liaison Office. Financial support in the field of agro-ecological research is very necessary to obtain technologies for mitigating the effects of climate change for different priority food crops.
- The Provincial Ministries and the provincial divisions and technical bodies of the national ministries such as the Sustainable Development Direction (DDD by its French acronyms) as well as the Provincial Inspections for Agriculture, Fisheries and Livestock (IPAPEL), for Rural Development (IPRODER).

The capacity assessment conducted during the PPG revealed that these institutions have very limited capacities. They are entirely dependent on technical and financial partners, have a poor capacity of response and preparedness in the event of climate change induced disaster, and are affected by systemic corruption and poor governance.

Most agricultural institutions are not very functional because of multiple constraints:

- allocation conflicts between ministries (rural development and agriculture in particular);
- malfunctions in the exchanges between the central and provincial levels;
- lack of strategic human resources management plans linking the training of agents, their assignments and their career prospects;
- demotivation of agents related to working conditions and remuneration;
- insufficient national resources allocated to support the implementation of development programs;
- lack of transparency in the management of public resources;
- degradation of infrastructure[7].

Decentralization process

This can also be observed within most of the institutions involved in rural development. While they do have decentralized services distributed throughout the country, staffed with human resources having basic education, they are not entirely operational because of the lack of resources and capacities of the staff, the obsolescence of infrastructure and equipment and the low level of motivation of the staff.

In December 2005 the new Constitution prepared by the Parliament provided for the division of the national territory into 26 highly decentralized provinces. The decentralization process aimed to bring the Congolese people closer to their local authorities and limit the concentration of power at the central level. However, the evolution of the process is slow, and its cost is poorly managed[8]. A new territorial division has been effective since June 30, 2015 and the country now has 26 provinces against 11 previously. These new provinces are divided into territories, sectors and chiefdoms.

Some powers have been transferred to the provincial governments and decentralized territorial authorities, namely in terms of agriculture. A roadmap on transfer of powers and resources for provinces and territorial entities, adopted in August 2013, gave the province "exclusive jurisdiction" over agriculture and rural development, among other sectors. The prerogatives of the provincial ministry are extended and are no longer limited to implementing the national policy at the provincial level. In addition, the National Agricultural Investment Plan (NAIP) for the period 2013-2020, provides for "the valuation of the comparative advantages of each province through the implementation of Provincial Agricultural Investment Plans (PPIA), that should be developed by the provincial authorities. However, beyond the legal framework, the actual implementation of this transfer of powers is

dragging on and the provinces are still lacking the means and the powers that would allow them to apply their exclusive competence. Similarly, Provincial Agricultural Investment Plans have not yet been drafted in most provinces, namely North and South Kivu and Maniema[9].

Also, the agricultural sector is strongly affected by the lack of a national policy for the supply, extension and dissemination of improved seeds, fertilizers and pesticides to farmers. In the three provinces of the project, the extension services are very weak or even totally unoperational (North Kivu) due to the weakness of the governmental structures (SENASEM, SNV, INERA).

Climate change adaptation commitments

In terms of climate change adaptation, the DRC government has engaged in strategies both at international and national levels.

Indeed, DRC has ratified most of the Multilateral Environmental Agreements (MAE), including Dar-Es-Salaam Convention on sustainable management of the Tanganyika Lake, the United Nations Framework Convention on Climate Change (UNFCCC), the Kyoto Protocol, the Convention to Combat Desertification (UNFCCC) and the Convention on Biodiversity (CDB). In the implementation of these agreements, important actions have been taken, including the development and adoption of laws and regulations to manage environmental issues, including those related to climate change.

The country's first Nationally Determined Contribution was submitted to the UNFCCC in 2017 and its third National Communication in 2015.

The country has also elaborated in 2015 a National Climate Change Strategy and Policy (2016-2020) as well as a dedicated action plan.

DRC elaborated its second Strategic Document for Growth and Poverty Reduction (DSCR2P-2 in French) that was the strategic reference document for the period 2011-2015 and included as its fourth pillar the protection of the environment and the fight against climate change. The ongoing National Strategic Plan for Development (PNSD) also recognizes the threat posed by climate change on the country's economy.

In 2014, DRC initiated the process of drawing up the National Plan for Adaptation to Climate Change (NAP) to develop the resilience of the country and combat the vulnerability induced by climate risks. However, in its preliminary phase, the NAP was already materialized in 2006 by the National Action Program for Adaptation to Climate Change (NAPA). It had the objective of developing a nationwide program identifying urgent and immediate adaptation activities that respond to current and anticipated adverse impacts of climate change, including extreme events. This program has identified ten priority adaptation options in DRC on three main axes: (i) securing the livelihoods and lifestyles of rural / urban communities (agriculture, electrification, access water, communication, erosion control, etc.); (ii) the rational management of forest resources; and (iii) the protection of coastal areas. Four NAPA projects have been implemented so far. Among them the project on Adaptation of the Agricultural Sector, (PANA-ASA by its French acronym), aimed at strengthening capacities to adapt and manage the impacts of climate change on agricultural production and food security in the DRC. It intervened in the former provinces of Bas-Congo, Bandundu, Kasai Oriental and Katanga. It is one of the DRC's pilot capacity-building projects to address the additional threats of climate change to food production and security. Up to 3 million USD were financed by the Global Environment Facility (GEF) (85.7%) and UNDP (14.3%) for a period of 4 years (from June 2010 to April 2014), is executed by the Sustainable Development Department (DDD) of the Ministry of Environment and Sustainable Development (MEDD).

In addition to this, the NAPA project on Adaptation of Women and Children, (PANA-AFE by its French acronym) is currently focusing on strengthening resilience and capacity to adaptation of women and children to climate change in the DRC in the provinces of Upper Katanga, Kongo Central, Kwilu and Lomami and is funded by the GEF and UNDP for the benefit of the MEDD for the period from 2015 to 2020.

The National Environment, Forests, Waters and Biodiversity Program (PNEFEB) adopted in 2011 reflects the major strategic orientations and measures taken and / or envisaged by the DRC to protect the environment and sustainably manage renewable natural resources, with a view to the reduction of poverty of the Congolese people and the satisfaction of the expectations not only of the national community, but also of the international community. The strategic axes of intervention of the PNEFEB are: (i) Environmental protection, (ii) Forest resources management, (iii) Water resources management, (iv) Conservation of biological diversity and (v) Institutional strengthening and abilities.

Also, in 2012, the government developed the National REDD + Framework Strategy that provides a platform for discussion, awareness raising and multi-level dialogue. It presents a strategic vision and sets the programmatic framework for a national REDD + policy aimed at acting on the drivers of direct and indirect deforestation. It is based on a national consensus on the main causes of deforestation and forest degradation.

It should be however specified that the deforestation and degradation rates in DRC, despite relatively low rates over the period 1990-2010 (0.34%)[10], have sharply increased in the recent years. In 2018, the national Forest Reference Emission Level (FREL) to UNFCCC, indicated that for the period 2000-2014, a total of more than 13 million hectares of forest have been lost, meaning almost 1 million hectares every year[11].

The National Agricultural Investment Plan (PNIA by its French acronym) was established in 2013. It is the national planning framework for national and external funds for the agriculture and rural development sector over an eight-year horizon (2013 - 2020). It brings together all current and future programs and projects in the sector, and is structured in five programs including: i) promotion of agricultural and agribusiness sectors, ii) management of food and nutritional security and strategic reserves; (iii) agricultural research, extension and education; (iv) agricultural governance, gender and human and institutional capacity building, and (v) climate change adaptation. The PNIA has taken into account a number of measures related that should help mitigate the negative impact of its implementation. They are to knowledge management, agricultural governance as well as specific actions including the promotion of integrated soil fertility management, the promotion of community and private afforestation and reforestation plantations activities or the construction of riverbank protection structures. In addition, a specific cross-cutting component is devoted to issues related to environmental protection with a view to ensuring a healthy and sustainable exploitation of the environment.

1.3. Barriers

While the climate risks and impacts are clearly identified, **barriers to resilient growth and CC adaptation** exist. They are described below:

Slow integration of climate change adaptation into subnational and national planning. Presently the formulation of sector and cross-sector relevant policy is fragmented and there is limited consideration of climate change concerns. The knowledge gap is evident for innovations and actions in the different sectors, and is even more pronounced in terms of public awareness of (a) climate change impacts including on how to interpret climate information (b) possible adaptation measures, (c) how human interaction can either diminish (through adaptation and preparedness) or exacerbate climate change impacts, (d) the economic implication of climate changes, and how to integrate climate change concerns within planning

and budgeting processes, e) the differing gender implications of climate change. There is also a weak technical and institutional capacity to implement the vertical integration of climate change risks between the national and provincial levels. The country still faces a challenge to use different socioeconomic parameters together with climate, social and other environmental data in order to determine vulnerabilities in a more holistic manner and adjusting national and provincial development policies, processes and budgets at all levels and stages. There is insufficient institutional and technical capacities in: (i) delineating the individual and combined effects of changes in the climate on development sectors in the short- and long-term; (ii) identifying climate change induced risks to development investments and opportunities for collaboration and realization of co-benefits, including economic benefits. While the Directorate of Sustainable Development has taken the lead in coordinating all climate change related activities, the management of joint decision-making and action needs to be improved to avoid duplication

Poor climate information management system. Currently the climate information management system remains poor, with very limited technical capacities and equipment, and inconsistent approaches in collecting, analyzing and disseminating climate information in support of adaptive activities. The actual capacities of meteorological services (METTELSAT) for collecting, analyzing and disseminating user-friendly climate information are low, especially in the provinces of South Kivu, North Kivu and Maniema. The country first suffers from a deep lack of investment in meteorological equipment, a situation likely to evolve in the coming years thanks to the support of the GEF, the World Bank, the International Meteorological Organization, as well as Chinese investments in new meteorological stations across the country, with the objective of reaching 125 weather stations across the county over the next few years. Second, there is no information system relaying information on climate scenarios at different scales, climate change adaptation strategies in various sectors, as well as lessons learned from different projects and interventions in the country.

Weak institutional framework. Activities relating to the agricultural sector including animal husbandry, are dispersed between various ministries and institutions at the national and provincial levels, resulting in duplication of roles and inefficiency. The absence of adequate agricultural policy and incoherence between projects and programs in the field are contributing to the historical counter performance of the agricultural sector in Eastern Congo. Added to this is the very low level of investment in agriculture in general and the quasi absence of funding dedicated to agriculture related institutions, which rely almost exclusively on externally funded projects.

Lack of resources for investment in resilience and risk reduction strategies. Smallholder farmers in target zones do not have easy access to knowledge and technologies that would contribute to their resilience to climate change and extreme climate events. Capacities to implement agroecological practices at farm level are lacking, in particular access to reliable extension services. Access to quality inputs, such as climate-resilient seeds and associated technologies that would increase yield, quality and resilience to climate change is difficult. Constraints in accessing these technologies, including high prices on the retail market, result in under investment in effective risk reduction strategies.

In addition, investments in landscape rehabilitation infrastructure and practices are lacking resources and efficient organizational schemes between public institutions, farmers organizations, private sector and local communities.

Lack of access to markets. In Eastern DRC, value chains for agricultural commodities and other natural resource-based products are weak and underdeveloped, resulting in limited access to markets, low prices paid for produce ‘at the farm gate’ and considerable spoilage of produce because of inadequate storage, preservation and processing facilities. In addition, there is limited participation in, and access to, financial services and cooperative approaches to marketing, resulting in limited capacity of rural smallholders to invest in activities that will increase or diversify household income. This is particularly affecting women and the youth who benefit from very few opportunities to develop agriculture-based businesses.

2) The baseline scenario or any associated baseline projects

Baseline for Component 1

DRC is undergoing several new policy and institutional change processes and reforms. This includes specific reforms on planning, governance, and finance. There is a mechanism (and/or process) in place for the monitoring of these reforms conducted by the government of DRC with support from its technical and financial partners (TFP). At national level, the National Strategic Plan for Development (PNSD) was completed in collaboration with UNDP, the IMF and the World Bank, and aims to transform DRC into a developed nation by the year 2050 with a substantially higher GDP per capita. The strategy consists in three phases, with the first one covering the period from 2017 to 2021, focused on agriculture, industrial development and knowledge-based economy. Its final phase includes an exclusive focus on growth and employment generation while addressing risks of climate change which is recognized as a major threat to the national economy. This plan calls for the “protection of the environment, and adaptation to the demands of climate change for a better living environment.” This requires DRC to act quickly, and effectively, to incorporate adaptation planning into its developmental planning processes.

The National Adaptation Plan (NAP) process builds on the “2016-2020 National Climate Change Policy, Strategy and Action Plan (PSPA-CC)”. The Action Plan has four pillars – a climate change resilient economy, realizing adaptation and mitigation efforts, strengthening innovative technologies, and a financing strategy. With the objective to build on previous UNDP-UNEP support to the NAP Global Support Program, the GCF funded-UNDP implemented project “Medium term investment planning for adaptation in climate sensitive sectors in the DRC: Advancing the NAP process” aims to advance the climate change adaptation planning process for priority climate-sensitive sectors and regions in DRC. The project first outcome (“the 2016-2020 PSPA-CC implementation is facilitated through the reinforcement of the legal and institutional framework and capacity building for climate change adaptation planning”) will identify institutional and legal barriers to CCA planning and will enhance coordination and technical capacities of relevant institutions. The second outcome (“climate change adaptation and development priorities are aligned and reflected in the National Strategic Plan for Development (PNSD), the National Investment Plan Agriculture (PNIA) and the Provincial Development Plans (PDPs) of priority provinces”) will focus on the revision and the updating of the PSPA-CC to ensure its alignment with international frameworks. It will also foster the integration of adaptation priority interventions in the national, provincial and sectoral development plans. Provinces of focus of this project are: Kwilu, Tshopo, Haut Katanga, Kinshasa and Kongo central Provinces. The third and final outcome (“Financing options for adaptation investments in agriculture and rural development, health, land use planning and energy are identified with the support of the private sector”) will help identify, analyze and recommend policy options for scaling up financing for adaptation options, including through the creation of public-private partnerships (PPPs).

