



Planning and Financing Adaptation in Niger

Part I: Project Information

GEF ID

8020

Project Type

FSP

Type of Trust Fund

LDCF

Project Title

Planning and Financing Adaptation in Niger

Countries

Niger

Agency(ies)

UNDP

Other Executing Partner(s):

National Council on Environment for Sustainable Development (NCESD)

Executing Partner Type

Government

GEF Focal Area

Climate Change

Taxonomy

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

Rio Markers**Climate Change Mitigation**

Climate Change Mitigation 0

Climate Change Adaptation

Climate Change Adaptation 1

Duration

60In Months

Agency Fee(\$)

847,875

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	6,052,053	25,400,000
CCA-2	Strengthen institutional and technical capacities for effective climate change adaptation	LDCF	977,297	3,800,000
CCA-3	Integrate climate change adaptation into relevant policies, plans and associated processes	LDCF	1,895,650	2,667,282
		Total Project Cost(\$)		8,925,000
				31,867,282

B. Project description summary

Project Objective

To strengthen national/local institutions and communities capacities in adaptation planning & budgeting while using opportunities of water market to advance local adaptation and resilience in Niger

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
1. Improving the planning of adaptation in the water sector	Technical Assistance	Outcome 1: Integrate climate change adaptation in relevant water-related budgeting and planning frameworks at national and local levels	Output 1.1: An operational coordination and consultation mechanism is established to ensure ownership by all actors of the process of mainstreaming CC Output 1.2: National, subnational and local stakeholders understand CCA practices related to sustainable water resources management Output 1.3: Data collection/production, information and communication mechanisms, are in place for the water-sector NAP Output 1.4: CCA is integrated in relevant planning and budgeting frameworks in the water sector	LDC F	1,370,900	2,667,282

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
2. Developping field-tested knowledge for IWRM	Investment	Outcome 2: Disseminate economically sustainable hybrid village water systems and multipurpose infrastructures	<p>Output 2.1: Hybrid household water supply solutions and smallholder irrigation systems are promoted and adopted in vulnerable communities</p> <p>Output 2.2: Multi-purpose infrastructures in sensitive ponds and koris to protect equipment and agricultural land from erosion and flooding are installed</p>	LDC F	6,052,053	25,400,000
3. Fostering evidence-based water policy decisions	Technical Assistance	Outcome3: Establish evidence-based knowledge to inform policies and investments on adaptation in the water sector	<p>Output 3.1: Tailored information services and products on water are set up to respond to the private sector and decision-makers audience needs</p> <p>Output 3.2: Knowledge management and M&E systems are established in the water sector</p> <p>Output 3.3: An online community platform is implemented</p>	LDC F	977,297	3,300,000

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
Monitoring and Evaluation	Technical Assistance	M&E and Knowledge Management		LDCF	154,750	
Sub Total (\$)					8,555,000	31,367,282
Project Management Cost (PMC)						
				LDCF	370,000	500,000
Sub Total(\$)					370,000	500,000
Total Project Cost(\$)					8,925,000	31,867,282

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	CNEDD	In-kind	3,300,000
Government	Ministry of Hydraulics and Sanitation	In-kind	25,400,000
Others	GCF NAP	Grant	2,667,282
GEF Agency	UNDP	Grant	500,000
Total Co-Financing(\$)			31,867,282

Agency	Trust Fund	Country	Focal Area	Programming of Funds	NGI	Amount(\$)	Fee(\$)
UNDP	LDCF	Niger	Climate Change		No	8,925,000	847,875
Total Grant Resources(\$)						8,925,000	847,875

E. Non Grant Instrument

NON-GRANT INSTRUMENT at CEO Endorsement

Includes Non grant instruments? **No**

Includes reflow to GEF? **No**

F. Project Preparation Grant (PPG)

PPG Required

☐

PPG Amount (\$)

150,000

PPG Agency Fee (\$)

14,250

Agency	Trust Fund	Country	Focal Area	Programming of Funds	NGI	Amount(\$)	Fee(\$)
Total Project Costs(\$)						0	0

PART II: Project JUSTIFICATION

1. Project Description

A. describe any changes in alignment with the project design with the original pif[1]¹

Section	Changes since PIF
Global environmental and adaptation problems, root causes and barriers that need to be addressed	<p>The global adaptation problem has not significantly changed since the PIF endorsement. Niger is still one of the most vulnerable country to the impacts of climate change, and is facing an important gap in planning and financing for adaptation. The main change is that, with the focus of the project set on the water sector, the baseline now provides more in-depth information about the vulnerability of water resources. In addition, the selection of sites and communes for the project enabled the identification of specific climate change impacts.</p> <p>In terms of barriers, the Prodoc updated and reformulated the barriers identified in the PIF.</p> <ul style="list-style-type: none">- The first barrier “Informational” was reformulated as Barrier 2: Low level of technical knowledge in alternative solutions for improved water management;- The “Technical” barrier was split between: Barrier 1: Limited availability and poor management of knowledge on identified adaptation options in the water sector for planning and Barrier 3: Absence of a detailed water institutional framework to better integrate CCA in water resources management;- The “Financial” barrier was reformulated as Barrier 4: Insufficient evidence-base to inform CCA investments in the water sector and private sector engagement

Baseline scenario and/or any associated baseline project	<p>Since the endorsement of the PIF, different initiatives were designed and implemented. This enabled the production of knowledge and lessons learned on climate change adaptation options. However, this knowledge has not yet been appropriately capitalized for future use.</p> <p>In addition, the GCF recently approved a NAP project for Niger, that will support the advancement of the NAP process.</p> <p>In light of these changes in the baseline scenario, the PPG carefully took into account new initiatives and clearly mentioned them in the prodoc package to ensure the coordination and the establishment of partnerships during the implementation. One of the main demonstration of this coordination is the selection of the water sector as a focus for this project, considering that the NAP GCF is already supporting other priority adaptation sectors.</p>
Proposed alternative scenario	<p>Since the PIF submission, a number of interventions were implemented and designed in Niger, including the NAP-GCF project. In order to avoid overlapping, the LDCF project will focus its planning and budgeting interventions on the water sector.</p> <p>In addition, under outcome 2, the scale of both outputs was revised:</p> <ul style="list-style-type: none"> - Under output 2.1, 5 villages will benefit from hybrid water systems. This can be explained as the systems require access to water table resources, and only five of the targeted villages were responding to the requirements set for the selection of villages (depth of available water table resources that were neither too easily available, making such an investment irrelevant, or too deep making the investment too costly) - Under output 2.2, following the consultations it was decided that instead of focusing on 3 large scale multi-purpose, that would hardly be replicable and which coverage would be limited, the project would introduce smaller scale infrastructures to benefit a larger range of people. <p>Other minor revisions (rewording) were made since the PIF, including reformulation of components, outcomes and outputs, to clarify them and align them better with the activities.</p>
Additional cost reasoning	By conducting in-depth studies of the needs, the barriers and the options available, the project document is proposing a well examined long-term solution to the problem. While it was briefly identified in the PIF, the PPG enabled the formulation of a Theory of change based on on-the-ground collected results and extensive discussions with stakeholders.
Global adaptation benefits	The global benefits were more clearly stated in the Project Document.
Innovativeness, sustainability and potential for scaling-up	Through the studies and the analysis, the project formulation team has designed detailed innovative, sustainable and scalable outputs, based on the PIF outputs.
Stakeholders	The consultative process adopted for the project formulation has enabled the identification of a large range of partners and stakeholders to engage in the project implementation to ensure a sustainable impact. This engagement across the different sectors is also expected to facilitate the advancement of the NAP process beyond the water sector.
Gender equality and women's empowerment	Since the PIF endorsement, the GEF and UNDP have both strengthened their focus on gender issues and women empowerment. This is reflected in the Prodoc, and the acute challenges women are facing have been a leading aspect in the design of the activities.
Risks	The risks were updated and detailed following the changes in the context since the PIF endorsement.

Institutional arrangements	The institutional arrangements were discussed with key national counterparts during the PPG to ensure the ownership of the project at the national level while ensuring an efficient and effective implementation of the project activities.
----------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

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

A.1. *Project Description.*

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

1. Niger water resources have suffered from the consequences of multiple droughts over the last forty years . The vulnerability of surface water resources to climatic variability has been demonstrated, using flow indices from the Niger River in Niamey, from Komadougou Yobe to Bagara. From 1969 to 1994, there was a 34% decrease in the annual Niger River flows and a decrease of more than 70% in minimum daily flows. The strength of the runoff flow during torrential rains considerably erodes the soil. These runoff waters carry large amounts of sand in the river beds, resulting in the silting of rivers. By comparing pluviometric and temperature data from 59 stations from 1961 to 2004, the 2006 National Adaptation Programme for Action (NAPA) attributed these abnormal fluctuations to climate change.

2. Climate projections reported in the Fifth Assessment Report (AR5) of the Intergovernmental Panel on Climate Change (IPCC) show that Africa’s temperatures are expected to increase by 3-4°C on average (RCP 6.0) across the continent during this century and that this regional trend will be more extreme than the global mean temperature increase. The abnormality of the temperature trends in Western Africa in recent decades was reiterated in the AR5: “Over West Africa and the Sahel near surface temperatures have increased over the last 50 years”.

3. In addition, Global Circulation Models (GCMs) under RCP4.5 to RCP8.5 indicate that mean annual temperature in the Sahel will continue to increase by 2 to 6° C within the next hundred years as a consequence of climate change . In Niger, the study conducted under the Third National Communication (TNC) concludes that the country will experience a temperature increase ranging from 2.5 to 3°C in the next fifty years, mostly due to human-induced climate change . This will result in continuously greater rate of evapotranspiration, causing a reduction in the amount of water available for cultivation, livestock rearing, and human consumption. Inadequate water supplies prevent farmers from continuing normal production practices, which further threatens food security in vulnerable areas due to the high rate of subsistence farming.

4. Rainfall in Niger declined rapidly between 1950 and the mid-1980s and partially recovered during the 1990s and 2000s with the average rainfall in Niger’s crop-growing districts only 8% lower between 2000 and 2009 than the 1920–1969 mean. However, the pluviometric evolution demonstrates that, over the past three decades, rainfalls became increasingly unreliable, both inter-annually and during a particular season. For instance, while the average rainfall calculated over 51 years amounts to 301.2 mm per year, 2011 was particularly marked by a severe drop in annual precipitation (111.2 mm, the smallest amount of rain ever recorded over the entire observation period) . In addition, the dry season

duration increased from 50 days to 4 months. Niger receives most of its rain between June and September, with aggregated precipitation usually amounting to above 500 millimeters (mm), providing enough water for crops and livestock .