The Government of DRC has selected North Kivu, South Kivu and Maniema as pilot sites for the project considering that the majority of adaptation planning intervention have been focusing on savannah and dry regions, sidelining mountainous and forest regions, highly vulnerable to the impacts of climate change, in particular in the agricultural sector. In addition, these provinces have not been subject to the provincial remodeling happening in July 2015 and conducting to an increased number of provinces from 11 to 26, throughout the country. This reshaping has led to the establishment of new provincial authorities, not fully operational yet. The recently established authorities are not, to date, conducive for the implementation of NAP activities, nor do they have the planning and budgeting documents that are expected to support the NAP, leaving the three targeted provinces in a stronger position to benefit from NAP interventions. Before the remodeling of 2015, each of the 11 provinces had Provincial Development Plans (PDP), updated every 5 years. While the new provinces had to restart the development process, the PDP for the targeted provinces are soon, or have already, reached term. The previous phase did not appropriately take climate considerations into account, therefore, as a guiding document for the development planning in the provinces, this impacted the integration of climate change concerns into the planning and budgeting at the provincial level. The UNDP "Strategic Planning for Development" project (2018-2021) is another relevant baseline for the proposed project. With an investment of US\$2.1 million, this baseline project will contribute to improving the planning system at the provincial level. However, additional capacity building support is needed to help identify the instruments that can attract financial flows to urgently address the threats posed by climate change. LDCF resources will help facilitate the integration of climate

change risk management into the national and provincial strategy and development plans by providing skills, support of technical expertise and tools to municipal and provincial officials.

Baseline for Component 2

The National Agronomic Research Institute (INERA) has dedicated offices and a laboratory in targeted sites and supported the first NAPA project on Agriculture. The institution will continue to provide training and housing facilities including senior staff houses for Research/Development Program and technology transfer. National technical services are also operating in each province.

The National Extension Services (SNV), under the Ministry of Agriculture supports producers on seed certification. With regards to the proposed project, their operations will support target communities with the production and dissemination of seeds during the project implementation and beyond the lifetime of the project, ensuring the sustainability of the activities. The national Service of farmers' corporation (SNCOOP), under the Ministry of Rural Development, supervises farmers' organisations and will provide target communities with fundamental skills in improving agriculture productivity.

In the 3 provinces, ongoing projects support agricultural development and value-chains organizations. The **IFAD-PASA-NK Project** (« Support to the agricultural sector of the Province of North Kivu) aims to durably improve food security and incomes of the poorest households in target sites in North Kivu, through the improvement of productivity and value of 4 commodities: maize, rice, potato and arabica coffee. Starting in 2019 for 5 years, the project will (i) develop the capacities of agriculture support actors, in particular producers organisations and public sector institutions; and ii) support rural infrastructures, in particular feeder-roads.

In Maniema, the **IFAD PIRAM project** (Integrated Program for Agriculture Rehabilitation in Maniema Province) aims to contribute to poverty and food insecurity reduction through boosting agricultural, fish and animal production and better access to markets, combined with improved social services (health, education, drinkable water and sanitation). Ending in 2019, the project results need to be reinforced and IFAD is considering a follow-up project in the coming months.

In South-Kivu, the World Bank **Regional Great Lakes Integrated Agriculture Development Project (PICAGL)** aims to i)“to increase agricultural productivity and commercialization in targeted areas in the territory of the Recipient and improve agricultural regional integration; and (ii) to provide immediate and effective response in the event of an eligible crisis or emergency.” Although not focused towards climate change resilience, this project constitutes an important baseline to the GEF project in this province. Started in 2018, it will be implemented until the end of 2021.

The situation of agrometeorological services in DRC is poor. Currently, the country only has 22 meteorological stations distributed in the national territory, compared to the 120 it had in the early 1960's. Among these 22 stations, a dozen does transmit the data on a regular basis. In addition to the observation network is so scattered, the meteorological data is kept in paper. The storage period for most of the stations ranges between 1950 to 1990, except for few stations that currently operate up to date data.

Previous projects funded by the GEF have supported agrometeorological services. In particular, the project “Building the Capacity of the Agriculture Sector in DR Congo to Plan for and Respond to the Additional Threats Posed by Climate Change on Food Production and Security” (PANA-ASA, 2010-2015) supported the promotion of an agro-genetic material better adapted to the projected climate conditions, as well as strengthened the agricultural services including the extension services and the agro-meteorological information and planning in 4 provinces of the DRC; more precisely in Kiyaka in the province of Bandundu, Gimbi in the province of Bas Congo, Kipopo in the province of Katanga and Ngandajika

in the province of Kasai Oriental. The main project partners were the INERA, IITA and METTELSAT. The pilot villages have been selected within 40km around the INERA stations. The stations have been equipped by the project with meteorological equipment to allow climate information collection and transmission to METTELSAT. Similar work in Eastern DRC remains however to be realized.

The project “Improving women and children’s resilience and capacity to adapt to climate change in the Democratic Republic of the Congo” (PANA-AFE, 2014-2019) invested in 4 automatic agricultural meteorological stations and 400 pluviometers, provided to produce agricultural meteorological information and secure production against climate risks in the 4 target regions, namely in Kiyaka, Gimbi, Kipopo and Ngandajika.

Finally, the on-going WB-GEF Hydromet project “Strengthening Hydro-Meteorological and Climate Services” supports DRC meteorological services through 3 main components:

- Component A (Institutional and regulatory strengthening, capacity building and implementation support) will invest in strengthening institutional setup and building capacity of human resources of MettelSat.
- Component B (Modernization of equipment, facilities and infrastructure for basic observation and forecasting) will finance i) hydrological and meteorological monitoring networks; ii) transmission, data management and data dissemination hardware; iii) refurbishment of facilities needed to support the services; and iv) technical systems and software for performing meteorological, hydrological and climate modelling and forecasting.
- Component C (Improvement of hydromet information service delivery) will provide technical assistance for delivery of more accurate, timely and user-friendly products and services to users and decision-makers.

With this project, basic services will be provided at national level (seasonal and daily forecasting, ten-day agro-meteorological reports, etc.). More specialized services (such as flood forecasting systems, personalized agro-meteorological information services, warning reports to anticipate impacts, etc.) will be provided to 10 pilot zones, mainly around Kinshasa. This work will contribute to functioning meteorological services in DRC, supporting agrometeorological activities under component 2 of the propose LDCF project.

3) The proposed alternative scenario

The project objective is to strengthen the enabling environment for climate risk management that can improve agro-ecological production practices to withstand the immediate and potential impacts of climate change. The target regions include the forest and mountainous agroecological zones of Democratic Republic of Congo.

In order to achieve the above, specific project outcomes are:

- **Outcome 1:** Medium and long-term climate change risks and adaptation measures integrated into existing national and provincial development plans, policies and budgets
- **Outcome 2:** Tested and adapted agroecological production practices address the foreseen impacts of climate change and advance the NAP process on the ground in North Kivu, South Kivu and Maniema
- **Outcome 3:** Project Implementation based on results-based management and application of project lessons learned in future operations facilitated

Alignment with national policies, GEF focal area and UNDP strategy

Alignment with national policies

With regards to the national policies, the project is entirely consistent with the National Strategic Plan for Development (PNSD) 2019-2023 on top of the regulatory structure that identifies a strategic objective on CCA, specifically in the agricultural sector.

Moreover, the project is aligned with the multilateral environmental agreement signed by DRC, in particular as being party to the United Nations Framework Convention on Climate Change. The project contributes to the achievement of the Intended National Determined Contribution commitments from 2015 that integrated CCA measures related to the promotion of climate resilient agricultural practices. Likewise, the project is aligned with the NAPA from 2006 and the Climate Change Policy, Strategy and Action Plan 2016-2020.

Consistency with national priorities is detailed in section B1.

Alignment with the GEF and LDCF strategies

The proposed project is aligned with the GEF and LDCF strategy on CCA. It contributes to the following strategic objectives and outcomes:

CCA-1: Reduce the vulnerability of people, livelihoods, physical assets and natural systems to the adverse effects of climate

Outcome 1.2: Livelihoods and sources of income of vulnerable populations diversified and strengthened

Outcome 1.3: Climate-resilient technologies and practices adopted and scaled up

CCA-2: Strengthen institutional and technical capacities for effective climate change adaptation

Outcome 2.2: Improved scientific and technical knowledge base for the identification, prioritization and implementation of adaptation strategies and measures

Outcome 2.4: Institutional and technical capacities and human skills strengthened to identify, prioritize, implement, monitor and evaluate adaptation strategies and measures

CCA-3: Integrate climate change adaptation into relevant policies, plans and associated processes

Outcome 3.2: Policies, plans and associated processes developed and strengthened to identify, prioritize and integrate adaptation strategies and measures

Alignment with UNDP Strategic Plan, 2018-2021 and UNDP Country Programming Framework

This project will contribute to UNDP Strategic Plan, 2018-2021, which vision is to help countries achieve sustainable development by eradicating poverty in all its forms and dimensions, accelerating structural transformations for sustainable development and building resilience to crises and shocks. It will specifically contribute to the following “signature solutions” defined by UNDP Strategic Plan 2018-2021:

Signature solution 1: Keeping people out of poverty. The project targets the barriers and vulnerabilities that keep people in poverty or that push them back into poverty;

Signature solution 3: Enhance national prevention and recovery capacities for resilient societies. A main project objective is to build resilience to the impact of disasters and emergency situations, minimizing the drivers of risk ingrained within development processes, in particular as regards climate change impacts.

Signature solution 4: Promote nature-based solutions for a sustainable planet. Although this project does not target biodiversity conservation as an objective, the activities implemented at farm level aim to increase agrobiodiversity and soil conservation, including through agroforestry and tree plantations, all of which do impact positively terrestrial ecosystems.

This project will also contribute to the following country outcome included in the UNDAF/Country Program Document: UNDAF Outcome 5: The DRC State improves management of natural resources and associated benefits, disaster management mechanisms and engages into green economy. This outcome is aligned with the Poverty reduction Strategy Document (DSCR 2) which places environmental protection and climate change mitigation and adaptation as one of the 4 pillars of the strategy.

Expected outcomes and components of the project

Component 1: Addressing adaptation in the context of the national and provincial planning and budgeting processes

Outcome 1: Medium and long-term climate change risks and adaptation measures integrated into existing national and provincial development plans, policies and budgets

Outcome indicator 1.1: National and sector-wide policies, plans and processes developed and strengthened to identify, prioritize and integrate adaptation strategies and measures

Baseline:

- The GCF-NAP project will review several policies to mainstream climate change adaptation concerns and align them with international frameworks, specifically the National Strategic Plan for Development (PNSD), the National Investment Plan Agriculture (PNIA) and the 2016-2020 National Climate Change Policy, Strategy and Action Plan (PSPA-CC)".
- CCA understanding, mainstreaming and planning remain very weak in the key sectors of Water and Agriculture and rural development
- CCA information, data and lessons learned from previous initiatives is disseminated across various stakeholders and locations and has not been consolidated to serve future interventions.

End of project target:

- CCA mainstreamed in the water and agriculture and rural development sectors in DRC
- A CCA knowledge management and stock taking web-based information platform is in place, regularly updated and actively utilised by institutions and project developer

Outcome indicator 1.2: Provincial plans and processes developed and strengthened to identify, prioritize and integrate adaptation strategies and measures

Baseline: The GCF-NAP project will work closely with 5 provinces on mainstreaming CCA in their Provincial Development Plans (PDPs). However, provinces of Eastern DRC have only recently finalised Provincial Development Plans (PDPs), and those were not established using a climate change adaptation approach. In addition, there is currently no climate change adaptation planning document at the provincial level, and directly concerned institutions lack the knowledge and capacity to implement NAP pilots.

End of project target:

- Climate change adaptation is mainstreamed in the 3 provincial PDPs and their Priority Action Programmes (PAPs)
- Three Provincial Climate Change Adaptation Plan are prepared and possible sources of funding are identified.