5. The main anticipated effects of climate change in Niger, due to the unreliability of water access, caused by temperature increase and rainfall uncertainties, are expected to be an overall reduction of food supply and incomes in the agricultural sector, increasing the incidence of malnutrition and famine in the country. Flooding will also further damage housing and crop fields, triggering the degradation of plant cover, the development of *koris*[1] or silting of market gardeners[2]².

6. Rural areas are particularly vulnerable to climate change. While the project's components 1 and 3 have a nation-wide geographic scope of intervention and application, as they target national-level institutional and research mechanisms, component 2 is targeting the most vulnerable communities in the communes, as identified in the NAPA. These communes located in the regions of Zinder, Tahoua, and Tillabery, are the following ones: Tenhiya, Kao, Takanammatt, Tchintabaraden, Tabalak, Ouallam, Tondikiwindi.

7. In the rural communes of Tenhiya (region of Zinder), the communes of Tabalak, Kao, Tchintabaraden, Takanamat (region of Tahoua), as well as in the communes of Ouallam and Tondikiwindi (region of Tillabéry), climate change has severe consequences for the rural population. The variability in the annual precipitation poses major challenges and rainfalls are increasingly erratic, irregular and poorly distributed in time and space. The main activities of the populations, which are farming, agriculture, livestock, trade, crafts and fishing, are suffering from drought episodes. Consequently, vulnerable populations often do not have sufficient access to water for agriculture and drinking.

8. In the communes of Tenhiya, Takanamat, Tchintabaraden, and Kao, the progressive and accentuated silting of the beds of the water bodies and shallow waters, caused by the solid flows carried by the runoff of water collected by the *koris*, is impacting water access for the surrounding population. In Tabalak, the weak capacity of the commune to cope with threats to the pond, as well as the existence of practices that pollute the pond threaten biodiversity. This is also explained by the mis- and uncontrolled use of pesticides and herbicides. In this site, an increasing number of *koris* claws was observed. In the rural communes of Ouallam and Tondikiwindi, a small mesh of modern water points (cemented wells) do exist in order to respond to the needs of livestock (mainly large ruminants such as beef or dromedaries). But again, climate change is affecting these water points, through a decrease in water flows and a progressive silting of the wells.

9. The table below summarizes information on water access in the targeted sites and their vulnerability to climate change, which is the basis for their selection and their prioritization under the NAPA. Indicative villages were identified based on their estimated rate of access to safe and secured water resources, with a focus on villages with less than 25% access rate. Due to the rapid changes in water access vulnerability, the villages will be reexamined during the starting phase of the project, through discussions with the commune authorities and local populations:

10. In particular, Niger is facing the following barriers for an effective planning and financing of climate change adaptation in the water sector:

Barrier 1: *Limited availability and poor management of knowledge on identified adaptation options in the water sector for planning:* There is currently no capitalization of the knowledge in this sector through a centralised national database, that would gather inputs from decision makers, local populations, the private sector and research institutes. Without scientifically-based and visible evidence of the benefits of improving climate resilience, decision-makers are not provided with relevant knowledge about successful adaptive practices. Consequently, national and local decision-makers are constrained to a limited number of replicable adaptation practices, and are not able to access a comprehensive set of data on lessons learned at the local level. This also hinders the NAP process, which necessitates detailed knowledge and information on the adaptation solutions available.

- **Barrier 2:** *Low level of technical knowledge in alternative solutions for improved water management:* At the local level, there is limited knowledge and understanding of the benefits of possible adaptation options for the improvement of water management systems in a context of climate change. This hampers the introduction of alternative solutions by smallholder farmers (ie. drip irrigation, solar/hybrid water systems), and results in limited economic development with increased rural poverty and land conflicts. Additionally, local populations have a limited understanding of the adaptation solutions to address their vulnerability to droughts and floods (ie. bank restoration), causing food and water insecurity, the destruction of crops and livestock, and the dewatering of numerous ponds.
- **Barrier 3:** *Absence of a detailed water institutional framework to better integrate CCA in water resources management.* The weakness or lack of economic and regulatory instruments (e.g. water pricing systems or efficiency targets) demonstrates the limited awareness of decision-makers about the impacts of climate change on water resources. The integration of CCA is further limited by the weakness of the coordination mechanism and capacity to mainstream CCA into national and regional ministries' staff. In addition, even though the Government of Niger already started the set up of an institutional framework for climate change, informed by various structures, agencies, and committees, the implementation is still weak, due to a lack of capacities and resources.
- **Barrier 4:** *Insufficient evidence-base to inform CCA investments in the water sector and private sector engagement.* CCA, often seen as a mid- to long-term problem, does not benefit from adequate investments in national and regional budgets, and fails to be efficiently monitored and evaluated, including with the use of climate budget lines. This therefore limits the generation and identification of CCA practices for future investments from national and local authorities, as well as the private sector.

2) Baseline scenario and/or any associated baseline project

Planning for adaptation in the water sector

- The Government of Niger made a number of efforts to integrate CCA in planning, including in the 2017-2021 PDES, which Priority Action Plan includes a budget line for the promotion of CCA measures. More specifically, the water sector has been targeted for CCA inclusion, including the 2010 Water Code, the 2005 National Strategy for the Development of Irrigation and Water Harvesting (SNDI/CER), the 2015 Strategy for Small Irrigation , or the National Drinking Water Supply and Sanitation Program (PNAEPA). The country also benefits from the support of the UNDP/SIWI Water Governance Facility to provide the Ministry of Water and Sanitation (MH/A) with human, financial and organizational support, following the GEF funded project “Implementing NAPA priority interventions to build resilience and adaptation sectors of the agriculture sector to climate change in Niger”.
- The implementation and monitoring of environmental policies, including climate change policies, are coordinated by the National Council for Environment and Sustainable Development (CNEDD), created in 1996 and placed under the Office of the Prime Minister. It is supported by an Executive (SE/CNEDD) for the day-to-day management. The

CNEDD is responsible for coordinating the NAP process. In the water sector, the CNEA is the technical advisory body of the government in the definition, implementation, and monitoring of sectoral policies.

- In addition, the GCF has recently approved a NAP project for Niger, implemented through UNDP. This project is planning a range of actions to address the main barriers that hinder CCA mainstreaming into planning in Niger: limited institutional, functional and technical capacity; constrained financial, human and material resources; limited synergies and coordination among climate adaptation initiatives; weak monitoring and evaluation mechanisms; and insufficient data availability, reliability and management. It covers 5 sectors to be identified during the inception phase, and, based on discussions for possible synergies with the LDCF project, will exclude the water sector. Through its ground-setting activities to the NAP process and the strengthening of sectors key to the adaptation of the water sector, this GCF project will therefore provide the basis for an improved understanding of climate change in Niger and planning for adaptation.

- However, the current institutional framework in Niger is not entirely operational, presents several weaknesses (particularly in terms of human resources), lacks coordination, and is unprepared with regards to the mainstreaming of climate change adaptation and mitigation. Despite efforts made thus far by the GoN, the inclusion of climate change into development plans, budgeting, and programs for the water sector at the national and local level remains nascent. In addition, there is a lack of coordination of activities to adequately promote integrated water resources management, in particular for agriculture and rural activities, and to take into consideration adaptation into sectoral budgeting framework.

Water access in rural areas

- Due to the lack of facilities, resources, and capacities, farmers and breeders continue to rely on non-resilient and poor water infrastructures and techniques. Under the baseline scenario, rural communities endure important yield losses due to severe climate events such as floods, droughts, and erratic rainfall patterns that are becoming increasingly frequent.
- Even though a few on-going projects (PANGIRE and PHRASEA II, Mekrou II, ZARESE II) are supporting an improved access to water for rural populations, they fail to introduce climate change adaptation concerns, and may have a limited impact in the long term.

CCA knowledge for water policy decisions

- In December 2012, the SE/CNEDD set up a coordination framework for integrating the climate change into Niger's policy planning. However, the provision of scientific information is weakly institutionalized to support evidence-based policymaking. The use of knowledge on adaptation in development policy dialogues and decision-making

remains limited due to many obstacles and barriers. This can be explained by several reasons such as policymakers’ low level of scientific understanding, a limited interest or knowledge of policy makers in climate change challenges, the limited dissemination of research results, a lack of incentives to use information on adaptation in development policy making, and the lack of institutional channels for mainstreaming adaptation information into policies.

Under the baseline scenario, integrating science and better assessing the impacts of climate change will be difficult to achieve. The absence of an efficient monitoring and evaluation (M&E) framework will impede scientific knowledge to be effectively shared with policymakers in a timely and appropriate manner. Also, no evidence-based knowledge system will be put in place to guide adaptation policies and investments. This will result in a perception of high investment risk for CCA practices and infrastructures in the water sector, leading to a disinterest from the private sector.

Associated baseline projects

11. The project will build on the following baseline projects to avoid overlapping and ensure complementary interventions. Some of the baseline projects will serve as co-financing, the amounts are indicated in the first column.