<p><i>Output 1.1:</i> A NAP framework for the priority sectors of agriculture and rural development and water is set up.</p>	<p>This output will establish a detailed framework for the implementation of the NAP process in the priority sectors of (i) agriculture and rural development; and (ii) water. Building on the work conducted by the GCF-NAP project, which will work (i) to identify institutional and legal barriers to climate change adaptation planning and enhance coordination through the establishment of a coordination mechanism for climate change adaptation planning; and (ii) to mainstream climate change adaptation into the National Agriculture Investment Plan (PNIA) and the National Development Strategic Plan (PNSD), LDCF resources will be used to augment coordination, advocacy, awareness raising, fundraising, and mainstreaming of climate change adaptation needs into on-going relevant plans and budgets in the agriculture and rural development and water sectors, also supporting the National Committee for the planning and monitoring of the PSPA-CC, which is one of the key mechanisms for the implementation of the PSPA-CC policy and its action plan.</p> <p>The project will also support awareness raising of key stakeholders in Finance and Planning Ministries, as well as relevant line Ministries, including the Ministry of Environment, on the integration of climate change risks into planning and budgeting processes, including on (i) the use of climate information to draw planning and budgeting, and (ii) the economics of climate change adaptation.</p> <p>The activities conducted to reach this output will include:</p> <ul style="list-style-type: none"> · Working closely with the Ministries of Planning and Finance, launch a study on the socioeconomic risk profiles of climate change impacts in the water and agriculture and rural development sectors, with case-studies on the economic impacts of climate change at provincial level. This activity will aim to identify future risks from climate change for inter alia GDP growth, other well-being or socioeconomic indicators, or specific economic sub-sectors. The purpose is to identify (with stakeholders) high-risk areas and develop risk narratives that link economic sectors with sustainable development goals. These risk narratives, or storylines, will then feed into priority setting of adaptation options · Deliver a series of awareness raising and training workshops on the basics of CCA in the agriculture, rural development and water sectors, spatial planning, the integration of climate change risks into planning and gender-sensitive budgeting processes, the use of climate and environmental information to draw planning and budgeting and the economics of climate change (Ministry of Finance, Ministry of Planning, Ministry of environment and Sustainable Development, Ministry of Agriculture, Ministry of Rural Development, Ministry of animal husbandry and fishing, Ministry of Energy and Water Resources). · Using the above study results and a participatory and gender-sensitive approach, mainstream CCA into the Agricultural Research Strategic Plan 2016-2021 (INERA), National Agricultural Investment Plan 2014-2021, the Strategic Plan for the Revival of the Agriculture Sector, the National Programme for the Revival of the Agriculture and Rural Development Sector and the three Provincial Agricultural Development plans. · Using a participatory and gender-sensitive approach, mainstream CCA into water sector strategic documents, in particular the Strategic Action Plan for Water in the DRC, the National Environmental Action Plan, and the National Action Plan for Sustainable Management of Water resources. · Translate CC-mainstreamed gender-sensitive investment plans of the Agriculture, Rural Development and Water Resources ministries into action fiches and concept notes and identify potential funding sources
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Output 1.2: A knowledge management and stock taking web-based information platform is established to organize social, economic, and environmental data relevant to CCA from a variety of sources, at the national level and including information from the provinces targeted

In DRC, there is an important gap in terms of environmental information and data management and dissemination, and there is no existing National Environmental Information and Surveillance Centre in place. In 2012, a National Communication Strategy on the Environment (SNCE) was established but it was not implemented to date. Information on climate change, climate hazards and climate change adaptation are spread over a large variety of actors and institutions, and lacks comprehensive, up-to-date consolidation. In this context, there is a need to provide DRC with a unified knowledge system on local knowledge and good practices on CCA to disseminate them, through the establishment of a national climate change adaptation information platform that could (i) consolidate in a single place the lessons learned from the past and on-going climate change adaptation projects; (ii) provide access to latest climate scenarios, risk maps and vulnerability assessments conducted in the country; (iii) provide up-to-date meteorological information at national, provincial and local levels, based on Meteosat and international predictions; (iv) take stock of experiences in climate-smart agriculture and climate-related agricultural research from various organisations (incl. INERA, IITA, etc); (v) publish land-use maps and relevant land-use planning documents and (vi) serve as a knowledge exchange and dissemination forum to inform policies and strategies at national and provincial levels.

LDCF resources will therefore be used to set up a platform that will make the information easily available to all relevant stakeholders, in particular in the Planning and Financing Ministries and the National Coordination Mechanism for CCA Planning (to be established under the GCF-NAP project). This platform shall be headed and managed by the Sustainable Development Directorate (DDD) under the Ministry of Environment and Sustainable Development (MEDD), who will establish partnership agreements with relevant institutions to produce content.

Activities will include:

- Conduct a benchmark study of existing such platforms in the DRC and other African countries, as for example the CIDMEWS mapping application in Sierra Leone (<https://www.cidmews-sl.solutions>), analysing the pros and the cons of each of them and providing recommendations on the most adapted solution for DRC;
- Identify and organize consultations to mobilize institutions, universities, development partners, private sector and NGOs - that will be both information producers (on climate change adaptation and its linkages to social, economic and environmental sectors) and future users of the platform - around the upcoming platform (needs, expectations, modalities), and gather a first comprehensive set of information and data;
- Propose a possible architecture of the information platform and secure partnership agreements with information providers and users;
- Contract a firm or an NGO to set-up the platform, integrate initial data and information and establish the technical links and automatic information and data treatment processes;
- Deliver capacity building sessions to the DDD to organise the platform management service and ensure staff is adequately capacitated.

<p><i>Output 1.3:</i> Gender responsive climate change adaptation is integrated into the PDPs (and their budgets) of the provinces of North Kivu, South Kivu and Maniema</p>	<p>In the 3 provinces of SK, NK and Maniema, PDPs were prepared in 2019 and cover the period 2019-2023. They provide a detailed diagnostic of the governance, economic and financial situation of the provinces, and establish several development targets aligned with the Sustainable Development Goals (SDGs). Those include SDG Pillar 5 on environment and sustainable development, and in particular SDG13 <i>Take urgent action to combat climate change and its impacts</i>. PDPs are completed by budgeted Priority Action Programmes (PAPs) that define thematic programmes of actions to be implemented over the 5-year period.</p> <p>Those planning documents are very recent and provide a solid roadmap for the 3 provinces. However, although climate change is quickly covered in one section, it is not mainstreamed at all stages of the documents. Climate change adaptation and resilience should be considered more strongly in provincial planning, based on up-to-date downscaled climate change scenarios and economic studies.</p> <p>Therefore, LDCF resources will be used to:</p> <ul style="list-style-type: none"> · Organise capacity building sessions in the 3 provinces explain why and how climate change adaptation and resilience, but also climate change mitigation, should be considered in development planning, as a guideline to sustainable development; · Contract study to produce downscaled climate change scenarios and assessment of the frequency of extreme weather events in each province · Ensure climate change is mainstreamed at all stages of the PDPs and their PAPs, also considering the gender dimension of climate change. · Ensure budgeted activities in the PAPs do take account of climate change scenarios for the province, by (i) contracting an economic analysis of the likely costs of adaptation of the various investments planned in the PAPs, focusing on the biggest investments (main infrastructures); and (ii) adjusting the budgets in the PAPs to reflect any additional costs to be considered. · Organize awareness raising events in the project target communities on climate change scenarios and climate change adaptation planning and strategies, using a gender-sensitive approach.
<p><i>Output 1.4:</i> Gender-responsive fully-fledged NAP pilots are implemented in South Kivu, North Kivu and Maniema</p>	<p>In addition, PDPs and PAPs, the 3 provinces lack specific knowledge, capacities and planning tools for adaptation not climate change. For example, the 3 provinces do not have any consistent Climate Change Adaptation Plan in place. Such plans would enable better understanding of what should be done in terms of adaptation, the likely costs (as compared to the costs of non-adaptation) and possible sources of funding. As such, they would constitute excellent complements to the PDPs.</p> <p>Under this output, a framework for the NAP process in the targeted provinces will therefore be established. This will entail:</p> <ul style="list-style-type: none"> · Strengthen provincial steering committees on climate change adaptation; · Identify capacity development needs in terms of implementing adaptation to climate change activities for provincial authorities; · Strengthen provincial authorities' capacities through thematic workshops and training to various categories of staff, from decision-makers to technicians on the ground; · Conduct climate vulnerability studies at the provincial level, using the climate change scenarios produced under output 1.3, and focusing on different sectors and sub-regions; · Prioritize climate change adaptation options and prepare Provincial Climate Change Adaptation Plans. Those plans will include, among other things, an analysis of alternative funding sources for climate change adaptation (e.g. the private sector) and map existing adaptation projects and their gaps; · In line with the PAPs and the adaptation options prioritized into the Provincial Climate Change Adaptation Plans, prepare 5 to 10 Action Fiches in each province in the form of pre-concept notes for their presentation and possible funding by development partners, the private sector and/or climate and environmental funds.

Component 2: Enhancing productivity, sustainability, and resilience of rural farmers, in particular women and youth, in Eastern DRC

Outcome 2: Tested and adapted agroecological production practices address the foreseen impacts of climate change and advance the NAP process on the ground in North Kivu, South Kivu and Maniema

Outcome Indicator 2.1: Extent of adoption of climate-resilient technologies/ practices

Baseline:

- Improved seeds and fertilizers. Access to and use of improved, climate resilient seeding material is scarce due to lack of availability and quality of affordable climate resilient seed varieties. Availability and access to, and knowledge for proper use of fertilizers is also very limited.
- Agrometeorological information. Access to reliable and user-friendly agrometeorological information is very limited and the use of this information by farmers, in particular women, remains undeveloped.
- Land Management: About one-third of the population still practicing techniques that are harmful for the environment such as slash and burn. A large majority of the population in project sites lack the knowledge and capacity to implement agroecological practices and soil conservation techniques that would increase their resilience to climate change.
- Water Management: Water conservation practices, water management at farm level and water sources protection techniques are generally unknown and not implemented.

End of project target:

- 300 Farmer Field Schools (FFS) in total set up by the project in the 3 provinces with at least 30% female and 30% young (age 18-30) participants
- Improved seeds and fertilizers. At least 80% of the FFS participants (at least 30% of which are women) use improved seeds and have access to quality fertilizers and fertilizer use information.
- Agrometeorological information. At least 80% of the FFS participants (at least 30% of which are women) receive and use agrometeorological information on a weekly basis.
- Land management: At least 90% of the FFS participants (at least 30% of which are women) use at least 3 improved resilient land management practices.
- Water management: at least 90% of FFS participants (at least 30% of which are women) use improved water management practices. This will include among others practices such as: (1) integrated crop management using conservation agriculture techniques to minimize the delivery and transport of agriculturally derived pollutants to surface water; (2) Soil protection by reducing soil erosion and improving infiltration; (3) Innovation to optimize water use and promote water use efficiency; (4) Water conservation through proper selection of crops that are the most suitable to available water and agroclimatic conditions; and (5) Water source protection and micro-watershed management.

Outcome indicator 2.2: Population benefiting from the adoption of diversified climate-resilient livelihood options

Baseline: Access to markets is difficult and processing of agricultural products is underdeveloped in the project sites, affecting in particular women.

End of project target: 500 farmers (70% female and 30% youth) are involved in a sustainable value chain development approach to process and market agricultural products and services.

<p><i>Output 2.1:</i> The landscape of three provinces is rehabilitated through an agroecological approach focused on sustainable land management, encompassing soil erosion control, water harvesting techniques and soil and water conservation</p>	<p>Population growth and high levels of dependence on natural resources generate anthropogenic pressures on the environment which result in accelerated soil erosion and degradation, landslides, water pollution, and ultimately in low agricultural yields. This exacerbates rural populations vulnerability to climate variability and climate change in the medium and long term and undermines their capacity to adapt to current and future climate changes. Through the farmer field schools (FFS) approach, the project will follow a farmer-based approach to complement traditional extensions services. The FFS methodology promotes the use of trained local facilitators to accelerate the dissemination of appropriate production and agricultural practices. The FFS approach aims to build the capacities and support smallholder farmers (male, female and youth) and rural communities in the adoption of sustainable agricultural techniques and livelihoods practices that enhance their resilience. The FFS offer a platform for validating and scaling up identified crop, livestock and natural resources management practices/technologies in an integrated manner. They support diversified and resilient production systems, as well as other measures farmers are interested in to promote sustainable agriculture, livelihood security and diversification.</p> <p>The activities conducted to reach this output will include:</p> <ul style="list-style-type: none">· Set up farmer field schools (a partnership between INERA/SNV/IITA, the producers organisation and UN Women): This will involve: informing communities about the FFS; identifying agroecological practices already implemented in the area; training FFS master trainers and facilitators. Master trainers in charge of the supervision of the FFS will be trained in each province (training of trainers) on methodological aspects, which makes of the FFS a special instrument for extension services and processes. The trainers will train the FFS facilitators, who are selected among the farmers' groups.· Train farmers (min 30% women) on climate smart agricultural practices and agronomic measures to adapt to climate change linking them to the rehabilitation of the productive landscape (control of soil erosion, water harvesting and soil and water conservation)· Strengthen the technical and organizational capacity of farming communities to cope with climate change through training sessions on effective technical itineraries, seed multiplication, water management, soil management, and agroforestry (IPAPEL and SENASEM in close collaboration with IITA and SNV).· Develop, disseminate and support the adoption of new technologies, strategies and agricultural practices (water and soil management) for adaptation to climate change.
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<p><i>Output 2.2:</i> The supply chain of locally adapted fertilizers and adapted seeds is developed for distribution channels in key production basins at agreed cost between farmers' associations/cooperatives</p>	<p>The unavailability of farm inputs undermines adaptation capacities. LDCF resources will be used to develop diversified local services (production, certification, extension, distribution) in order to improve access to CC adapted seeds and fertilizers. The main objective is to strengthen the food security of the poorest by increasing their production under changing climate conditions and improving their access to quality agricultural inputs and local services. Community seed banks will be used to reinforce the availability of local and adapted seeds among communities. Community seed banks fulfil a number of roles, including that of conserving rare local varieties and making modern and traditional varieties of seeds available to farmers, particularly after crisis situations such as war, long droughts, and dramatic loss of local crop genetic diversity. In addition, the project will promote the organisation of seed fairs to allow farmers to exchange locally-produced seeds of varieties adapted to local conditions, and also promote social interaction among farmers, between farmers and extension agents, and between farmers and private companies. Community seed banks are therefore an important tool for awareness raising with regards to resilient crops and crop diversity. Seed fairs also enhance seed-dissemination networks.</p> <p>Activities will include concrete actions ranging from research and development to the dissemination of fertilizers and seeds:</p> <ul style="list-style-type: none"> · Organize a consultation workshop with INERA / SENASEM / SNV / IITA / Producers Organisations to conduct a needs assessment, identify resilient varieties and suppliers, and define an action program; · Identify and technically monitor and train seed multipliers for the varieties identified, and establish purchasing contracts; · Set up a network of farming supply stores managed by the producers organisations or by the communities through support to constitution meetings, the organisation of workshops on the operation of supply stores, the establishment and capacity building of management committees, the construction of community seed banks, the organization of seed-fairs, and the organization of meetings between input suppliers, producers, input store manager; · Engage the women's and youth organisations in the supply chain of inputs and seeds by training them to become seed multipliers; · Strengthen the capacities of the provincial extension services in the agricultural sector (IPAPEL, SENASEM, SNV, SNCOOP) on day-to-day project management, research and development, agricultural extension and seeds certification (in partnership with IITA); · Conduct an analysis of the financial and regulatory conditions (incl. taxes) for the import of agricultural inputs at provincial level.
<p><i>Output 2.3:</i> The production and dissemination of agrometeorological information is improved</p>	<p>The project plans to set up an agro-meteorological information system (AMIS) in the provinces of North Kivu, South Kivu and Maniema to help producers better plan agricultural activities and anticipate climate risks. This intervention will take stock of the experience of the PANA-AFE project in the field of agrometeorological information and will be based on participatory action research reinforced by a strong pluri-institutional collaboration and by the dissemination of the information through several channels. The strategy for improving the value chains, and for disseminating and enhancing the use of agrometeorological information is based on the following activities:</p> <ul style="list-style-type: none"> · Organize a consultation workshop with INERA / METTELSAT / Universities / IPAPEL / Producers Organizations to diagnose needs and constraints, to select the observation sites and define the action program for the production and dissemination of agrometeorological information; · Set up a mechanism for the production and dissemination of agrometeorological information, so that it is available to and easy to use by the communities; · Conduct a study on the perception and experience of local and indigenous communities on climate disruptions and their impact on their activities and natural resources; · Strengthen the capacities of the agents involved in the establishment of the AMIS (INERA, METTELSAT, Universities, IPAPEL, producers org.) through training sessions on data collection, data processing, and information organization; · Organize training and awareness-raising workshops with local and provincial actors and farmers; · Produce and disseminate agrometeorological information, through various channels (technical and extension services, community-based community radios, producers, farmers organizations, etc.) along with practical crop management advice; · Regularly assess the performance of the agro-meteorological information system to fine-tune it; · Create a computer database storing and presenting the agrometeorological information from NK, SK and Maniema available to multiple users.

Output 2.4: Women and young entrepreneurs develop financially sustainable business models related to the processing, conservation and marketing of agricultural products.

Young people under 35 represent about 60% of the population of the provinces targeted by the project. Both women and youth remain largely on the margins of the economic process and are confronted with high unemployment rates. Women are also more likely to enter the labour market without a proper education and training. For these particularly vulnerable groups, entrepreneurship is a strategic tool, in that it provides them with the possibility of ensuring their financial autonomy and of accessing economic life. In this context, the project aims to build the entrepreneurship capacities of the target communities in the 3 provinces to contribute to the creation of sustainable jobs and generate new incomes for youth and women. The project will encourage the growth of sustainable commercially viable agribusiness small and medium enterprises (SMEs) by supporting the development of both on-farm and non-farm well-structured agribusiness projects. Women and youth will be trained in incubation centres. During the incubation, capacity building will focus on (i) production systems, services, processing and value addition. An experiential learning program across established pilot ventures in marketing, services and value addition will be implemented; (ii) skills and competencies necessary to be an entrepreneur; and (iii) mentoring, coaching and assistance to elaborate business ideas, development of business plans and application for funds, management support and assistance to develop start-up companies and services in creating business to business (B2B) and business to customer (B2C) markets. This output will be implemented in close collaboration with IITA, contextualizing its youth and agribusiness Youth Program, a comprehensive program - implemented in several African countries including DRC - that builds entrepreneurship in agribusiness via skills acquisition so that young men and women become owners of profitable agribusinesses

Activities will include:

- Recruit potential agricultural entrepreneurs focusing on women and youth in the project area, especially within the communities that will set up FFS;
- Organize the recruitment and training of trainers (coachs) using a gender approach;
- Facilitate access to markets for young entrepreneurs through concertation workshops to identify business opportunities, market studies, the design of joint projects with potential buyers and firms, and the promotion of flagship products at regional level, considering cross-border markets;
- Create and operationalize training and incubation centres for agricultural entrepreneurs (women and young people);
- Build the capacity of selected agricultural entrepreneurs through thematic trainings and incubation;
- Support young agricultural entrepreneurs by: (i) coaching the development and implementation of business plans; (ii) connecting young entrepreneurs with support structures; (iii) establishing a leverage fund for the installation of young entrepreneurs; (iv) accessing to finance adapted to value chain actors; (v) establishing a support system for monitoring the installed entrepreneurs.

Component 3: Project monitoring, and evaluation and knowledge management

Outcome 3: Project Implementation is based on results-based management and application of project lessons learned in future operations is facilitated

Outcome indicator 3.1: Number and types of documents and tools developed to monitor and evaluate the project and share knowledge

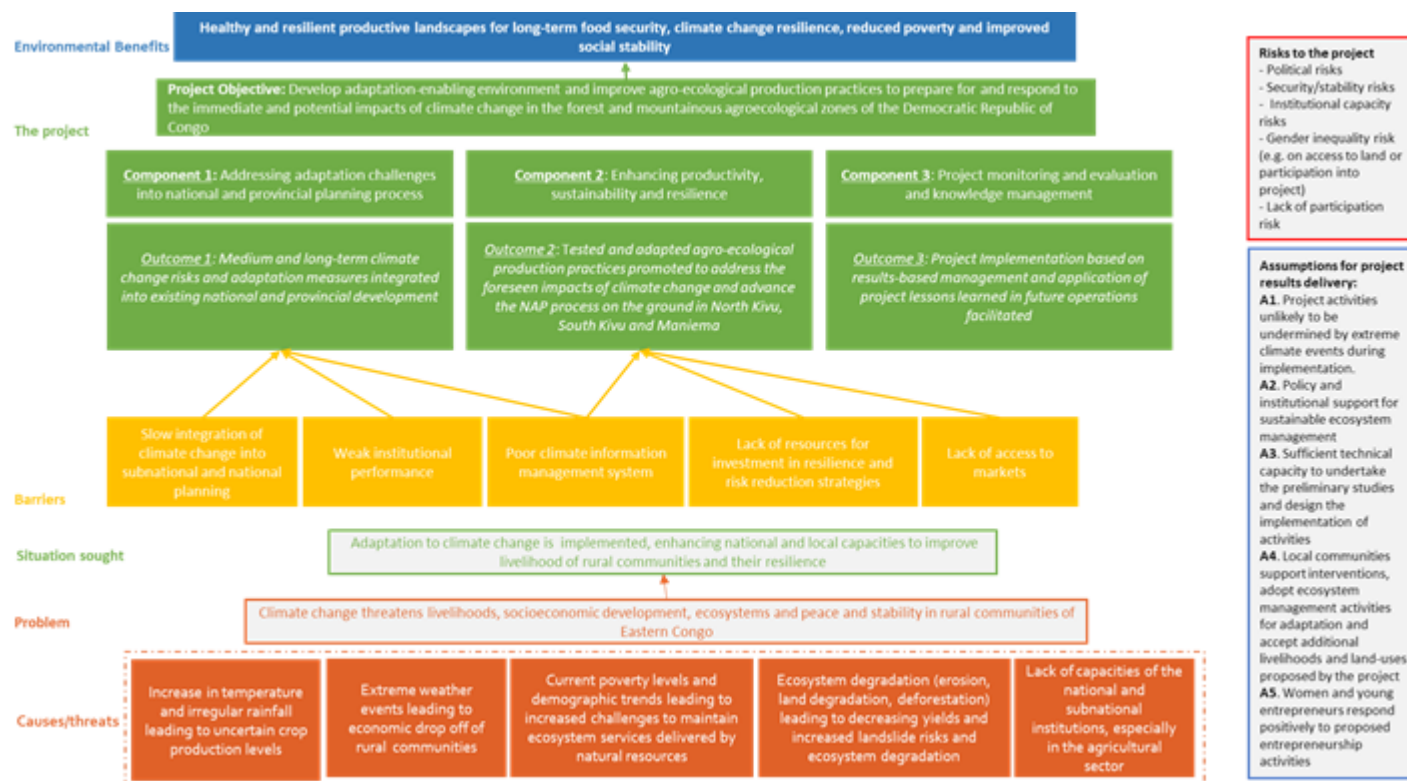
End of project target:

- M&E framework developed;
- Mid-term evaluation conducted;
- Project communication and visibility strategy developed and implemented;
- Final evaluation conducted;

Capitalization document on best practices and lessons learned from NAP pilots in several provinces of the DRC.

<p><i>Output 3.1:</i> Project monitoring system providing systematic information on progress in meeting project outcomes and output targets</p>	<p>This output will ensure that project results are properly monitored throughout implementation. Planned activities are:</p> <ul style="list-style-type: none"> · Organize a project inception workshop; · Develop a performance framework (M&E plan) defining roles, responsibilities, and frequency for collecting and compiling data to assess project performance, and defining baselines for all indicators; · Develop project progress reports every 6 months; · Conduct a mid-term evaluation; · Conduct a final evaluation.
<p><i>Output 3.2:</i> Project-related “best-practices” and “lessons learned” disseminated</p>	<p>This output will ensure that knowledge produced by the project is shared and disseminated to inform future initiatives. Related activities are:</p> <ul style="list-style-type: none"> · Develop and implement a project communication and visibility strategy; · Prepare and publish a stocktaking document on lessons learned and best practices from past and on-going NAP pilots in different provinces of the DRC (i.e taking due account of the work conducted under the GCF/NAP project); · Organize a project terminal workshop.

The theory of change of the project is presented in the following figure.



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

The proposed LDCF project will build upon and complement the baseline initiatives presented above to address remaining gaps hindering the water and agricultural sector’s climate resilience in the Provinces of intervention and at national level. The following paragraphs describe the additionality of the proposed project (i.e. what the project will bring) with regards to the baseline initiatives, for each of its components.

The Government of DRC requests the LDCF to finance additional cost aiming to promote climate resilient growth and adaptation in North Kivu, South Kivu and Maniema. The project objective is to strengthen the enabling environment for climate risk management that can improve agroecological production practices to withstand the immediate and potential impacts of climate change. The target regions include the forest and mountainous agroecological zones of Democratic Republic of Congo. In order to achieve the above, specific project outcomes will include:

Component 1: Addressing adaptation challenges into national and provincial planning and budgeting processes

Given the important size and level of complexities (i.e. political, social, geographic) of the country, this component will focus on developing a framework to address issues relating to coordination, mainstreaming, advocacy, training, awareness raising, and resource allocation at the national, provincial and local levels to support climate resilient growth. It will complement the work conducted with the GCF-financed NAP project. Approved in 2018, this project's objective is to advance the adaptation planning process for priority climate sensitive sectors and regions in DRC. The project will benefit the Ministries of Planning and Budget, and the sectoral ministries in charge of priority sectors (agriculture, rural development, coastal management, biodiversity, energy, transport and water and sanitation) and provincial governments in the five target provinces of this project (Kwilu, Tshopo, Haut Katanga, Kinshasa and Kongo Central Provinces). Building on GCF-NAP achievements and lessons learned, the LDCF project will work specifically with the agriculture and rural development and water sector. It will also work on the PDPs and NAP pilots in South-Kivu, North-Kivu and Maniema, benefiting from the experience in the provinces covered by the GCF-NAP project and previous GEF-funded projects (PANA-AFE and PANA-ASA). Finally, it will work on the establishment of a climate change knowledge platform to reduce the data management and dissemination gap currently existing in the DRC.

Component 2: Enhancing productivity, sustainability and resilience of rural farmers, in particular women and the youth in Eastern DRC

In the 3 provinces of NK, SK and Maniema, ongoing projects support agricultural development and value-chains organization. However, they do not include resilience to climate change as a central focus of their intervention. Without LDCF resources, the value chain of suppliers and support for agriculture in target zones will remain at a low level of capacity to withstand likely climate change impacts. The availability of tested and adapted genetic material that is suitable in the local context and in large enough quantities and quality will be in short supply and not available for vulnerable farmers. The challenge that the project seeks to address is to provide enhanced agricultural genetic material to producers as a key means to increase agricultural productivity and increase the resilience of vulnerable populations to the impacts of climate change. This will be done with the support of the national seeds offices (SENASA, INERA, SNV and IITA).