Name / Lead Institution / Lessor / Budget	Basic information	Relevance to the proposed project	Opportunities / complementarities
-------------------------------------------	-------------------	-----------------------------------	-----------------------------------

<p>Advancing medium and long-term adaptation planning and budgeting in Niger</p> <p>Responsible institution: UNDP, Executive Secretariat of the National Council on Environment for Sustainable Development (SE/CNEDD)</p> <p>Implementing entity: Executive Secretariat of the National Council on Environment for Sustainable Development (SE: CNEDD), Ministry of Water and Environment, Ministry of Planning and Finance</p> <p>Budget: US\$2.9 million</p> <p>Donors: GCF</p> <p>Closing date: Total proposal period is for 4 years: 2018 – 2022</p> <p>Co-financing: US\$2,667,282</p>	<p>This project is planning a range of actions to address the main barriers that hinder CCAA mainstreaming into planning in Niger: Limited institutional, functional and technical capacity; Constrained financial, human and material resources; Limited synergies and coordination among climate adaptation initiatives; Weak monitoring and evaluation mechanisms; and Insufficient data availability, reliability and management. It covers 5 sectors.</p>	<p>The GC NAP Support project will establish intersinstitutional coordination and M&E mechanisms at the national level, develop planning and budgeting tools, strengthen technical capacities on adaptation planning, and generate knowledge management products and information.</p>	<p>The two projects are complementary in terms of activities and sectoral coverage. The unique institutional anchorage of the two projects, the CNEDD, and the unique implementing partner UNDP will facilitate the establishment of synergies between the two initiatives.</p> <p>The two projects will work jointly to establish coordination mechanisms (Output 1.1), develop training modules on (output 1.2), set up Data collection/production, information and communication mechanisms (output 1.3.), integrate CCA into planning and budgeting frameworks (Output 1.4), and generate evidence-based water policy decisions (Outcome 3)</p>
<p>The Economic and Social Development Plan (PDES)</p> <p>Responsible institution: National Government</p> <p>Implementing entity: National Government</p> <p>Starting date: 2017</p> <p>Closing date: 2021</p>	<p>The Economic and Social Development Plan (PDES) for the period 2017-2021 is the unified development framework of the country. It can facilitate the promotion of adaptation in sectoral policies and strategies. It is the First five-year plan to operationalize the Sustainable Development and Inclusive Growth Strategy (SDDCI) Niger 2035 adopted by the Government on 9 May 2017</p>	<p>Its Priority Action Plan includes a budget line for the promotion of CCA and CCM measures. The PDES is organized around five major areas that are cultural renaissance, social development and demographic transition, accelerating economic growth, improving governance, peace and security, and sustainable environmental management. It dedicates a whole program to the improvement of development management.</p>	<p>The project will guide the PDES towards CCA mainstreaming, as well as addressing water issues and increasing agricultural benefits, by implementing CCA water actions as the irrigation of numerous ponds, and enhancing the resilience of the agriculture and livestock production (outcome 2).</p>

<p>Improvement of Food Security and Farmer's initiative valorization in the High Social and Environmental Risks Areas of Niger (ZARESE II)</p> <p>Responsible institution: Helvetas Swiss Intercooperation</p> <p>Implementing entity: Ministry of Hydraulics and Sanitation</p> <p>Starting date: 2018</p> <p>Closing date: 2022</p> <p>Co-financing : US\$3,300,000</p>	<p>The general objective of the project is to contribute to the restoration of production systems in order to improve the living conditions of populations vulnerable to climate change and reduce migration.</p>	<p>In a Sahelian context, water management is a key concern for production systems. Water-related adaptive techniques, including spreading thresholds, development of ponds, etc. are providing a solution to climate change for the agriculture sector. The project also works with local communities to improve the protection of their rights on natural resources (including by revising CDPs) and capacitating them on adaptive techniques.</p>	<p>By informing local beneficiaries about and protecting their rights on natural resources, the project enhances their ownership of the activities. This is a useful lesson learned for the development of a NAP (outcome 1), but also for the formulation of on-the-ground activities (outcome 2). If successful, these practices could be applied in the NAP project.</p>
<p>Support programme for the water and sanitation sector (PHRASEHA II)</p> <p>Responsible institution: Helvetas Swiss Intercooperation</p> <p>Implementing entity: Ministry of Hydraulics and Sanitation</p> <p>Starting date: 2018</p> <p>Closing date: 2022</p>	<p>The objective of the project is to contribute to the improvement of the access to sustainable services of drinking water provision and basic sanitation, by strengthening the capacity of the sectoral actors</p>	<p>The project will focus on the regions of Dosso and Maradi for the improvement of governance and access to water for drinking and sanitation.</p>	<p>The project, including the experience collected during the phase I of the project, will be relevant to the implementation of activity 1.1.4 for the identification and appraisal of on-going water-related climate change adaptation options. These options and experiences will also feed into the outcome 1, by guiding the development of planning and budgeting frameworks in the water sector as well as informing the development of the Water-NAP.</p>

<p>Second phase of the project “water for growth and poverty reduction in the Mekrou sub-basin in Niger”</p> <p>Donors: European Commission</p> <p>Responsible Institution: Global Water Partnership Afrique de l’Ouest (GWP-AO)</p> <p>Implementing Entity: Ministry of Hydraulics and Sanitation (MHA)</p> <p>Starting date: 2020</p> <p>Closing date: 2023</p> <p>Co-financing : US\$1,100,000</p>	<p>The objective of the project is to support green economic growth and poverty reduction in the Mekrou River basin and its area of influence through integrated and concerted water management in developing areas</p>	<p>The project will provide lessons learned and capacity building at the national and local level on the improved management of water resources.</p>	<p>The project is supporting the implementation of regulations at the national level, such as the PANGIRE by improving the availability of data on groundwater resources and strengthening the capacity on IWRM. The project also intervenes in a regional context, with the alignment with cross-border schemes (Directing Scheme for Planning and Management of Water - SDAGE). The lessons learned for cross-border work will be highly relevant for the development of the NAP on Water (outcome 1).</p>
<p>Integrated Programme for Development and Adaptation to Climate Change (PIDACC) – Niger, Phase II</p> <p>Donors: GCF</p> <p>Accredited Entity: African Development Bank</p> <p>Implementing Entity: Ministry of Hydraulics</p> <p>Starting date: 2020</p> <p>Closing date: 2025</p> <p>Co-financing : US\$24,300,000</p>	<p>The objective of the project is to contribute to the improvement of the resilience of ecosystems and populations through the sustainable management of natural resources. It promotes the sustainable use of natural resources in the Basin to ensure the protection of existing water resources and their ecosystems, supporting an ecosystem-based adaptation.</p>	<p>The national component of the PIDACC in the Niger Basin will also provide important knowledge, in particular regarding the management of water at the regional level, with lessons learned from the Niger Basin.</p>	<p>The project will be particularly relevant for the outcome 1, by providing important knowledge for cross-border cooperation for water resources. This could be integrated into the NAP-Water for a larger impact through the adoption of a regional approach. On-the-ground techniques will also provide inputs and lessons learned for the activities conducted under outcome 2.</p>

<p>The Climate-Smart Agriculture Support Project</p> <p>Responsible entity: World Bank</p> <p>Implementing entity: Ministry of Agriculture</p> <p>Budget: US\$ 111 million</p> <p>Donors: World Bank</p> <p>Starting date: May 26th 2016</p> <p>Closing date: December 31th 2022</p>	<p>The objectives of the Project are: (i) to enhance adaptation to climate risks, (ii) to improve agricultural productivity among the Targeted Communities and (iii) in the event of an Eligible Crisis or Emergency, to provide immediate and effective response to said Eligible Crisis or Emergency. Project direct beneficiaries are estimated at about 500,000 farmers and agro pastoralists who will benefit from integrated commune sub-projects. Producer organizations, women, youth, and vulnerable groups, and micro small and medium enterprises will also directly benefit from the project activities. It is anticipated that 40 percent of the total direct beneficiaries will be women. The project intervention area covers the regions of Dosso, Maradi, Tahoua, Tillabery, and Zinder</p>	<p>The project funded by the World Bank is supporting a better management of the agriculture in some targeted communities. Some of the concerned communities are the same as this proposed project: Tahoua, Tillabery and Zinder. Hence, this World Bank project is supporting the future actions of this proposed project by completing the objective of increasing resilience of these regions thanks to the plan of Eligible Crisis or Emergency.</p>	<p>The proposed project will capitalize on lessons learnt from the formulation process of the Eligible Crisis or Emergency plans in the regions of Zinder, Tahoua, and Tillabery which are the proposed project coverage area. Lessons learnt from this process will inform the formulation of the Local Water and Sanitation Plans (Output 3.3).</p> <p>The Climate-Smart Agriculture Support Project will gain from information generated by the climate vulnerability assessment of targeted communes (Output 1.3)</p>
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<p>The European Union (EU) funded project – under the Global Climate Change Alliance (AMCC) on climate resilience support for a sustainable agricultural development (PARC-DAD)</p> <p>Responsible entity: Global Climate Change Alliance (AMCC)</p> <p>Implementing entities: Ministry of Finance, Ministry of Environnement, Local governments of Dosso and Zinder, high commissioner's office</p> <p>Donors: European Union</p> <p>Starting date: 05/2015</p> <p>Closing date: 05/2020</p>	<p>The specific objective is to enhance the capacity of national actors at various levels to manage food and nutritional security and agricultural development in a more integrated, sustainable and climate-resilient manner. The expected results include both local / regional and central level are the following:At the local level, in the target areas of Dosso and Zinder, field actions should help to strengthen the agro-forestry-pastoral production and sustainable land management and ecosystems with a view to increase resilience to climate risks.</p>	<p>The project supports (i) the integration of climate change in the municipal development plans (PDC) in targeted municipalities of Zinder, one the proposed project target region, and (ii) the design and effective implementation of a comprehensive system of monitoring and evaluation of initiatives related to climate change.</p>	<p>Experiences capitalized by the population and local decision-makers during the PDC mainstreaming process, will facilitate the development of climate sensitive PLEA by the proposd project and vice-versa.</p> <p>The implementation of the M&E system will benefit of specific support for the water sector provided by the proposed project</p>
-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<p>The Programme for rural development and productive agriculture: promotion of productive agriculture (PROMAP)</p> <p>Responsible entity: Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)</p> <p>Implementing entities: Ministère du Plan, de l'Aménagement du Territoire et du Développement Communautaire</p> <p>Donors: German Federal Ministry for Economic Cooperation and Development (BMZ)</p> <p>Starting date: 2016</p> <p>Closing date: 2018</p>	<p>The objective of the project is to exploit the economic potential of small-scale irrigation in the Niger's agricultural sector. The project targets the regions of Agadez, Tahou and Tillabery.</p>	<p>The project is supporting the development and implementation of an appropriate small-scale irrigation policy, and will provide training on improved agricultural practices to private and public agricultural service providers, enabling them to offer farmers professional advice. These agricultural service providers can subsequently help interested farmers to develop technical and business aspects of their farms or cooperatives.</p>	<p>The PFNAC will build on the results of the PROMAP, in particular the policy on small-scale irrigation that will facilitate the up-scaling of irrigation practices introduced under the LDCF project.</p> <p>In addition, the strengthening of agricultural practices is complementary to the improved access to water for agriculture. The PFNAC could engage with the trained private and public providers to disseminate good practices in the targeted villages for multiplied adaptation benefits.</p>
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<p>The Programme for Small Irrigation and Food Security (PISA)</p> <p>Responsible entity: Kreditanstalt für Wiederaufbau (KfW)</p> <p>Implementing entities: Ministry of Agriculture</p> <p>Donors: KfW</p> <p>Starting date: January 2016</p> <p>Closing date: December 2019</p>	<p>The objective of the programme is to contribute to the promotion of productive agriculture and food security in Niger. More specifically, it aims to increase agricultural production, improve the income of family farms, and facilitate access to the market for agricultural products.</p> <p>The main expected results of PISA are, first, the development, rehabilitation, equipment and development of small-scale irrigation infrastructures and their sub-watersheds; the improvement, storage and conservation of agricultural products, and access to markets; and the sustainability, development and maintenance of rehabilitated areas.</p>	<p>By promoting small-scale irrigation, the PISA will produce lessons learned that will be useful to the LDCF project. The increased revenues of family farms will also provide a strong basis for investment in further irrigation equipment.</p>	<p>The LDCF project could work with the PISA to advocate for the dissemination of lessons learned and trainings to targeted villages through the training of additional extension services. As both projects are intervening in similar regions (Tahoua et Tillabery), the improved knowledge of extension services can ensure the dissemination of lessons learned from both projects to each other's sites.</p>
-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