LDCF resources will also be used to instill and disseminate agroecological practices and landscape rehabilitation in specific project sites, supporting climate-smart agriculture to demonstrate the potential of such an approach in those mountainous regions in terms of resilience to climate change and climate shocks, soil conservation, and economic development of the beneficiary communities.

Currently producers in the target areas have no access to critical information such as seasonal forecasts. This is partly due to the low coverage of mountainous and forest areas. LDCF resources will aim to install early warnings and weather forecasts capacities in North Kivu, South Kivu and Maniema, therefore support their efforts to manage their productivity. Indeed, climate information is very sensitive to the ecological situation and is highly disparate depending on the location. Given the size of DRC and its ecological diversity, there is a strong need to reinforce provincial climate information systems.

5) Global environmental benefits

The NAP process has been designed to create a comprehensive system through which countries can integrate climate change adaptation into national and local planning. Through the support to the setting-up of the NAP institutional framework in priority sectors, the project will contribute to improving planning of adaptation, which in turn will offer guidance for

internal and donor supported development resourcing, monitoring and assistance, as part of national, provincial and sectoral strategic planning, policy and budgeting. Targeting, among others, the Ministries of Planning and Finance also constitutes an innovative approach, as these central actors for development planning have so far not been involved in adaptation planning. Raising awareness and building capacities to integrate CCA into planning and budgeting within these institutions could yield significant results in terms of effectively taking CCA into account in the mid- and long-term and progressing towards a paradigm shift where climate change is fully part of development planning. Besides, the planning process would not only encompass government agencies and ministries, but also communities, the private sector, local municipalities, non-governmental organizations, and other relevant stakeholders.

The LDCF project will also build and increase the adaptive capacity of smallholder farming systems and rural livelihoods to climate change-driven risks. This will be achieved by empowering smallholder farmers to use available climate information, plan and implement technologies that will promote climate resilient production landscapes. A total of 6000 direct beneficiaries are targeted by the project, of which a minimum of 2000 female farmers. The project will make available improved seeds to at least five hundred (500) multipliers, among them 50% women so that they can withstand climatic shocks (drought and wet years) and reduce economic, crop and human losses in the case of these extreme events caused by climate change. It will help them to plan and promote climate-resilient techniques that increase the resilience of the production landscape and reduce the impact of climate hazards on farms and livelihoods (a total of 6000ha under improved/climate resilient practices is targeted). Expected direct economic benefits for targeted smallholder farmers and small-scale processors at the various levels of the value chain include: (i) input supply; (ii) improved access to better and more affordable seed, planting materials and other inputs; (iii) access to meteorological information; (iv) developing marketable and investable business models. These benefits, by improving the resilience of vulnerable farmers' livelihoods and diversifying these livelihoods, will reduce their vulnerability to expected climate change and the risk of food insecurity. In adopting a landscape approach to climate change adaptation, the proposed investments in agriculture productivity and potential linkages of farmers to markets and priority commodity chains would integrate wider risks that have direct impact on productivity and rural assets. The project is also expected to bring non-quantifiable institutional benefits: enhanced effectiveness of national agencies (INERA, METTELSAT) and communities' radios to deliver to farmers. It will also impact on governance by enabling women and youth to have voice in the developmental process. The landscape approach will have strong impacts in soil quality through the adoption of sustainable land management, encompassing soil erosion control and water sedimentation in mountainous regions, water harvesting techniques and soil and water conservation in the landscape. These interventions will have sustainable adaptation impacts due to the reduction in the likelihood and impacts of erosion, landslides and flooding as well as the increase in soil quality and yields in the long term.

6) Innovativeness, sustainability and potential for scaling up

The development of the NAP process in the sectors of Agriculture and rural development and Water is an innovative approach of pooling resources, strengthening capacities, sharing knowledge, working in partnership with the various organisations already in place to build on existing work and successes, and ensure a sustainable impact of the project covered by the numerous actors engaged in the process. In particular, the focus on the Ministries of Planning and Finance, which have a central role in the national framework, will support the dissemination of climate change consideration among the different sectors, while the development of a detailed frameworks for Agriculture and rural development and Water sectors will provide guidance for upscaling in further sectors.

More comprehensive measures to advance adaptation planning, looking at how to address the main gaps and build capacities, which will be tested at provincial level, could be replicated at a later stage in other provinces, hence scaling-up the NAP process to a wider part of the country. The support to the mainstreaming of climate change into PDPs and the implementation of NAP fully-fledged pilots in provinces had already been highlighted as part of the NAP roadmap formulated in November 2014, and the establishment of pilot provinces is expected to enable scaling-up to other provinces through experience sharing. Component 3 of the project will ensure that experience sharing is realized in an organised and efficient way, opening the floor for replication.

The LDCF financed project will undertake activities aimed at the mobilization and engagement of local communities and their various committees, women and young groups, seed providers and associations as cost effective way of coordinating their activities and minimizing trade-offs and conflicts under multi-purpose and multi-stakeholders usage of the water resources without compromising the resilience of the system. Experiences from other places have shown that both the extent of long-term benefits, and in particular their sustainability, are directly related to the community ownership promoted through such mobilization efforts and strengthening of community-based groups. A key aspect of the programme is to develop the capacity at the local level to ensure ownership and sustainability of the proposed interventions. The envisaged training of the population and extension services will build their capacities and will create the conditions for sustainable resilience and local development, by fostering the emergence of community groups capable to act appropriately and in sufficient time to reduce the possibility of harm or loss.

Scaling-up project best practices would help to better disseminate how livelihoods can be better sustained under climate changes and draw synergies from other programs, projects, processes and communities. The project can potentially share:

- Measurable, quantifiable and qualitative results and how to adhere to high-quality and fair
- practices/processes;
- Process for linking with community-managed institutions, benefits and ownerships;
- Participation, decision-making, local and indigenous expertise, partnerships, networking, sharing of costs,
- equity and enhanced gender relations;
- How to meet local demands, link markets, and sustain actions on scale and areas;
- Adaptive management, informal and responsive arrangements and systems created, especially for income
- generation activities, marketing arrangements etc.;
- Linkages with institutions/banks for access of resources, loans, repayments etc.; and
- Technology learnt, adopted, disseminated by the partners with other partners and institutions.

Documenting adaptation practices and technologies will constitute a precondition and point of departure for the process of scaling-up and out (quantitative scaling-up). The participatory processes and other collaborative planning approaches that will be developed and used will enable multiple stakeholders to share knowledge, develop awareness, and improve learning and foster replication in other sites.

A.2. Child Project?

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

N/A

A.3. Stakeholders

Please provide the Stakeholder Engagement Plan or equivalent assessment.

The success of project intervention requires the active involvement and participation of the different stakeholders. Key stakeholders for the project include (i) ministries, provincial governments and other local authorities implementing the project and/or benefiting from it, (ii) cooperating partners, NGOs, and Civil Society Organizations (CSOs) involved in direct support, and (iii) communities that are living in the targeted intervention areas, in particular agricultural entrepreneurs including the participation of potentially vulnerable groups such as women and youth.

A detailed stakeholder engagement plan was designed based on a series of meetings and workshops organised with stakeholders during the preparation phase of the project. The plan is presented in Annex 4 of the Project Document. Additional information on stakeholder engagement is provided in section 4 of the document on “results and partnerships”.

Documents

Title

Submitted

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

Select what role civil society will play in the project:

Consulted only;

Member of Advisory Body; Contractor;

Co-financier;

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

Executor or co-executor;

Other (Please explain) Yes

Civil society will play a critical role in the project as it will be alternately a beneficiary of the project, a consulted actor and a member of the provincial advisory committee acting like a provincial steering committee. For instance, civil society organisations will be mostly consulted under the activities of the Outcome 2, but they will also be beneficiary of the awareness and sensitization activities and for some of them, actively involved in the establishment of the master trainers and the integration of gender aspects. Furthermore, it is worth noting that representants of the CSOs are present in the provincial advisory committees.

Table 2: Stakeholder Engagement

Stakeholder name - institution	Institutional Mandate	Participation in the project <i>(in the main outputs)</i>
Governmental Bodies – National Level		
Ministry of Environment and Sustainable Development (MEDD)	Involved in the agricultural and rural sector through its provincial divisions and specialized services	Executing partner <i>(All outputs)</i>
Sustainable Development Division (Direction du Développement Durable- DDD)	National GEF Focal Point	Overall coordination of activities; Ensure coordination among ministries involved in the project <i>(All outputs)</i>
Institut National d'études et de Recherche Agricole (INERA)	Coordination and monitoring of all agronomic research Experimentation in applied agriculture and forestry;	Provide basic infrastructure to the project (laboratories, etc.) Produce seeds and cuttings for multiplication Agro-meteorological observation <i>(Outputs 1.2; 2.1; 2.2; 2.3)</i>
SENASA (Service National de Semences)	Control and certification	Training and supervision of agro-multipliers Quality control and seed certification Training and supervision on the use of fertilizers and other inputs <i>(Output 2.2)</i>
Other sectoral ministries include : · Ministry of Planification · Ministry of Rural Development · Ministry of Environment · Ministry of Energy and Water Resources · Ministry of Gender · Ministry of Fisheries and Livestock · Ministry of Finance	Implement government policy in the different sectors	Involved in the integration of climate change risks and adaptation in the existing national planning through the NAP framework. Consulted and engaged in the establishment of the information platform <i>(Outputs 1.1; 1.2; 2.1)</i>
Service National de Vulgarisation (SNV)	Agricultural extension services	Dissemination of agricultural practices and techniques <i>(Outputs 2.1; 2.2)</i>

Service National de l'Hydraulique Rurale (SNHR)	Rural water resources mobilization and management	Development of water mobilization infrastructures Promotion of water management techniques (<i>Outputs 1.1; 2.1</i>)
Service national des Cooperatives (SNCOOP)	Farmer supervision	Training and supervision of producers and women groups on organization skills (<i>Output 2.2</i>)
METTELSAT (National meteorological institution)	Meteorological, agro meteorological observation Climate and weather forecasting Remote sensing	Agro-meteorological observation Development of seasonal forecasts and agricultural calendars Support training on climate information (<i>Outputs 1.2; 1.3; 2.3</i>)
Governmental bodies – Provincial and decentralized level		
Provincial Inspections for Agriculture, Fisheries and Livestock (IPAPPEL)	Participate in the definition of agricultural policies monitor their application, control and regulate agricultural activities and coordinate the activities Min Agri at local level	Engaged in the production and dissemination of improved agrometeorological data together with the METTELSAT (<i>Outputs 2.2; 2.3</i>)
Provincial Inspections Rural Development (IPRODER)	Participate in the definition of rural development policies monitor their application, control and regulate agricultural activities and coordinate the rural development activities at local level	Engaged in the production and dissemination of improved agrometeorological data together with the METTELSAT (<i>Outputs 1.3; 1.4; 2.1; 2.4</i>)
North Kivu, South Kivu and Maniema provincial authorities	Representation, integration and coordination of activities by all decentralized ministries	Contribution on development of local NAP (<i>Outputs 1.3; 1.4</i>)
Environment Provincial coordination	Environmental sanitation and public sanitation Nature Conservation and Facility Management	Host the PIU Contribution on development of local NAP (<i>Outputs 1.3; 1.4; 2.4</i>)
Provincial Advisory Committee	Advise on any proposed provincial environmental regulations. Can seize the provincial governor.	Provincial Steering Committee (<i>Outputs 1.3; 1.4; 2.4</i>)
Research		
International Institute of Tropical Agriculture (IITA)	non-profit institution that generates agricultural innovations	Contribution to the improvement of the production and dissemination of agrometeorological information (service provider for capacity strengthening) in coordination with METTELSTAT and ACMAD (<i>Outputs 2.1; 2.2; 2.4</i>)
Universities and research centre	Research /development	Contribute to the development of the training kit to train ministries' staff on economics/cost-benefit analysis and climate adaptation, as well as management. (<i>Outputs 1.3; 2.3</i>)
NGOs, CBOs and local communities		

Farmers Organizations and Farmers cooperative associations	Support agricultural sector Support small farmers in production and marketing	Project beneficiaries Engaged in master trainers setting, development of supply chains of inputs and seeds, and production and dissemination of agrometeorological data <i>(Outputs 2.1; 2.2; 2.3; 2.4)</i>
Rural Radios	Communication, awareness raising and knowledge dissemination	Climate information and adaptation practices dissemination <i>(Output 2.3)</i>
Women and youth organizations	Awareness, supervision and training of women farmers	Project beneficiaries Replication of project lessons Awareness raising <i>(Outputs 1.3; 2.1; 2.2; 2.4)</i>
Media	Information and dissemination	Involve in awareness and outreach activities Information and dissemination <i>(All outputs)</i>
Churches	N/A	Project beneficiaries Replication of project lessons Awareness raising <i>(Output 1.3)</i>
Community leaders	N/A	Project beneficiaries Replication of project lessons Awareness raising <i>(Output 1.4)</i>
Indigenous people	N/A	Project beneficiaries Replication of project lessons Awareness raising <i>(Outputs 1.3; 2.3)</i>
CSOs	Non-State, not-for-profit, voluntary entities formed by people	Involve in the integration of climate change issues into the PDPs and in the awareness and outreach activities <i>(Outputs 1.3; 2.3)</i>
Private sector		
Fédération des Entreprises du Congo (FEC)	Foster a favourable business environment	Promotion of women's and youth entrepreneurship <i>(Output 2.4)</i>
Confédération des Petites et Moyennes Entreprises du Congo (COPEMECO)	Foster a favourable business environment	Promotion of women's and youth entrepreneurship <i>(Output 2.4)</i>

Entrepreneurs	N/A	Project beneficiaries Replication of project lessons Awareness raising (Output 2.4)
Development partners		
PNUD	GEF Agency	Co-financing
IFAD (PASA-NK project and PADRIR)	Finances the PASA- project in North Kivu and the second phase of the PIRAM project still under formulation	Co-financing
UN Women (project " Autonomisation économique des femmes rurales par une agriculture résiliente aux changements climatiques)°	UN organization on gender equality and women autonomization	Involve in the integration of gender issues into the PDPs and in the awareness and outreach activities (Outputs 2.1; 2.4)

A.4. Gender Equality and Women's Empowerment

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

Gender equality is at the core of the proposed project that will undertake a gender-responsive approach throughout all its components, and was designed using a specific gender lens, in particular by taking a gender analysis as PPG stage. The results of this analysis have guided the project conception.