12. The project will also build on the lessons learned of the following closed project:

<p>Water Resources Mobilization and Development Project (PROMOVARE) - Pilot Program for Climate Resilience (PPCR).</p> <p>Responsible institution: Min. of Planning, Land Use Planning and Community Development (MP / AT)</p> <p>Implementing entity: Directorate of National Meteorology (DMN / Min of Transport)</p> <p>Budget: US D 25 million (US D 15 million loan, US D 10 million grant)</p> <p>Donors: AfDB, IFC</p> <p>Period: Project approval April 2012 / Closing date June 2018</p>	<p>The project will contribute to strengthening the resilience of the population at the level of the targeted communities, through the control of water for agro-pastoral activities.</p> <p>This project will operate in ten communes, namely Abalak, Afala, Agadez, Baleyara, Illelera, Kaou, Loga, Ouallam, Sukututan, and Tabelot.</p>	<p>Relevant activities:</p> <p>(i) Construction and rehabilitation of mini-dams, furrow irrigation systems, and development of irrigated perimeters for the development of an area of 1,023 ha; (ii) watershed protection; and (iii) capacity building of producers to adopt resilient technologies and practices.</p>	<p>The proposed project will capitalize on lessons learnt from the PROMOVARE project, in particular during the design and implementation phases of the IWRM practices and techniques, (Outcome 2). taking into account constraints and opportunities related to the national context</p>
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

3) Proposed alternative scenario

13. The long-term solution would be to improve the integration of climate change adaptation into sectoral and local water planning and budgeting, building on proven adaptation techniques and practices for Integrated Water Resource Management (IWRM) developed under the project and identified through in-depth studies.

14. This will be achieved by (i) integrating climate change adaptation in relevant water-related budgeting and planning frameworks at national and local levels; (ii) disseminating economically sustainable hybrid village water systems and multipurpose infrastructures; and (iii) establishing evidence-based knowledge to inform policies and investments on adaptation in the water sector. The first and third component will be conducted in close synergy with the NAP GCF support project. In particular, the GCF project will “advance medium and long-term adaptation planning and budgeting in Niger” to compile a NAP and facilitate its implementation, before putting in place mechanisms to ensure appropriate reporting and monitoring.

15. This project is aligned with the following GEF Focal areas:

- CCA-1 Reduce the vulnerability of people, livelihoods, physical assets and natural systems to the adverse effects of climate change. The outcome 2 will support vulnerable populations to access safe and sustainable water resources for their consumption and for agriculture. This outcome will also protect vulnerable people's assets and livelihoods to the increased droughts and floods.
- CCA-2 Strengthen institutional and technical capacities for effective CCA. The outcome 3 will increase the technical knowledge of decision makers at the local and national level in terms of adaptive practices in the water sector by ensuring the diffusion of best practices and lessons learned across the actors.
- CCA-3 Integrate CCA into relevant policies, plans and associated process. Outcome 1 will be responsible for the improvement of planning for adaptation in the water sector.

16. More specifically, the expected results of the projects are:

<i>Component 1: Improving the planning of adaptation in the water sector</i>

Outcome 1: Integrate climate change adaptation in relevant water-related budgeting and planning frameworks at national and local levels

Co-financing amount for Component 1: **US\$ 2,667,282**

LDCF project grant requested for Component 1: US\$ 1,370,900

-

Without LDCF intervention (baseline situation)

17. The country has been developing and adopting several development plans and strategies in various sectors to integrate climate change[3]³.

18. The 2017-2021 PDES[4]⁴ is the unified development framework of the country. The PDES is organized around five major areas that are cultural renaissance, social development and demographic transition, accelerating economic growth, improving governance, peace and security, and sustainable environmental management. Its Priority Action Plan includes a budget line for the promotion of CCA and CCM measures. The PDES dedicates an entire program to improve development management. With regards to budget programming, the PDES is implemented through the Multiannual Budget and Economic Programming Document (DPBEP) and the Multiannual Expenditure Programming Documents (DPPD) of sectoral ministries covering a period of three years. They are updated through the annual macroeconomic and budgetary framework exercises, The PDES orientations reflect the various initiatives taken by the GoN to advance the adaptation agenda.

19. The water sector is key to the development of Niger, as stated in 2017 in the PANGIRE approved on May 9th, 2017[5]⁵, which reiterates the importance for the water resources sector to adapt to climate change. It complements the 2010 Water Code[6]⁶, the 2005 National Strategy for the Development of Irrigation and Water Harvesting

(SNDI/CER), the 2015 Strategy for Small Irrigation[7]⁷, or the National Drinking Water Supply and Sanitation Program (PNAEPA). The country also benefits from the support of the UNDP Water Governance Facility @SIWI to provide the Ministry of Water and Sanitation (MH/A) with human, financial and organizational support, following the GEF funded project “Implementing NAPA priority interventions to build resilience and adaptation sectors of the agriculture sector to climate change in Niger”[8]⁸,[9]⁹. By controlling water distribution, preventing droughts and setting up a resilient agricultural sector better prepared for climatic disruptions and providing sufficient food (vegetable crops, but also meat and milk by improving conditions of livestock farmers and their herds) and drinking water for local populations, Niger will benefit from improved economic productivity.

20. The decentralization process of the PANGIRE and its operationalization at the communal level are based on the development of Local Water and Sanitation Plans (PLEA), and the creation of consultation and management bodies: The Water Management Local Committees (CLE).

21. The implementation and monitoring of environmental policies, including climate change policies, are coordinated by the National Council for Environment and Sustainable Development (CNEDD), created in 1996 and placed under the Office of the Prime Minister. It is supported by an Executive (SE/CNEDD) for the day-to-day management. The CNEDD is responsible for coordinating the NAP process. In the water sector, the CNEA is the technical advisory body of the government in the definition, implementation, and monitoring of sectoral policies.

22. The project of community action for climate resilience (PAC/RC), financed by the World Bank from 2012 to 2019, also supports the integration of climate change considerations into planning through the implementation of its first component “integration of climate resilience into development strategies at the national and local level”.

23. In addition, the project will directly build on the results of the GCF NAP project, which is planning a range of actions to address the main barriers that hinder CCA mainstreaming into planning in Niger: limited institutional, functional and technical capacity; constrained financial, human and material resources; limited synergies and coordination among climate adaptation initiatives; weak monitoring and evaluation mechanisms; and insufficient data availability, reliability and management. It covers 5 sectors to be identified during the inception phase, and, based on discussions for possible synergies with the LDCF project, will exclude the water sector. Through its ground-setting activities to the NAP process and the strengthening of sectors key to the adaptation of the water sector, this GCF project will therefore provide the basis for an improved understanding of climate change in Niger and planning for adaptation. **The project will contribute with grant co-financing of US\$ 2,667,282 during the remaining period of the project.**

24. However, the institutional analysis undertaken during the PPG[10]¹⁰, shows that the current institutional framework in Niger is not entirely operational, presents several weaknesses (particularly in terms of human resources), lacks coordination, and is unprepared with regards to the mainstreaming of climate change adaptation and mitigation. Despite efforts made thus far by the GoN, the inclusion of climate change into development plans, budgeting, and programs for the water sector at the national and local level remains nascent. In addition, there is a lack of coordination of activities to adequately promote integrated water resources management, in particular for agriculture and rural activities, and to take into consideration adaptation into sectoral budgeting framework.

With LDCF intervention (with adaptation benefits)

25. The intervention will address the main challenges to integrating CCA into water planning and budgeting at national and local levels (taking gender into consideration), as identified in the May 2014 NAP Stocktaking Report and under the framework of the 2012 LEG Technical Guidelines on NAP. Under Component 1, Niger will use LDCF resources to develop effective multi-stakeholder processes to advance NAP in the water sector. It will support the alignment of the NAP with the national priorities and strategic frameworks of the water sector, in alignment with the activities conducted under the GCF NAP project.

26. Following the establishment of the appropriate linkages between the national coordination mechanism and the sectoral mechanism, the project will support the production of information needed to facilitate CCA mainstreaming into the water institutional framework. The most appropriate adaptation options in the water sector will be identified, based on the climate risk and vulnerability assessment and the appraisal of their costs and benefits. It is expected that capacity building activities will enable interactions and synergies among actors, address gaps, and advance the NAP process in the water sector, in synergy with the GCF-financed project.

27. Finally, communication and capitalization of lessons will be supported to maximize the efficiency and the impact of the project. The main implementing agencies will be supported in compiling lessons learnt so as to disseminate and perpetuate the good practices.

28. Component 1 will give women access to trainings and workshops on resilient water resources management practices and benefits. This will reduce the existing gender gap on technologies access and agricultural productivity, through improved access to water for crops, and result in women empowerment and a lightened workload.

Output 1.1: An operational coordination and consultation mechanism is established to ensure ownership by all actors of the process of mainstreaming CC in the water sector

29. An operational coordination and consultation team will be created under the direction of the MH/A to jointly identify and prioritize adaptation needs in the water sector and coordinate the monitoring of water management activities. The team will also coordinate the implementation of the communication and raising awareness program on Integrated Water Resources Management (IWRM) (output 1.2), climate change risks for water resources (output 2.1) and the online community platform (output 3.3). This operational team will work in close collaboration with the NAP coordination mechanism led by the CNEDD and established under the GCF NAP support project, as well as with the CNEA.

30. The team will update the NAP sectoral road map, including sequencing of various stages and draft a monitoring and evaluation plan for the process. This sectoral road map is drawn from the overall NAP roadmap adopted at the national level under the GCF support project.

31. An updated gap and need analysis will also be conducted in order to identify constraints and required measures to create an enabling environment for integrated water resources management in a context of climate change and variability. The analysis will identify: a) the strengths and weaknesses in the capabilities, data, information and resources needed to contribute effectively to the water management process, and b) potential barriers to the planning, design and implementation of IWRM practices.

32. This output will also build on the priorities and recommendations elaborated from the national database set up under output 3.2. Urgent needs and targeted groups will be refined and made more precise in order to respond to the needs of the water sector in terms of CCA. Eventually, the workshops at national and local levels and the compilation of the

revised sectoral and subnational priorities, will conduct to the elaboration of the draft of the water sector NAP. The draft will define the NAP framework and strategy for the water sector, which will complement the already existing NAP process implemented through the GCF-financed project.

Activity 1.1.1. Set up and run an operational coordination team for the water sector that will steer the revision of the institutional framework and pave the way for the sectoral NAP.

Activity 1.1.2. Draft a roadmap to advance the NAP process in the water sector.

Activity 1.1.3. Conduct an analysis of the gap and need for the creation of an institutional enabling environment for adaptation through IWRM.

Activity 1.1.4. Conduct multi-stakeholder consultation workshops at national and local levels to identify and appraise on-going water-related climate change adaptation options.

Output 1.2: National, subnational and local stakeholders understand CCA practices related to sustainable water resources management

33. Several partnerships will be created with national institutions (including the Ministry of Water and Sanitation) and regional organizations (Niger Basin Authority (NBA)) that have mandates relating to the water sector and water resource management. Partnerships will be further extended to the GCF-financed NAP project and the Climate Information and Pro-spective Development Project (PDIPC) initiative for a joint design and implementation of training packages. In particular, the PDIPC will improve the quality of climate information and products and improve climate modeling, prediction, and information dissemination, to make it easily understandable for key farmers and pastoralists. These trainings will support the integration of CCA in planning tools, cost-benefit analysis for the water sector, innovative and climate-smart techniques for IWRM, flood modeling, and costing and integrating CCA budgets into national and subnational budgets. Three training modules will be prepared for ministries' staff on (i) the current climate variability and future climate projections, and the trends in terms of pressures on the water resources; (ii) the water market, with the current and future water use correlated with socio-economic developments; and (iii) guidance on the climate-smart use of water resources.

34. These series of training sessions will be organized under the partnerships established with both projects (DPIPC and NAP GCF) with national institutions (Ministry of Water and Sanitation, DGRE, ENAM, University of Niamey, Geography Department, EMIG, etc.) and regional organizations (NBA, AGRHYMET, CILSS, ACMAD). About 250 experts, national, subnational and local decision-makers will be trained as a result of this output.

35. These partnerships with national and regional institutions will also support public awareness and outreach programmes and facilitate the communication, education and public access to information on climate change adaptation. Campaigns of information and sensitization about CCA and water resources management will be launched. These campaigns will focus on groups at risk in the water sector and estimate their needs. The consultation will target vulnerable groups such as women, children, the elderly, pastoralists, farmers, etc. It will also raise awareness on best practices. This will take the form of one-month information campaigns via the radio, information gathering in villages, the dissemination of leaflets, etc.

36. Strong coordination will be established with the outcome 3, in particular, the lessons learned collected, analysed and managed will provide critical resources to support national, subnational and local stakeholders to have an adequate understanding of CCA practices related to sustainable water resources management.

Activity 1.2.1. Forge partnerships with national institutions (ie. National Commission for Water and Sanitation) and regional organizations (NBA) that have mandates relating to the water sector and water resource management.

Activity 1.2.2. Prepare training modules for ministries' staff and train key stakeholders.

Activity 1.2.3. Develop public awareness and outreach programmes to facilitate the communication, education and public access to information on climate change adaptation in the water sector.

Output 1.3: Data collection/production, information and communication mechanisms, are in place for the water-sector NAP

37. Under Output 1.3, decision-makers will be sensitized on efficient CCA practices in the water sector and on the benefits of data exchange. As such, permanent institutional links and data exchange protocols are necessary to allow participants to be more efficient and ensure the alignment and compatibility of various databases and monitoring systems.

38. These links and protocols will be ensured through the harmonization and standardization of indicators, data processing, modeling, projections, vulnerability assessments, GIS related to CCA practices in the water sector. This harmonization and standardization process will be conducted in close consultations with the NAP-GCF project, to ensure a strong alignment across the different sectors. A review of the legal, institutional and regulatory frameworks will also be conducted to identify the gaps and inconsistencies in directing adaptation investment in the water sector. This review will support the achievement of the output 1.4 by providing guidance on the needs for increased integration of CCA into these existing frameworks. This output will also support the assessment of climate vulnerability for targeted communes on the basis of current climate variability and future climate projections, current and future land and water resource use and socio-economic development.

39. Then, information and communication mechanisms for CCA practices will be shared via workshops to enhance public access to knowledge on existing adaptive mechanisms and success stories in preventing climate-related hazards in the water sector.

40. They will also inform the climate information and knowledge management strategy expected to be formulated under the GCF NAP support project. This strategy will serve to strengthen the information collection, production and dissemination mechanisms for iterative updating of climate-relevant knowledge. Data will be organized to facilitate communication on CCA practices between all the key stakeholders as well as the population, and to draw lessons from CCA activities and implement and replicate good CCA practices. This will lead to a systematic integration of these good practices into the national policies and strategic frameworks in the water sector under Output 1.1 as well as allow adequate cooperation and complementarity with the NAP process. This output will also encourage dialogues through the annual publication of reports and the establishment of fora for dialogue between communities and the MH/A, to broaden perspectives and visions and to promote the resolution of possible water conflicts.

Activity 1.3.1. Establish permanent institutional links and data exchange protocols between key stakeholders.

Activity 1.3.2. Harmonize/standardize indicators, data processing, modeling, projections, vulnerability assessments, GIS for CCA practices in the water sector, in line with the GCF NAP.

Activity 1.3.3. Review the legal, institutional and regulatory frameworks.

Activity 1.3.4. Assess climate vulnerability and identify coping measures for targeted communes

Activity 1.3.5. Organize workshops to enhance public access to knowledge on existing adaptive mechanisms and success stories in preventing climate-related hazards related to water sector.

Activity 1.3.5. Publish annual reports and establish fora for dialogue between communities and the MH/A.

Output 1.4: CCA is integrated in relevant planning and budgeting frameworks in the water sector

41. Under Output 1.4, CCA will be integrated in relevant planning and budgeting frameworks in order to improve water resources management in the context of climate change. A complementary support is provided by the GCF NAP project for additional sectors, through (i) the review and revision of existing integration guidelines for the local development plans (PDC), and sectoral policies and strategies, and (ii) the adoption of budget tagging and tracking tools for climate finance and assisting sector budget and planning departments to apply tagging tools.

42. This output will support the identification of climate adaptation options for the water sector through the conduct of cost-benefit analysis, building on coping measures identified in activity 1.3.4. This will guide the decision-making process for the NAP elaboration and create a momentum between all stakeholders by exchanging experience and information.

43. The output will also support the development of pluri-annual programmatic and budgeting climate sensitive approaches for the water sector, and the set up of climate budget code for climate budget tagging in order to track climate expenditures and climate budgeting. These budget codes will be harmonized with the different climate indicators and financial climate markers across key sectors developed under the GCF NAP in order to enable the setting up of a national climate budget and future investment lines at the national level. These approaches will be developed through the compilation of priorities in the water sector, the organization of stakeholders' consultations, the integration of comments and the validation and dissemination of a NAP for the water sector. In addition, to enable climate budgeting global comparison, this output will build on the practices applied for existing Climate Public Expenditures and Institutional Review (CPEIRs).[11]¹¹ This will support the development of a coherent vision for external and national climate investments to put together a water regulatory framework to better integrate CCA in IWRM.

Activity 1.4.1. Conduct studies to assess the costs and benefits of innovative and/or adaptive measures and techniques in the water sector.

Activity 1.4.2. Develop pluri-annual programmatic and budgeting climate sensitive approaches and set up climate budget codes.

Activity 1.4.3 Put together a detailed and coherent water legal, institutional and regulatory framework to better integrate CCA in water resources management.

<i>Component 2: Developping field-tested knowledge for IWRM</i>

Outcome 2: Disseminate economically sustainable hybrid village water systems and multipurpose infrastructures

Co-financing amount for Outcome 2: **US\$ 25,400,000**

LDCF project grant requested for Outcome 2: US\$ 6,052,053

Without LDCF intervention (baseline situation)

44. Due to the lack of facilities, resources, and capacities, farmers and breeders continue to rely on non-resilient and poor water infrastructures and techniques. Under the baseline scenario, rural communities endure important yield losses due to severe climate events such as floods, droughts, and erratic rainfall patterns that are becoming increasingly frequent.

45. However, four on-going projects are supporting communities in improving their access to water and provide decision-makers with field-tested opportunities for investment in water infrastructures.

46. The project for the implementation of the PANGIRE, under its outcome 2 “mobilize and enhance natural water resources and develop socioeconomic activities”, will install hydraulic infrastructures for drinking water access, sanitation, agriculture or livestock.

47. The second phase of the Integrated Programme for De-velopment and Adaptation to Climate Change (PIDACC) will promote the sustainable use of natural resources in the Niger Basin to ensure the protection of existing water resources and their ecosystems, supporting an ecosystem-based adaptation. Through the provision of important lessons learned, it is expected that the project will provide US\$24,300,000 in in-kind co-financing.

48. In addition, the second phase of the support programme for the water and sanitation sector (PHRASEHA II), financed by the Swiss Cooperation and implemented by the MHA, will also support the project by providing lessons learned in the implementation of its project interventions under its second component which aims at giving access to equitable and affordable access to water resources for drinking and sanitation and hygiene for rural populations.

49. Finally, the second phase of the project “water for growth and poverty reduction in the Mekrou sub-basin in Niger” will also provide lessons learned and additional infrastructures that will support the outcome 2 of the LDCF project. This project is implemented by the Ministry of Hydraulics and Sanitation and the permanent secretariat of the PANGIRE (SP/PANGIRE), through the Global Water Partnership for West Africa (GWP-AO). This project will provide US\$ 1,100,000 of in-kind co-financing.

50. Even though these projects are supporting an improved access to water for rural populations, they fail to introduce climate change adaptation concerns, and may have a limited impact in the long term.

51. A detailed and participatory analysis of climate risks and hazards has been undertaken at the village level in seven municipalities during the PPG phase (see table 1). The study shows that all seven municipalities suffer heavily from climate change induced by the alteration in rainfall patterns. Without the GEF intervention, this situation will persist, with no additional support to mitigate the climate-related impacts on their living conditions.