Political and institutional CCA mainstreaming and training will be performed by thoroughly considering the impact of women and by promoting their empowerment. Under the first component, a gender-sensitive approach will be used to mainstream climate change adaptation into policies and plans and translate them into actions.

Under the second component, the project will focus on supporting women entrepreneur to develop marketable and investable business models on transformation, conservation and commercialization of agricultural products.

Finally, the Project Implementation Unit will include a gender expert that will ensure that gender mainstreaming is effectively carried out, and the project coordination unit in the provinces will also count with a gender assistant that will liaise with the identified key stakeholders relevant in terms of gender equality and will ensure women's participation in the project activities.

Documents

Title

Submitted

Gender Analysis and Action Plan

Gender Action Plan

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

Yes

If yes, please upload document or equivalent here

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

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

Improving women's participation and decision making Yes

Generating socio-economic benefits or services or women Yes

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

Yes

A.5. Risks

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

The risk management approach is presented in the Project Document in *Section XI. Risk Management* and detailed in *Appendix V. UNDP Atlas Risk Log*.

A.6. Institutional Arrangement and Coordination

Describe the Institutional arrangement for project implementation. Elaborate on the planned coordination with other relevant GEF-financed projects and other initiatives.

Roles and responsibilities of the project's governance mechanism:

Implementing Partner: The UNDP will execute this project, under the its National Implementing (NIM) modality.

The implementing partner will be the Directory for Sustainable Development (DDD) of the Ministry of Environment and Sustainable Development, who will closely coordinate project implementation with the Ministers in Agriculture, Water and Provincial Authorities

The Implementing Partner is the entity to which the UNDP Administrator has entrusted the implementation of UNDP assistance specified in this signed project document along with the assumption of full responsibility and accountability for the effective use of UNDP resources and the delivery of outputs, as set forth in this document.

The Implementing Partner is responsible for executing this project. Specific tasks include:

- Project planning, coordination, management, monitoring, evaluation and reporting. This includes providing all required information and data necessary for timely, comprehensive and evidence-based project reporting, including results and financial data, as necessary. The Implementing Partner will strive to ensure project-level M&E is undertaken by national institutes and is aligned with national systems so that the data used and generated by the project supports national systems.
- Risk management as outlined in this Project Document;
- Procurement of goods and services, including human resources;
- Financial management, including overseeing financial expenditures against project budgets;
- Approving and signing the multiyear workplan;
- Approving and signing the combined delivery report at the end of the year; and,
- Signing the financial report or the funding authorization and certificate of expenditures.

Responsible Parties: The provincial coordination of the environment is the direct partner responsible for the implementation of the project. In practice, the Project Coordination Units (PCU) at the provincial level will be hosted at the provincial coordination of the environment for capacity building and skills transfer. It will, through its technical services, ensure the consideration of climate change issues in the areas of intervention.

The Ministry of Environment and Sustainable Development will supervise the project and its strategic management through periodic supervision missions. It will also attend the National Steering Committee together with:

- The representative of the Ministry in charge of Agriculture
- The representative of the Ministry in charge Water
- The representative of the Ministry of Finances
- The provincial coordinator of the Environment

The **Project Implementation Unit (PIU)**, based in Kinshasa, will assure day-to-day implementation and management of project activities. Members for the PIU will be recruited by DDD with support from UNDP in its role as a GEF IA. The PIU will consist of one National Project Manager (PM), one M&E expert, one Finance and Administration Manager, and a communication and gender specialist. The project will also develop MOU with extension services based in target regions to support resilient activities.

A **Project Coordination Unit (PCU)** will be set up in each project intervention province, specifically in Goma, Bukavu and Kindu and will ensure close collaboration with intervention municipalities and communities. In order to facilitate capacity building and knowledge transfer, these units will be hosted at the Environment Provincial Coordination. These Unit will consist in the provincial coordinator, an M&E officer and a gender and research & development assistant.

These provincial units will be assisted by the **Provincial Advisory Committees** that will play the role of provincial steering committees and reflect the decisions of the national steering committee. They will facilitate the work of technical services and decentralized territorial entities, as well as supervise the interventions at the provincial level. The Provincial minister of Environment will preside the provincial advisory committees. Representatives of the decentralized territorial entities and technical agricultural services will also take part to it.

Project stakeholders and target groups:

Project partners include the provincial technical services in the agricultural and rural sector such as IPAPPEL, IPDER, SENASEM, SNV, SNCOOP that will help implement the project at local level namely with regards to the R&D, agricultural advisory and extension, seed certification, etc.

INERA, through the stations of Ndihera (and its Goma Liaison Office) and Kibangula and the Mulungu Research Center, will bring its expertise in varietal improvement. It will develop research directed towards short-cycle resilient varieties. INERA will also have to collect, process, analyze and organize agro-meteorological information; these must be presented in exploitable form by the peasants.

METTELSAT will contribute to the collection and processing of meteorological information. This information will be transmitted to INERA for the purpose of centralization and computerization for the establishment of a database.

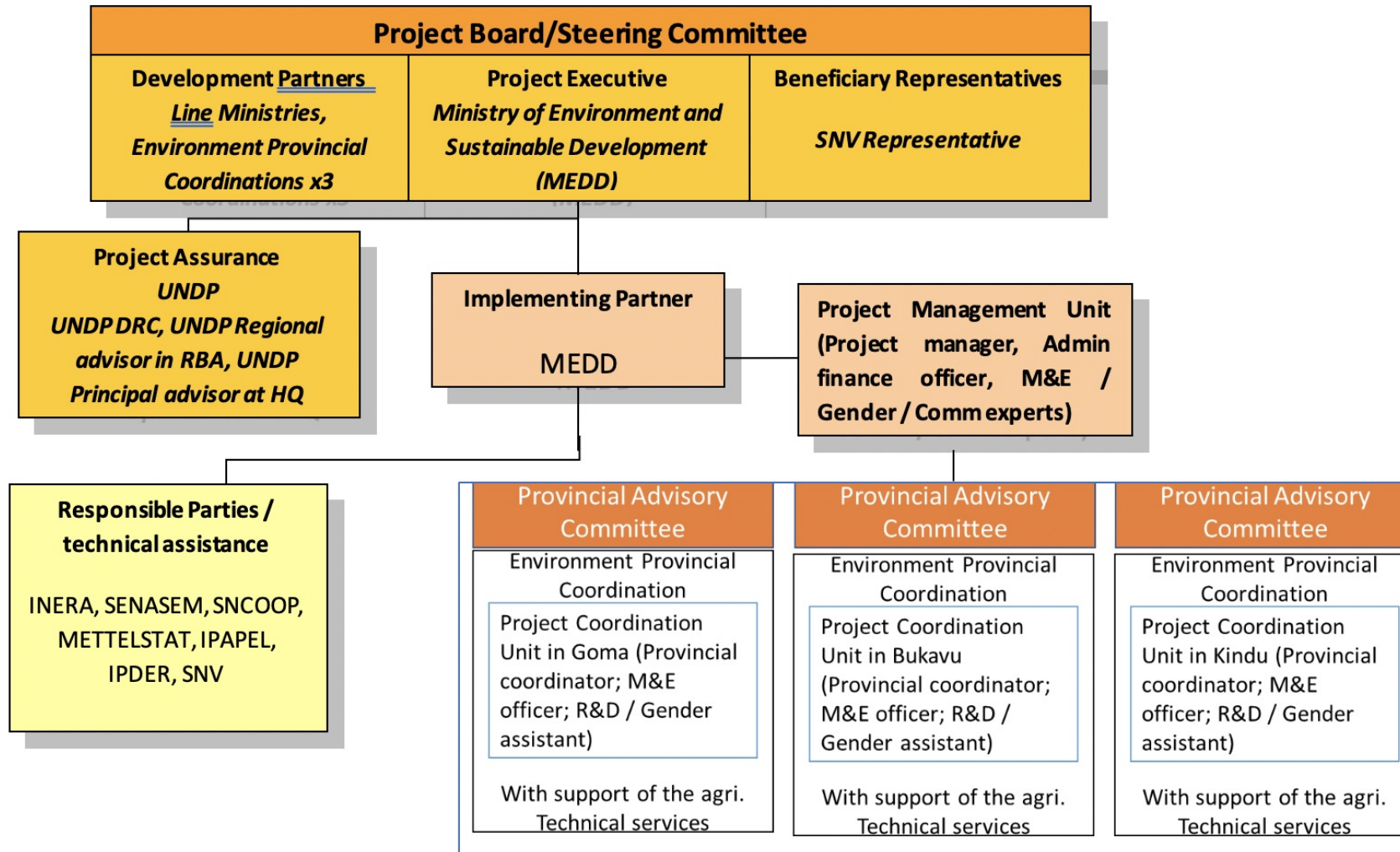
The Provincial Division of Gender, Family and Children (GEFAE), as a technical body, is identified as one of the key partners in the promotion of gender, including through advocacy and the mobilization of women's associations.

UNDP: UNDP is accountable to the GEF for the implementation of this project. This includes oversight of project execution to ensure that the project is being carried out in accordance with agreed standards and provisions. UNDP is responsible for delivering GEF project cycle management services comprising project approval and start-up, project supervision and oversight, and project completion and evaluation. UNDP is responsible for the Project Assurance role of the Project Board/Steering Committee.

A strict firewall will be maintained between project oversight costs and personnel (called implementation by the GEF) and implementation of the project costs and personnel (called execution by the GEF).

Project organisation structure:

Project Organisation Structure



Project Board: The Project Board (also called Project Steering Committee) is responsible for taking corrective action as needed to ensure the project achieves the desired results. In order to ensure UNDP's ultimate accountability, Project Board decisions should be made in accordance with standards that shall ensure management for development results, best value money, fairness, integrity, transparency and effective international competition.

In case consensus cannot be reached within the Board, the UNDP Resident Representative (or their designate) will mediate to find consensus and, if this cannot be found, will take the final decision to ensure project implementation is not unduly delayed.

-
Specific responsibilities of the Project Board include:

- Provide overall guidance and direction to the project, ensuring it remains within any specified constraints;
 - Address project issues as raised by the project manager;
 - Provide guidance on new project risks, and agree on possible mitigation and management actions to address specific risks;
 - Agree on project manager's tolerances as required, within the parameters set by UNDP-GEF, and provide direction and advice for exceptional situations when the project manager's tolerances are exceeded;
 - Advise on major and minor amendments to the project within the parameters set by UNDP-GEF;
 - Ensure coordination between various donor and government-funded projects and programmes;
 - Ensure coordination with various government agencies and their participation in project activities;
 - Track and monitor co-financing for this project;
 - Review the project progress, assess performance, and appraise the Annual Work Plan for the following year;
 - Appraise the annual project implementation report, including the quality assessment rating report;
 - Ensure commitment of human resources to support project implementation, arbitrating any issues within the project;
 - Review combined delivery reports prior to certification by the implementing partner;
 - Provide direction and recommendations to ensure that the agreed deliverables are produced satisfactorily according to plans;
 - Address project-level grievances;
 - Approve the project Inception Report, Mid-term Review and Terminal Evaluation reports and corresponding management responses;
- Review the final project report package during an end-of-project review meeting to discuss lesson learned and opportunities for scaling up.

The composition of the Project Board must include representatives of the Ministry of Environment and Sustainable Development, Ministry of Agriculture, Ministry in charges of Water, Ministry of Finance and the Environment Provincial Coordination

Project Manager: The Project Manager has the authority to run the project on a day-to-day basis on behalf of the Implementing Partner within the constraints laid down by the Project Board. The Implementing Partner appoints the Project Manager, who must be different from the Implementing Partner's representative in the Project Board.

The Project Manager's primary responsibility is to ensure that the project produces the results specified in the project document, to the required standard of quality and within the specified constraints of time and cost. The Project Manager will inform the Project Board and the Project Assurance roles of any delays or difficulties as they arise during implementation so that appropriate support and corrective measures can be adopted. The Project Manager will remain on contract until the Terminal Evaluation report and the corresponding management response have been finalized and the required tasks for operational closure and transfer of assets are fully completed.

Specific responsibilities include:

- Manage the overall conduct of the project.
- Plan the activities of the project and monitor progress against the approved workplan.
- Execute activities by managing personnel, goods and services, training and low-value grants, including drafting terms of reference and work specifications, and overseeing all contractors' work.
- Monitor events as determined in the project monitoring plan, and update the plan as required.
- Provide support for completion of assessments required by UNDP, spot checks and audits.
- Manage requests for the provision of UNDP financial resources through funding advances, direct payments or reimbursement using the FACE form.
- Monitor financial resources and accounting to ensure the accuracy and reliability of financial reports.
- Monitor progress, watch for plan deviations and make course corrections when needed within project board-agreed tolerances to achieve results.
- Ensure that changes are controlled and problems addressed.
- Perform regular progress reporting to the project board as agreed with the board, including measures to address challenges and opportunities.
- Prepare and submit financial reports to UNDP on a quarterly basis.
- Manage and monitor the project risks – including social and environmental risks - initially identified and submit new risks to the Project Board for consideration and decision on possible actions if required; update the status of these risks by maintaining the project risks log;
- Capture lessons learned during project implementation.
- Prepare revisions to the multi-year workplan, as needed, as well as annual and quarterly plans if required.
- Prepare the inception report no later than one month after the inception workshop.
- Ensure that the indicators included in the project results framework are monitored annually in advance of the GEF PIR submission deadline so that progress can be reported in the GEF PIR.
- Prepare the GEF PIR;
- Assess major and minor amendments to the project within the parameters set by UNDP-GEF;
- Monitor implementation plans including the gender action plan, stakeholder engagement plan, and any environmental and social management plans;
- Monitor and track progress against the GEF Core indicators;
- Support the Mid-term review and Terminal Evaluation process.

Additional Information not well elaborated at PIF Stage:

A.7. Benefits

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

The project is expected to deliver direct socio-economic benefits at local level. The project will support the creation of 300 farmer field schools that will help strengthen the capacities of the farmer communities to establish sustainable land and water management measures. The project will also contribute to the improvement of the access to improved seeds and to quality fertilizers and fertilizer use information, as well as to agrometeorological information. In doing so the project will directly improve the ability of these communities to cope with climate change through food security.

Moreover, the project will contribute to the development of economic opportunities and social stability by developing marketable and investable business models of agricultural products. This will allow will support entrepreneurship and job creation and will therefore ensure climate resilient livelihoods for the most vulnerable groups (women and youth). The project will stimulate a real dynamic in the creation of women micro-business.

The component 2 of the project will in-fine increase the diversification of livelihoods activities and improve the safety nets of vulnerable households.

The Project includes the important gender perspective in its activities and targets. Women must represent 30% of the participants to the farmer field schools, just as young people, to be trained on agronomic measures and their capacities will be strengthened to process and market agricultural products and services. For instance, they will be engage as multipliers. By doing so, the project will enhance the cohesion of the society and the empowerment of women.

Finally, the enhancement of communities capacity's to manage natural resources in an agricultural context (land, water, and genetic resources) will promote a better conservation of natural resources (waters, land and forests) and deliver various environmental services (water purification, transportation, less degraded lands, etc.)

A.8. Knowledge Management

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

Knowledge management is specifically addressed by the outcome 3. The output 3.2 aim to ensure that knowledge produced by the project is shared and disseminated to inform future initiatives. Effective knowledge management will be essential in ensuring the continued relevance and impacts of the project, as well as allowing the scaling-up of its results elsewhere in the DRC. That's why the project will develop a communication strategy with clear distribution of role and responsibilities within the stakeholders and prepare a stock-taking document on lessons learned and best practices from NAP pilots. Results from the project will also be disseminated within and beyond the project intervention zone through existing information sharing networks and forums.

Moreover, the project is building on the on GCF-NAP achievements and lessons learned. It is thereby easy to understand the relevance of a unified knowledge system on local knowledge and good practices on CCA, which is what the LDCF project establishes in its output 1.2. The platform will allow the consolidation of the lessons learned on CCA, provide access to improved meteorological information, and help take stock of previous experiences and disseminate relevant information. This platform will be beneficial in the design and implementation of similar future projects.

B. Description of the consistency of the project with:

B.1. Consistency with National Priorities

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

The following national policies and the strategies recognize the priority of the agriculture in the DRC's economy, the challenges imposed by climate change and that poor agricultural extension systems, poor coordination among stakeholders and human resource constraints impose great challenges to the achievement of the country's development goals. The project alignment with them is detailed in the table below.

Table 3: Key Policies and Project Alignment

POLICIES AND STRATEGIES		PROJECT ALIGNMENT
International agreements and contributions		
<ul style="list-style-type: none"> · Party to the RAMSAR Convention on Wetlands of International Importance especially as Waterfowl Habitat (1971) · Party to the United Nations Framework Convention on Climate Change (1993) · National Communications on Climate Change under the UNFCCC in 2000; 2009 and 2015 including the inventory and projections of greenhouse gas (GHG) emissions, mitigation measures, as well as vulnerabilities and adaptation measures to climate change · Party to the Kyoto protocol (2001) 		The project is consistent with all international agreements seeking CCA and mitigation, protection of natural resources such as wetlands or forest resources, in particular by mainstreaming CCA practices at all level
Intended Nationally Determined Contribution (INDC) 2015	The NDC includes adaptation commitments. These are aligned with the priority areas identified in the Third National Communication submitted to the United Nations Framework Convention on Climate Change (UNFCCC), the NAPA and the PSPA-CC. The NDC also integrates additional adaptation measures in response to the mitigation actions proposed in the energy and transport sectors. The priority sectors of action include : Protection of rural and urban communities' livelihoods; improved forest resource management; protection and preservation of ecosystems in coastal areas	The project contributes to the achievement of the INDC's commitment to reduce vulnerability by tackling 2 of the priority sectors of action (protection of the communities' livelihoods and improved forest resource management) through the promotion of climate resilient agricultural practices.
Cross sectoral national policies and strategies / Macro Policy Frameworks		
Poverty reduction Strategy Document (DSCR 2)	Strategic document. In its 4 th pillar "Environment protection and fight against climate change" the DSCR 2 aims to enhance the DRC's unique natural capital, which exploitation is a major factor in the socio-economic development of the country, especially for the most vulnerable population, and is also highly threatened by climate change.	The project is in line with the document, more specifically with the 4 th pillar as it seeks to enhance adaptation to climate change to reduce vulnerability and poverty.

National Strategic Plan for Development (PNSD) 2019-2023	This five-years plan is the strategic reference framework for interventions. Its fifth pillar is dedicated to “environment, sustainable development and balance” and aims to the creation of enabling conditions for industrial development respecting ecological balance and sanitary balance. In a sub-section on climate change it defines the main strategic objectives in the fight against climate change include: (i) Mitigating the effects of climate change in the LULUCF sector; (ii) Adapt the effects of climate change on the impacted sectors (agriculture, energy and forestry).	The project is consistent with the plan and will help achieve the strategic objective on climate change, namely through the climate change adaptation in the agricultural sector.
National Environment, Forests, Waters and Biodiversity Program 2014-2023 (PNEFEB-2)	Forms the guiding strategic document on natural resource management and biological diversity. The strategic axes of intervention of the PNEFEB are: (i) Environmental protection, (ii) Forest resources management, (iii) Water resources management, (iv) Conservation of biological diversity and (v) Institutional strengthening and abilities. Each strategic axis of intervention is articulated in six components: (i) Improvement of the environment in the respect of the ecological balance, (ii) Continuous monitoring of the environment, (iii) Sustainable management of the grounds, (iv) Fight against climate change, (v) Enhancement of environmental services and (vi) Environmental procedural mechanisms.	The project is aligned with the PNEFEB to protect the environment and sustainably manage the natural resources, including lands and forest.
Agriculture		
Climate Change Policy, Strategy and Action Plan 2016-2020 (PSPA-CC)	The PSPA-CC is the leading action plan towards the reduction of emissions in DRC, including through adaptation and mitigation. Adaptation considerations include (i) promoting resilient livelihoods in the face of climate change; (ii) disaster risk reduction to minimize the impact of climate hazards; (iii) building the capacity of local civil society and provincial and local government institutions to better support communities, households and individuals in their adaptation efforts; and (iv) advocacy and social mobilization to understand the underlying causes of vulnerability	The project integrates the adaptation considerations of the PSPA since it will help minimize the impact of CC on livelihoods with the partnership of provincial and local institutions as well as civil society.

National Agricultural Investment Plan (PNIA) 2013 - 2020	<p>The PNIA serves as the national planning framework for national and external funds for the agriculture and rural development sector with a special focus on climate change adaptation. It integrates a number of adaptation and mitigation measures as well as climate risk management measures. A specific transversal component is dedicated to questions related to environment protection so to guarantee a sustainable use of lands</p>	The project contributes to the programme 5 defined by the PNIA on adaptation to climate change. It will contribute to the implementation of measures to reduce soil erosion, strengthen agro meteorological services.
Climate change		
National REDD+ framework strategy (2012)	<p>The final objective of this strategy is to stabilize the forest cover to 63.5% of the national territory from 2030, by acting on multiple direct causes (slash-and-burn agriculture, artisanal logging, consumption of "wood energy") and indirect (strong demographic dynamics, lack of application of the land law, lack of spatial planning, etc.) deforestation and forest degradation. To this end, it calls for a coherent and transversal action based on seven pillars of intervention: spatial planning, land, forest, energy, agriculture, governance and demography. Along other specific objectives the framework strategy aims to reduce the impact of agriculture on the forest while contributing to the country's food security and economic growth for agriculture.</p>	The project is aligned with the objectives of the framework strategy as it will promote agroecological practices that will reduce the pressure of forested areas and reduce deforestation.
National Adaptation Programmes of Action (NAPA) 2006	It identified safeguarding livelihoods of rural and urban communities, sustainable forest management and coastal erosion as top priorities. Several sectoral development strategies incorporate climate change adaptation and environment.	The project will ensure sustainability through alignment of proposed interventions of the NAPA

C. Describe The Budgeted M & E Plan:

The budgeted M&E plan is presented *in Section 6* of the Project Document and summarized here below the mandatory GEF M&E requirements and the M&E budget.

Table 4: Summary of GEF M&E requirements and M&E Budget

Monitoring and Evaluation Plan and Budget:			
GEF M&E requirements	Responsible Parties	Indicative costs (US\$)	Time frame
Inception Workshop	UNDP country office Project Manager	Total: 30,000	Within 60 days of CEO endorsement of this project.
Inception Report	Project Manager	None	Within 90 days of CEO endorsement of this project.
Monitoring of indicators in project results framework	Project Coordination Unit will collect data at provincial level and Project Implementation Unit will complement and aggregate the data	Per year: 5,000	Annually prior to GEF PIR. This will include GEF core indicators.
GEF Project Implementation Report (PIR)	Regional Technical Advisor UNDP Country Office Project Manager	None ⁵³	Annually typically between June-August
Monitoring all risks (Atlas risk log)	Project Manager	<i>Per year: USD 5.000</i>	On-going.
NIM Audit as per UNDP audit policies	UNDP Country Office	<i>Per year: USD 10.000</i>	Annually or other frequency as per UNDP Audit policies
Monitoring of stakeholder engagement plan	Project Implementation Unit	<i>Per year: USD 5.000</i>	On-going.
Monitoring of gender action plan	Project Gender Officer and M&E expert	<i>Per year: USD 5.000</i>	On-going.

Monitoring and Evaluation Plan and Budget:			
GEF M&E requirements	Responsible Parties	Indicative costs (US\$)	Time frame
Monitoring of environmental and social risks, and corresponding management plans as relevant	Project Implementation Unit UNDP Country Office	<i>None</i>	On-going
Project Board Meetings	Project Board UNDP Country Office Project Manager	<i>Total 45,000</i>	Annually.
Reports of Project Board Meetings	Implementing Partner Project Manager	None	Annually.
Lessons learned and knowledge generation	Project Manager	<i>Total 43,000</i>	End of project.
Supervision missions	UNDP Country Office	None ^[1]	Annually
Oversight missions	UNDP-GEF team	None ⁵³	Troubleshooting as needed
<i>Mid-term GEF and LDCF Core indicators and Tracking Tools</i>	<i>Project Manager</i>	<i>USD 10,000</i>	<i>Before mid-term review mission takes place.</i>
<i>Independent Mid-term Review (MTR) and management response</i>	UNDP Country Office and Project team and UNDP-GEF team	<i>USD 55,000</i>	<i>Between 2nd and 3rd PIR</i>

Monitoring and Evaluation Plan and Budget:			
GEF M&E requirements	Responsible Parties	Indicative costs (US\$)	Time frame
Terminal GEF and LDCF Core indicators and Tracking Tools	Project Manager	<i>USD 10,000</i>	Before terminal evaluation mission takes place
Independent Terminal Evaluation (TE) and management response	UNDP Evaluation Specialists and independent evaluation consultants.	USD 73,000	<i>At least three months before operational closure</i>
Translation of MTR and TE reports into English	UNDP Country Office Error! Bookmark not defined.	<i>USD 30,000</i>	<i>As required. GEF will only accept reports in English.</i>
TOTAL indicative COST		<i>USD 446,000</i>	

[1] The costs of UNDP CO and UNDP-GEF Unit's participation and time are charged to the GEF Agency Fee.