With LDCF intervention

52. Under the alternative scenario, communities will become more resilient to erratic rainfall patterns. Land erosion and flood management planning as well as more efficient water supply and irrigation technologies will help sustain water and food supplies. This outcome will offer a specific opportunity to ensure the provision of CCA water services at the local level. The resources provided by the LDCF will help promote the widespread diffusion of economically viable hybrid water supply systems and multipurpose infrastructures that, in addition to providing health benefits to beneficiary households, will make access to water an opportunity for income generation. The preparedness of the vulnerable communities to climate related extreme events will be strengthened and municipalities will implement flooding risk prevention plans drafted under the Component 1. Most vulnerable communities, as identified in the NAPA, are targeted, namely Tenhiya in the department of Zinder, Kaou, Takanamat, Tchintabaraden and Tabalak in the department of Tahoua, and Ouallam and Tondikiwindi, in the department of Tillabery.

53. The Component 2 will also give women access to a dedicated training to ensure the maintenance of the hybrid and irrigation systems. This will reduce the existing gender gap in accessing technology and agricultural productivity and result in women empowerment and a lightened workload. Moreover, by supporting the development of climate-resilient water systems, the impacts of droughts on agricultural yields and water scarcity will significantly be reduced. This will therefore reduce the travel distance of women's often dangerous daily journeys, to fetch water and the threats of food insecurity caused by crop losses. As a result, women will have more time available for other activities, whether it is income-generating activities or participation in the citizen life of their village and education.

54. The beneficiary communes for each infrastructure were selected following a SWOT analysis, informed by the information collected during the PPG. This identified the context for each commune and which infrastructure would yield the highest impact. A detailed table summarizing the infrastructures and the results of the SWOT analysis is available in Annex K. The villages will be selected during the implementation of the project, in consultation with the local councils for each commune, based on the vulnerability and relevance of the intervention.

55. Following the sensitization activities in the Component 1, the field testing of economically sustainable hybrid village water system and multipurpose infrastructure for efficient water management systems will be conducted. It will enable the creation of an economy around water resources in remote villages and provide useful lessons for upscaling successful practices.

Output 2.1: Hybrid household water supply solutions and smallholder irrigation systems are promoted and adopted in vulnerable communities

56. Under the Output 2.1, 5 villages in the communes of Tenhiya (2), Tchintabaraden (1) and Kao (2) will be provided with one gravity tank of 15,000 liters, equipped with two distinct pipes for distribution of drinking water and for irrigated agriculture. The gravity tanks will be fed through the drilling of a borehole and the installation of a solar water pump, complemented by a generator to provide energy when needed (at night or if the weather conditions are not sufficient for solar energy generation).

57. More specifically, the first pipe will provide twelve standpipes serving 10 families each, with drinking water. The benefiting households will also be provided with water storage and treatment systems. The second pipe will distribute water to 80 small farming perimeters of 500m² for micro irrigation for agriculture. In total it is expected that, across the 5 villages, 5,600 people will benefit from these infrastructures. A detailed feasibility study for the design and procurement of the hybrid systems and irrigation systems will be conducted, taking into account the sustainability of these systems, including after the end of the project. To avoid vandalism around the groundwater supply systems, electrified fences will be installed.

58. A detailed feasibility study will carefully assess the sustainability of these drillings to avoid over exploitation of water table resources in the seven villages for both outputs 2.1 and 2.2. Long-term sustainability of the exploitation will be critical for the success of the project, and will depend on factors such as density of wells, depth and transmissivity of the producing horizon(s), vulnerability to contamination from human activities (pesticides, fertilizers, waste disposal etc.), abstraction rates etc. This feasibility study will include (i) a preliminary assessment collating from existing hydrogeological national and other international database of published maps, to identify high suitable/potential areas (make technical and socio-economic base case), (ii) a socio-economic analysis to further measure the viability of implementation (total cost), indirect benefits (ecosystem), indirect costs (opportunity cost of water) and other macro-scale aspects (local heterogeneity, synergies/trade-offs), (iii) a land-use/land cover map, land transitions (iv) the identification of the type of aquifer, hydraulic connections, aquifer productivity and the adequacy of water supply, (v) an assessment on the impact on other water uses and nearby groundwater users, and if relevant (vi)

hydro geochemical analysis, irrigation water quality parameter (ie. SAR) to measure the suitability of water for irrigation and understand the mechanisms that may affect groundwater for irrigation.

59. The International Hydrological Programme (IHP) of UNESCO has extensively worked on assessing water resources in the region of the Iullemeden Aquifer, where the project will be implemented, and it was instrumental in the preparation and execution in cooperation with the OSS of the GEF medium-size project “Managing Hydrogeological Risk in the Iullemeden Aquifer System” (2004-2007). A significant amount of data and experience is available within UNESCO, calling for the establishment of a partnership for supporting the feasibility study process. UNESCO/IHP supports member states in developing institutional and human capacities for water resources management and governance at local, national and regional levels. The IHP can contribute to the achievement of the outcomes of the project in particular strengthening the capacity of national institutions and communities through trainings on the management of groundwater resources for climate change adaptation measures and to inform adaptation policies.

60. Similarly, the UN-International Groundwater Resources Assessment Centre (IGRAC), working under the auspices of UNESCO and WMO, has extensive experience in studying groundwater and, as a close partner to UNESCO/IHP, could also support the feasibility studies for the drillings under outcome 2 (both output 2.1 and 2.2).

61. Both agencies would work with national partners to use the knowledge available at the local level and build the capacities for in-depth groundwater assessment of these stakeholders. During the project implementation, the project team will explore possibilities to involve these agencies to ensure resources can be used efficiently, and the knowledge within these agencies can be built upon.

62. Groundwater resources can be vulnerable to climate change because of 1) inadequate legislation, regulations, and national water policies that provide no clear priorities or directions to responsible government agencies, and 2) limited financial means and personnel to sustainably manage groundwater resources and water supply systems. In this context, improved national and local capacity on groundwater resources governance (including but not limited to the use and prioritization of IWRM and conjunctive management) can contribute to setting up adequate adaptation policies.

63. In addition, water user committee will be established in each community to ensure the maintenance of the gravity tanks and will be ultimately responsible for the operation and the regular collection of royalties from users of drinking water and water for irrigation. Before and during the construction of the water infrastructures (both for output 2.1 and 2.2), the committee will discuss the need to finance a guard for the infrastructures to prevent vandalism if the fences are not considered sufficient. At least 50% of the committee members will be women. These water user committees will receive technical support and will be trained to develop sustainable plans for maintaining hybrid systems during and beyond the project lifetime. The members of the committees will also benefit from trainings in maintenance, management, irrigation and agronomy, including for the activities conducted under output 2.2. Better water access will generate a new economic dynamic in the communes as the use of sustainable methods will increase agricultural productivity and give jobs to young people and women. It will also reduce the pressure on water resources between agriculture and livestock.

64. Considering the high risks associated with these infrastructures, the Social and Environmental Planning Procedure (SESP) conducted during the project formulation, identified the need for the conduct of an Environmental and Social Impact Assessment (ESIA) and an Environmental and Social Management Plan (ESMP). The ESIA and ESMP will provide assurance that the project activities do not have a negative impact, and will issue requirements to mitigate identified risks. These will cover the entire project, but given the higher risks involved with the implementation of Outcome 2, the ESMP is likely to have a stronger focus on this outcome. The ESIA and ESMP will be conducted in parallel with the feasibility study conducted under the activity 2.1.1. and will be complementary.

Activity 2.1.1. Conduct a feasibility study for the installation of sustainable hybrid systems and irrigation systems.

Activity 2.1.2. Install hybrid systems in 5 villages, including irrigation systems.

Activity 2.1.3. Establish an effective water users' committee in each village.

Activity 2.1.4. Train instructors of the associations' village councils to form young people and women to maintain the hybrid water systems.

Activity 2.1.5. Conduct an ESMP and ESIA

Output 2.2: Multi-purpose infrastructures in sensitive ponds and koris to protect equipment and agricultural land from erosion and flooding are installed

65. In areas subject to water-related challenges, the project will install water supply, irrigation and flood protection infrastructures and systems around sensitive ponds, koris and shallow waters, and restore surrounding degraded areas to enhance their protective and productive functions. A cost benefit analysis will evaluate the different options for the development of multi-purpose infrastructures and their environmental and social impacts. For water supply, irrigation and flood and erosion protection, the following interventions will be conducted:

- The drilling of 50 boreholes for small garden perimeters, around ponds, with easily accessible groundwater resources, equipped with solar pumps and a linear pipeline distribution system, including californian irrigation systems[12]¹², drainage systems and drip irrigation systems. This will cover 12,5 hectares.
- In areas vulnerable to floods and erosion,
 - o 10 kilometers of eroded riverbanks will be restored and protected through reforestation,
 - o 1,000 hectares of glacia[13]¹³ will be restored and protected through reforestation,
 - o 300 hectares of wooded areas will be regenerated/afforested and 380 hectares of grazing areas will be protected through half-moon formation, bank formation and planting of seedling.
 - o 2 spreading thresholds will be installed

66. The analysis will also identify opportunities for micro, small and medium-size enterprises (MSMEs), but also public-private partnership opportunities and financing strategies. The best environmental options will be analyzed in order to identify, design and build infrastructures that combine the restoration of ecosystem functions with the provision of sustainable services (especially for CCA and climate-related disasters prevention).

67. With these installations, trainings will be set up to guarantee the success of the activities and enable operation and maintenance of the facilities by the population. The trainings will cover, among other things, watercourse protection techniques, infrastructure maintenance, and socio-environmental monitoring. Additional productivity gains are expected through these land-use measures providing higher revenues, some of which will be set aside for the operation and maintenance led by the committees. The principle of mobilizing funds to ensure the functioning of the water user committees will be integrated into the protocols established with these structures. With these activities, water access will

be easier for the agriculture as it will prevent from the silting of ponds, koris claw, erosion and floods which are threatening the productivity. The water user's groups established and trained under output 2.1 will also be responsible for the maintenance and the management of the infrastructures to ensure their sustainability.

Activity 2.2.1. Conduct a cost-benefit analysis to evaluate different options for the development of multi-purpose water facilities.

Activity 2.2.2. Construct or rehabilitate multifunctional infrastructures and irrigation systems at sensitive ponds, *koris* and shallow waters in the targeted areas.

Activity 2.2.3. Organize advocacy workshops and undertake knowledge sharing activities to educate the population on disaster risk management (related to floods and droughts).