PART III: Certification by GEF partner agency(ies)

A. GEF Agency(ies) certification

GEF Agency Coordinator	Date	Project Contact Person	Telephone	Email
Pradeep Kurukulasuriya, UNDP	2/26/2020	Julien Simery		julien.simery@undp.org

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

This project will contribute to the following Sustainable Development Goal (s):				
SDG1: End poverty in all its forms everywhere				
SDG5: Achieve gender equality and empower all women and girls				
SDG13: Take urgent action to combat climate change and its impacts				
SDG15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss				
This project will contribute to the following country outcome (UNDAF/CPD, RPD, GPD): UNDAF Outcome 5: The DRC State improves management of natural resources and associated benefits, disaster management mechanisms and engages into green economy.				
	Objective and Outcome Indicators	Baseline	Mid-term Target	End of Project Target
Project Objective:	Mandatory Indicator 1: # direct project beneficiaries disaggregated by gender (individual people)	0	Up to 2,000 males Min. 1,000 females	Up to 4,000 males Min.2,000 females
	Mandatory Indicator 2: # indirect project beneficiaries disaggregated by gender (individual people)	0	15,000 males 15,000 females	25,000 males 25,000 females
	Mandatory GEF Core Indicators 2 - 5: Core Indicator 4: Area of landscapes under improved practices (ha) – Sub indicator 4.3 Area of landscape under SLM in production systems	0	3,000 ha	6,000 ha
Project component 1	Addressing adaptation in the context of the national and provincial planning and budgeting processes			

<p>Project Outcome 1: Medium and long-term climate change risks and adaptation measures integrated into existing national and provincial development plans, policies and budgets</p>	<p>Outcome indicator 1.1: National and sector-wide policies, plans and processes developed and strengthened to identify, prioritize and integrate adaptation strategies and measures</p>	<p>Key documents of the agriculture, rural development and water resources sectors do not properly account for climate change adaptation</p> <p>PNSD and PNIA planned to be CC mainstreamed within GCF-NAP project</p>	<p>CCA mainstreamed into the Agricultural Research Strategic Plan 2016-2021 (INERA), the Strategic Plan for the Revival of the Agriculture Sector, the National Programme for the Revival of the Agriculture and Rural Development Sector, the National Agricultural Investment Plan 2014-2021 and the three Provincial Agricultural Development plans</p> <p>CCA mainstreamed into water sector strategic documents, in particular the Strategic Action Plan for Water in the DRC, the National Environmental Action Plan, and the National Action Plan for Sustainable Management of Water resources</p>	<p>CCA mainstreamed into the Agricultural Research Strategic Plan 2016-2021 (INERA), the Strategic Plan for the Revival of the Agriculture Sector, the National Programme for the Revival of the Agriculture and Rural Development Sector and the three Provincial Agricultural Development plans</p> <p>CCA mainstreamed into water sector strategic documents, in particular the Strategic Action Plan for Water in the DRC, the National Environmental Action Plan, and the National Action Plan for Sustainable Management of Water resources</p>
	<p>Outcome indicator 1.2: Provincial plans and processes developed and strengthened to identify, prioritize and integrate adaptation strategies and measures</p>	<p>PDPs in the 3 provinces prepared without specific attention paid to climate change scenarios and climate resilient development. No CCA plans exist at Provincial level.</p>	<p>Climate change adaptation is mainstreamed in the 3 provincial PDPs and their Priority Action Programmes (PAPs)</p>	<p>Three Provincial Climate Change Adaptation Plan prepared, and possible sources of funding identified</p>

Outputs to achieve Outcome1	<p>Output 1.1: A NAP framework for the priority sectors of agriculture and rural development and water is set up.</p> <p>Output 1.2: A knowledge management and stock-taking web-based information platform is established to organize social, economic, and environmental data relevant to CCA from a variety of sources, at the national level and including information from the provinces targeted</p> <p>Output 1.3: Gender-responsive climate change adaptation is integrated into the PDPs (and their budgets) of the provinces of North Kivu, South Kivu and Maniema</p> <p>Output 1.4: Gender-responsive fully-fledged NAP pilots are implemented in South Kivu, North Kivu and Maniema</p>
Project component 2	Enhancing productivity, sustainability, and resilience of rural farmers, in particular women and the youth, in Eastern DRC

Outcome2: Tested and adapted agroecological production practices address the foreseen impacts of climate change and advance the NAP process on the ground in NK, SK and Maniema

Outcome indicator 2.1: Extent of adoption of climate-resilient technologies/ practices

Improved seeds and fertilizers: access to and use of improved, climate resilient seeding material is scarce due to lack of availability and quality of affordable climate resilient seed varieties.

Availability and access to, and knowledge for proper use of fertilizers is also very limited.

Agrometeorological information: access to reliable and user-friendly agrometeorological information is very limited and the use of this information by farmers, in particular women, remains undeveloped.

Land Management: about one-third of the population still practicing techniques that are harmful for the environment such as slash and burn. A large majority of the population in project sites lack the knowledge and capacity to implement agroecological practices and soil conservation techniques that would increase their resilience to climate change.

Water Management: water conservation practices, water management at farm level and water sources protection techniques are generally unknown and not implemented.

300 Farmer Field Schools (FFS) in total set up by the project in the 3 provinces with at least 30% female and 30% young (aged 18-30) participants

Improved seeds and fertilizers. At least 50% of the FFS participants (at least 30% of which are women) use improved seeds and have access to quality fertilizers and fertilizer use information.

Agrometeorological information. At least 50% of the FFS participants (at least 30% of which are women) receive and use agrometeorological information on a weekly basis.

Land management: At least 50% of the FFS participants (at least 30% of which are women) use at least 3 improved resilient land management practices.

Water management: at least 50% of FFS participants (at least 30% of which are women) use improved water management practices

300 Farmer Field Schools (FFS) in total set up by the project in the 3 provinces with at least 30% female and 30% young (aged 18-30) participants

Improved seeds and fertilizers. At least 80% of the FFS participants (at least 30% of which are women) use improved seeds and have access to quality fertilizers and fertilizer use information.

Agrometeorological information. At least 80% of the FFS participants (at least 30% of which are women) receive and use agrometeorological information on a weekly basis.

Land management: At least 90% of the FFS participants (at least 30% of which are women) use at least 3 improved resilient land management practices.

Water management: at least 90% of FFS participants (at least 30% of which are women) use improved water management practices

	Outcome indicator 2.2: Population benefiting from the adoption of diversified climate-resilient livelihood options	Access to markets is difficult and processing of agricultural products is underdeveloped in the project sites, affecting in particular women and young people.	200 farmers (70% female and 30% youth) are involved in a sustainable value chain development approach to process and market agricultural products and services.	500 farmers (70% female and 30% youth) are involved in a sustainable value chain development approach to process and market agricultural products and services.
Outputs to achieve Outcome2	Output 2.1: The landscape of three provinces is rehabilitated through an agroecological approach focused on sustainable land management, encompassing soil erosion control, water harvesting techniques and soil and water conservation Output 2.2: The supply chain of locally adapted fertilizers and adapted seeds is developed for distribution channels in key production basins at agreed cost between farmers' associations/ cooperatives Output 2.3: The production and dissemination of agrometeorological information is improved Output 2.4: Women and young entrepreneurs develop financially sustainable business models on processing, conservation and marketing of agricultural products.			
Project component 3	Project monitoring, and evaluation and knowledge management			
Outcome 3: Project Implementation is based on results-based management and application of project lessons learned in future operations is facilitated	Outcome indicator 3.1: Number and types of documents and tools developed to monitor and evaluate the project and share knowledge	0	M&E framework developed; Mid-term evaluation conducted; Project communication and visibility strategy developed and implemented	Final evaluation conducted; Capitalization document on best practices and lessons learned from NAP pilots in several provinces of the DRC
Outputs to achieve Outcome 3	Output 3.1: Project monitoring system providing systematic information on progress in meeting project outcomes and output targets Output 3.2: Project-related "best-practices" and "lessons learned" disseminated			

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

Comments at PIF stage	Response to project reviews
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Germany has raised the risk of overlap between (1) the LDCF project and the GCF NA project; and (2) the LDCF project and the previous GEF-funded project: “Building the Capacity of the Agriculture Sector in DR Congo to Plan for and Respond to the Additional Threats Posed by Climate Change on Food Production and Security” (PANA-ASA, 2010-2015)

(1) The GCF funded-UNDP implemented project “Medium term investment planning for adaptation in climate sensitive sectors in the DRC: Advancing the NAP process” will (i) identify institutional and legal barriers to CCA planning and will enhance coordination and technical capacities of relevant national institutions ; (ii) Ensure CCA is mainstreamed into the National Strategic Plan for Development (PNSD), the National Investment Plan Agriculture (PNIA); (iii) ensure CCA is mainstreamed into the Provincial Development Plans (PDPs) of Kwilu, Tshopo, Haut Katanga, Kinshasa and Kongo central Provinces; (iv) finance readiness activities and help fill the financing gap for priority interventions, recommending policy options for scaling-up financing for adaptation. In designing the proposed LDCF project activities, strong attention was placed into avoiding any duplication of activities.

The LDCF project is aimed at complementing the overall NAP process, through (i) Clarifying the economic risks posed by climate change in the water and agriculture and rural development sectors; (ii) mainstreaming CCA into other key national documents, such as the Agricultural Research Strategic Plan 2016-2021 (INERA), National Agricultural Investment Plan 2014-2021, the Strategic Plan for the Revival of the Agriculture Sector, the National Programme for the Revival of the Agriculture and Rural Development Sector and the three Provincial Agricultural Development plans in NK, SK and Maniema (recently created provinces largely uncovered by previous CCA interventions in DRC due to the conflictual context); (iii) mainstreaming CCA into water sector strategic documents, in particular the Strategic Action Plan for Water in the DRC, the National Environmental Action Plan, and the National Action Plan for Sustainable Management of Water resources; and (iv) translating CC-mainstreamed gender-sensitive investment plans of the Agriculture, Rural Development and Water Resources ministries into action fiches and concept notes and identify potential funding sources.

In addition to the work conducted during the PPG phase to clarify the scope of the proposed LDCF project, the inception phase and inception workshop will be an additional opportunity to present an updated situation of the implementation of the GCF-NAP project and reinforce complementarity between the two initiatives.

(2) PANA-ASA was finalized in 2015 and focused on the provinces of Bandundu, Bas Congo, Katanga and Kasai Oriental. Experience from this project (partnerships between institutions such as INERA, IITA and METTELSAT and the work realized to improve climate information are duly accounted for and will serve as a baseline to the proposed LDCF project.

Germany has recommended reconsidering whether the envisaged sub-components really fit well into an integrated picture despite the activities diversity

During the PPG phase, specific attention has been paid to propose an integrated approach to climate change adaptation in the project sites, covering the various aspects of climate-smart agricultural development, including (i) the rehabilitation of productive landscape and the adoption of climate-resilient agricultural practices, soil and water management; (ii) ensuring technologies such as improved seeding material are made available to farmers through better developed and functioning supply chains; (iii) the better access to meteorological information at farm level, enabling smart decision-making; and (iv) higher value added to agricultural products through enhanced business models, including farm products processing, conservation and marketing, which is a key aspect to reducing financial vulnerability and boosting the investment capacity of the targeted populations. The combination of those various activities will be made possible by: (i) focusing the activities on the identified project sites, to be further replicated in the rest of the provinces; (ii) establishing partnerships with specialized institutions, in particular IITA which has a permanent basis in SK and strong experience (built in DRC and in neighboring countries) in the above aspects of climate-smart agricultural development and national specialized institutions.

Germany would appreciate it if the project considered additional ways of attracting co-financing from the private sector	Co-financing from the private sector has been duly considered. The post-conflict situation in Eastern Congo makes however difficult the development of private sector activities in this part of the country, and some activities, as part of the project, will as a consequence aim to clarify regulatory and practical limitations to private sector engagement in the agricultural inputs sector. IITA's involvement in output 2.4 on entrepreneurship will also aim to boost private sector development and link young/women entrepreneurs to potential private sector buyers and exporters. In short, private sector is duly integrated into the project design, but private sector cofinancing could not be identified at this stage.
Component 2, Output 2.4: it would be helpful to extend the current formulation (agro-ecological landscape approach) by providing more details on the envisaged on-the-ground implementation of this outcome.	Output 2.4 (now output 2.1) has been further developed in the project document. Activities on the ground will be implemented by setting-up farmer field schools in the project sites, training master trainers and facilitators (and by extension, farmers) to climate smart agricultural practices and agronomic measures to adapt to climate change.

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

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

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

PPG Grant Approved at PIF: 200,000 USD			
<i>Project Preparation Activities Implemented</i>	<i>GEF/LDCF/SCCF Amount (\$)</i>		
	<i>Budgeted Amount</i>	<i>Amount Spent Todate</i>	<i>Amount Committed</i>
Technical assistance (design of technical elements as well as all the required financial and administrative components of the project)	120,000	118,346.19	1,653.81
Missions to project sites	21,000	5981.16	15,018.84
Stakeholder consultations and validation workshop	59,000	44,591.00	14,409.00
Total	200,000	168,918.35	31,081.65

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

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

N/A

ANNEX E: GEF 7 Core Indicator Worksheet

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

See separate Annex E. CCA Core Indicators

ANNEX: Project Taxonomy Worksheet

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

See separate Annex F. Taxonomy

<input type="checkbox"/>

Submitted to GEF Secretariat Review

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