Component 3: Fostering evidence-based water policy decisions

Outcome 3: Establish evidence-based knowledge to inform policies and investments on adaptation in the water sector

Co-financing amount for Outcome 3: **US\$ 3,300,000**

LDCF project grant requested for Outcome 3: US\$ 977,297

-

Without LDCF intervention (baseline situation)

68. In December 2012, the SE/CNEDD set up a coordination framework for integrating the climate change into Niger's policy planning. However, the provision of scientific information is weakly institutionalized to support evidence-based policymaking. The use of knowledge on adaptation in development policy dialogues and decision-making remains limited due to many obstacles and barriers. This can be explained by several reasons such as policymakers' low level of scientific understanding, a limited interest or knowledge of policy makers in climate change challenges, the limited dissemination of research results, a lack of incentives to use information on adaptation in development policy making, and the lack of institutional channels for mainstreaming adaptation information into policies.

69. However, some lessons learned can be capitalized as part of the NAP process. This is the case of the project for the Improvement of Food Security and Farmer's initiative valorization in the High Social and Environmental Risks Areas of Niger (ZARESE II), that has the objective to contribute to the restauration of production systems to improve the living conditions of climate change vulnerable population and reduce migrations. This will be achieved with the introduction of improved agricultural practices, in particular better water systems and management. Out of the total budget of US\$ 3,767,726 financed by the AICS, the Niger Government and the beneficiaries, US\$3,300,000 is proposed as in-kind co-financing.

70. Under the baseline scenario, integrating science and better assessing the impacts of climate change will be difficult to achieve. The absence of an efficient monitoring and evaluation (M&E) framework will impede scientific knowledge to be effectively shared with policymakers in a timely and appropriate manner. Also, no evidence-based knowledge

system will be put in place to guide adaptation policies and investments. This will result in a perception of high investment risk for CCA practices and infrastructures in the water sector, leading to a disinterest from the private sector.

71.

With LDCF intervention

72. Under the alternative scenario, the data collected under the output 1.3 will facilitate access to a range of information showing the needs of local communities in terms of adaptation to climate change. The data will inform decision-makers on a series of socio-economic benefits of these adaptation strategies, such as improved access to health and education. The visual representation and accessibility of this data can help to engage policy-makers, the private sector, and the international community in a vital step towards developing adaptation policy that will reduce the vulnerability of local communities.

73. Gender issues will be considered within all the decision-making processes of Component 3, thus ensuring a participation and consideration of women within the community platform and monitoring plans. This will include integrating women's perspectives and making use of their specific knowledge of adaptation, as well as local survival strategies.

74. Furthermore, in parallel, the LDCF interventions will be aligned with the GCF NAP project following activities: (i) 1.2: Identifying available information on climate change impacts, vulnerability and adaptation, and assess gaps, (ii) 4.1: Enhancing capacity to monitor the NAP process and adaptation progress; Conduct outreach on the NAP process and report on progress and effectiveness and, (iii) 5.3: Conduct studies or research programmes to estimate future investments in adaptation in all sectors.

Output 3.1: Tailored information services and products on water are set up to respond to the private sector and decision-makers audience needs

75. Key messages will be developed, taking into account the audience needs, operating language, objectives, timeframe, contacts and media of communication. Regular dialogues will be organized to promote greater interactions, discussions and deliberations between researchers, private sector, policy-makers and the general public on adaptation responses offered by IWRM practices. These dialogues will be organized in the framework of the overall NAP process, in liaison with the GCF NAP support initiative, and under the leadership of the CNEDD and the CNEA. They will build on the results of IWRM adaptation practices identified and developed under outcomes 1 and 2, and the strategy to leverage private sector finance to be elaborated by the GCF NAP support project. Policy briefs will be generated from the findings and shared with policy makers and private actors through different platforms including local, national and regional policy dialogues. These dialogues will also be useful to foster engagement of key stakeholders in climate change adaptation in the water sector.

76. This output will support the definition of new and updated climate change adaptation engagements and priorities of Niger at the international level to support the preparation of international negotiations and define Niger's positions on climate change. These discussions and the identification of national priorities will provide an up-to-date framework of investment for future climate change adaptation projects and programmes that will address most urgent needs in the water sector. This will be identified through extensive consultations at the national and local level and translated into policy briefs and the Niger Position Paper on climate negotiations for the water sector.

Activity 3.1.1. Organize regular dialogues for a better coordination and interaction on IWRM adaptation responses with the several stakeholders: private sector, policy-makers, researchers, civil society and universities.

Activity 3.1.2. Issue policy briefs from the findings, to be shared during several meetings with policy makers and private sector actors at local, regional and national levels.

Activity 3.1.3. Organize consultations workshops to discuss and deliberate about the future general plan for Niger in terms of climate negotiations for the water sector.

Activity 3.1.4. Support the drafting and validation of the Niger Position Paper on climate negotiations, taking into considerations findings from IWRM adaptation responses.

Output 3.2: Knowledge management and M&E systems are established in the water sector

77. A NAP M&E system is expected to be established by the GCF NAP support project and the PARC /DAD project, following a mapping of existing monitoring and evaluation systems. The project will contribute to set up the NAP monitoring and evaluation (M&E) system for the water sector. It will be completed and handed over to the SE/CNEDD which host the NAP M&E system and will serve as a learning tool for generating evidence-based data and information to inform policy making and future planning processes in the water sector. This will include the development of standard indicators and a detailed framework for a consistent monitoring of climate change impacts on key environmental and socio-economic aspects. This will ensure the effective and reliable observation of changes on CC causes and impacts. Based on the climate change impacts identified under the monitoring plan in activity 3.2.1, and the data managed and stored in the online community platform under output 3.3, adaptation priorities will be continuously identified and defined in the water sector. Each adaptation priority will be associated to standardized climate indicators that will enable the formulation of measurement methods to consistently assess the performance of investments (including the benefits they will have on a number of socio-economic factors, ie. increased revenues, improved health, increased access to education), to monitor progress on CCA/CBA against the baseline situation, and to update national adaptation plans. This will enable a continuous update of the community platform with the provision of lessons learned and best practices and the use of standardized advocacy tools, products, and methods to publish information on costs and impacts of climate change, but also reports on progress and effectiveness of CCA practices.

78. The monitoring plans, advocacy tools, products and methods of measuring costs and impacts of climate change will be designed during the first meetings, jointly with the GCF NAP project and all the stakeholders. It will also be necessary to set up an evaluation framework to assess whether interventions are efficient or not and adapt them if necessary. This framework will be important for extracting the success stories and lessons relevant to the plannings processes: NAP and PDES. In addition, a methodology could be developed for evaluating possible investment options for adaptation in the water sector using information from project experiences. To conduct this evaluation, the impact evaluation framework established under the activity 3.2.2 could be used. This methodology could be extended to other sectors covered by the GCF NAP project.

Activity 3.2.1. Develop monitoring plans to measure CCA causality and impacts on the water sector.

Activity 3.2.2. Develop a process to continuously define adaptation priorities in the water sector based on the identified climate change impacts and set up an impact evaluation framework to assess the efficiency of the interventions.

Activity 3.2.3. Set up standardized definitions and measurement methods for climate indicators on water to consistently assess the performance of investments in the water sector, to monitor progress on CCA/CBA against the baseline situation, and to update water-related national adaptation plans

Activity 3.2.4. Develop advocacy tools, products and methods to publish costs and impact information and reporting on progress and effectiveness of adaptation actions taken in the water sector.

Output 3.3: An online community platform is implemented

79. An online community platform will be set up to foster partnerships between local authorities and beneficiaries, to enable them to assess progress made, and support the scaling up of local experiences, through the availability of options impact assessments and appraisal. Under this project, such partnerships will be extended to research institutions

intervening in the water sector, including local and international research centers, in order to support the performance and impact assessments in the intervention sites, using the impact evaluation framework established under the output 3.2.

80. It is expected that the SE/CNEDD, coordinating this platform, will facilitate its expansion to other vulnerable sector, therefore paving the way for the NAP process, and the sectoral NAPs. Adequate trainings will be designed and provided to the partners to efficiently perform reviews and identify options and opportunities for scaling-up. This platform, by receiving inputs from stakeholders on innovative climate change adaptation approaches and practices for sustainable water management, as well as thorough reviews of these options, will be an open source database between all the actors to reinforce the multilateral communication and provide up to date information for the widespread upscaling of successful adaptation practices, including by building on the activities conducted under the Outcome 2.

81. This platform will also be informed by the platform developed under the PDIPC for sharing and analyzing meteorological information. For instance, by sharing information and gathering knowledge, it will highlight success factors of local experience in PDCs and Local Water and Sanitation Plans (PLEA). Based on the assessment of the potential, opportunities and lessons learned from intervention sites and project investments, including from the private sector, this output will also support the development of a strategy for the scaling up of successful initiatives. These lessons learned will feed into the strengthening of the institutional framework, supported under the Outcome 2. This will require to implement the following activities:

Activity 3.3.1. Set up and on-line community platform.

Activity 3.3.2. Set up a training program for users to review adaptation options and identify opportunities for scaling-up.

Activity 3.3.2. Facilitate consideration of success factors of local experience in PDCs and PLEAs by using the M&E framework established under the output 3.2.

Activity 3.3.3. Develop a scaling-up strategy for successful initiatives.

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

Baseline

82. The Government has initiated steps for the integration of climate change adaptation into planning, including in the water sector and there is an increased understanding of the challenges climate change is posing on the development of the country. However, very limited resources were already allocated to finance interventions.

83. In addition, a large range of initiatives, mainly financed by international donors and implemented by national institutions, including the SE/CNEDD, are being implemented and are generating a critical database of experience and lessons learned. However, these lessons fail to be capitalized and centrally recorded to inform future investments.

Co-financing

- The second phase of the Integrated Programme for Development and Adaptation to Climate Change (PIDACC) will promote the sustainable use of natural resources in the Niger Basin to ensure the protection of existing water resources and their ecosystems, supporting an ecosystem-based adaptation. Through the provision of important lessons learned, it is expected that the project will provide US\$24,300,000 in in-kind co-financing.
- The project for the Improvement of Food Security and Farmer's initiative valorization in the High Social and Environmental Risks Areas of Niger (ZARESE II), with the objective to contribute to the restauration of production systems to improve the living conditions of climate change vulnerable population and reduce migrations, will support the project. In particular, the project will introduce improved agricultural practices, including better water systems and management, this will produce important lessons learned for the LDCF NAP project. Out of the total budget of US\$ 3,767,726 financed by the AICS, the Niger Government and the beneficiaries, US\$3,300,000 is proposed as in-kind co-financing.
- The second phase of the project "water for growth and poverty reduction in the Mekrou sub-basin in Niger" will also provide lessons learned and additional infrastructures that will support the outcome 2 of the LDCF project. This project is implemented by the Ministry of Hydraulics and Sanitation and the permanent secretariat of the PANGIRE (SP/PANGIRE), through the Global Water Partnership for West Africa (GWP-AO). This project will provide US\$ 1,100,000 of in-kind co-financing.

Furthermore, the LDCF interventions will be strongly aligned with the GCF NAP project, implemented by the SE/CNEDD, specifically the following activities: (i) 1.2: Identifying available information on climate change impacts, vulnerability and adaptation, and assess gaps, (ii) 4.1: Enhancing capacity to monitor the NAP process and adaptation progress; Conduct outreach on the NAP process and report on progress and effectiveness and, (iii) 5.3: Conduct studies or research programmes to estimate future investments in adaptation in all sectors. This project will be implemented in close coordination with the LDCF project, including through staff cost-sharing, and will participate to the project by contributing US\$ 2,667,282 in co-financing.

-

5) Global adaptation benefits

84. The project will provide significant adaptation benefits by reducing the vulnerability of rural communities to the climate induced water stress in Niger. The targeted population are selected based on their access to water resources and its vulnerability to climate change. By providing sustainable water resources for drinking and farming, the project will increase the adaptation for the beneficiaries. In addition, the project will also strengthen the resilience to climate-induced events, such as drought and flood, which are increasingly occurring in Niger as an effect of climate change.

85. The project will also help systematically collect and record lessons learned and knowledge on adaptation practices in the water sector for improved and increased investments by local and national actors. This will be translated in the formulation of a comprehensive NAP framework for the water sector.

86. Finally, the project will have a broader adaptation impact by setting up an on-line platform that will serve as a sharing interface between the different adaptation actors. Under this project, it will be fed with water-sector related knowledge, but, through the partnerships and other sensitization activities, it is expected that other sector will be incentivized to make use of the platform.

6) Innovativeness, sustainability and potential for scaling up

87. The project has been designed to have a sustainable impact at the local and national level. The project addresses the key national development priorities and benefits from a strong institutional support, ensuring its sustainability. The strong commitment from all stakeholders at every level – from Ministries to the communes and villages – will enable the good implementation and execution of project activities and the integration of adaptation in Niger’s long-term policy, plans, and national budgets. As local interventions are guided by local needs and demand, sustainability will be ensured, and adaptive capacities will be built up and enforced.

88. The integrated approach adopted for the project design also supports its sustainability. Measures taken to reduce vulnerability to the adverse effects of climate change and those aimed at increasing the ability to introduce adaptive practices for improved livelihoods in the face of climate change, are mutually reinforcing.

89. The establishment of Water Users Committees, represented by women, herders, and farmers is a highly innovative action in Niger, where local communities are empowered to increase their resilience in the long-term and scale-up the interventions through sustainable fee-collection schemes. Another innovative measure of the LDCF intervention is the empowerment of rural communities to better adopt ecosystem based interventions to reduce their vulnerability to extreme climate events and hazards. Communities and local entrepreneurs will contribute to the project, not only by investing their time and facilities but also providing their knowledge and labor. The participative approach and the empowerment of grassroot beneficiaries, in addition to state authorities and Niger’s research institutes and universities, is also a guarantee for the long-term sustainability of the intervention.

90. The adoption of new plans, no-regret interventions and policies for the water sector at the national and local levels, together with the increased understanding of climate change and its impacts from Niger authorities, are all supporting the sustainability of the proposed initiative.

91. Institutional capacity enhancement and technical support will facilitate the scaling up of the project by enabling relevant ministries to comprehensively and iteratively assess development needs and climate vulnerabilities, and ultimately to integrate climate change adaptation into national and subnational development and sectorial planning. In addition, the training of Trainers' Approach will contribute to the sustainability and scaling-up of the project by ensuring that capabilities remain and can continue to be strengthened after the end of the project.

92. Finally, the third component of the project aims at developing an evidence-based knowledge system to inform adaptation policies and investments. This in turn will consolidate project results beyond implementation time.

Cost-effectiveness

80. This proposed project is cost-effective as it is expected to produce satisfactory results at a reasonable cost. It will be based on already existing structures and initiatives in Niger. During the preparation phase, the following cost-effective measures were identified for the project:

- a. implementing a participatory, integrated approach to climate change adaptation at the community level;

- b. conducting a range of training workshops, seminars, and awareness-raising activities for stakeholders;
- c. building on already existing capacity building initiatives.

81. These measures were identified as no-regret[14]¹⁴, tangible and cost-effective as they: prioritize the needs of local communities in the project design; optimize the spending of project funds on meeting the needs of the local communities; and ensure that the project is well understood by beneficiaries to promote project success, ownership, and efficient use of finances.

82. For instance, while the PROMOVARE builds capacities of women in facility management and producer cooperatives for soil improvement techniques and rural infrastructure improvements, all the lessons learned will benefit and feed into the proposed project to ensure the best practices are adopted. It will also be integrated into existing planning processes and budgeting to maximize efficiency. This project is also made to complement the NAP GCF project in order to maximize its utility.

83. In addition, the proposed project includes technical training for local communities on implementing, maintaining and monitoring project interventions. A “training the trainers” approach will be adopted whereby extension agents will undergo technical capacity building. This is a cost-effective approach as it reduces the number of beneficiaries that will undergo direct training but will also enable the project to reach a wider audience as the trainers themselves will further disseminate climate change concepts amongst local communities. The training of local communities in conjunction with the adoption of a participatory “learning by doing” approach will further promote sustainability and the scaling-up of the interventions beyond the lifespan of the project.

84. According to the first estimations, the water infrastructures will have a payout over 3-5 years before becoming positive investments for the population. After the first mission in the targeted communes, a first table was drawn to establish the estimated costs according to the quantity and the type of water infrastructures[15]¹⁵. Water infrastructures investments will include the construction of a miniature dam, the construction of an irrigation system with total water control for an area of 100 ha downstream of the mini-dam, the development and the equipment of 105 ha of irrigated areas through the rehabilitation/drilling of 10 water points, and the supply of 100 drip irrigation kits, 20 water pumps, and 1,000 linear meters of metal fencing.

93. The project formulation team also identified possible alternatives that were considered less cost-effective. The alternatives included:

Implementation in other project sites

85. The targeted population is already aware of the issues linked to the water resources management. On-going projects such as PROMOVARE initiatives, the Community Action Plan for Climate Resilience (PAC-RC) and the PDIPC paved the way for the proposed project. Consequently, in terms of building infrastructures, the targeted populations and local authorities understand the importance of building resilient infrastructure and are aware of the adaptation benefits. In areas that have not yet been subject to previous

interventions, the cost-effectiveness would have been lower as the project would have devoted a greater part of its budget envelope to raising awareness and communicating with the populations concerned.

Training of professional maintenance staff for water infrastructures

86. The project would have been less cost-effective without maintenance training benefiting local communities accompanying the building of water infrastructures. Indeed, by training youth in center formation to be able to ensure the maintenance of the hybrid water systems, communities become self-sufficient to perpetuate their own benefits. Without this notion of self-training but also this will of « learning by doing », the project would have dedicated a bigger part of its budget to professional maintenance staff (internal or external to the country), thus reducing the cost-effectiveness of the project.

Introduction of 2 or 3 large multipurpose infrastructures

The output 2.2 could have focused on the implementation of 2 or 3 large-scale infrastructures for water management instead of developing multiple smaller infrastructures in different villages. This would have made the replication of the intervention as well as the maintenance and sustainability less likely. Implementing a larger number of small infrastructures helps reaching a larger span of beneficiaries and increases the range of lessons learned collected.

[1] Kori is a temporary watercourse caused by the flooding of ponds. They are usually transporting a significant amount of water and solids (including sand), and are responsible for erosion. Their soils are hydromorphic, which gives them the swampy character favourable to market gardening and arboriculture..

[2] Contribution du Consultant Génie Rural, Djibo Niandou, Novembre 2017, Projet : ‘‘Planification et Financement de l’Adaptation aux changements climatiques, cas du Niger’’ See annex F to the Project Document

[3] Bachir Altiné, M. (2017), Rapport thématique sur les ressources en eau pour la formulation du projet de ‘‘Planification et financement de l’adaptation aux changements climatiques au Niger’’

[4] <http://www.ne.undp.org/content/dam/niger/docs/UNDP-NE-PDES%202017-2021.pdf>

[5] <http://www.hydraulique.gouv.ne/>

[6] DBD-Ordonnance n° 2010-09 du 1er avril 2010, portant Code de l’eau au Niger - J.O.Sp n°9 du 29 avril 2010, page 112

[7] http://www.reca-niger.org/IMG/pdf/SPIN_FINALE_Niger.pdf

[8] <http://watergovernance.org/programmes/goal-wash/niger/>

[9] <https://www.thegef.org/project/implementing-napa-priority-interventions-build-resilience-and-adaptive-capacity-agriculture>

[10] Danguioua, A. (2017) Rapport thématique sur les politiques publiques pour la formulation du projet de “Planification de l’adaptation aux changements climatiques au Niger”

[11] <https://www.climatefinance-developmenteffectiveness.org/about/what-cpeir>

[13] Artificially created slope around a field. The technology evacuated excessive rainfalls and maintains stable levels of soil humidity.

[14] No-regret options are those that are justified by current climate conditions and further justified when climate change is considered, e.g. additional off-farm sources of income will provide livelihood benefits extreme weather events increase in frequency. Lim. B, and E. Spanger-Siegfried. 2004. Adaptation policy frameworks for climate change: developing strategies, policies and measures. Cambridge University Press, Cambridge, UK pp 253.

[15] See annex F for Estimation of water infrastructures implementation costs

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.

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.

38. The implementation strategy for the proposed LDCF project includes extensive stakeholder participation. The stakeholder’s involvement during the implementation phase are provided in the table below. More details are available in Annex H to the Project Document – Stakeholder’s engagement.

39. Relevant partners, particularly in the framework of multilateral (WB, ADB, EU) and bilateral (GIZ) cooperation, as well as regional entities (ACMAD, AGRHYMET) will be invited to participate in consultations and provide technical support.

40. The Executive Secretariat of the National Council on Environment for Sustainable Development of Niger (SE/CNEDD): As the main national body in charge of monitoring the implementation of the UNFCCC, the SE/CNEDD is in charge of promoting the integration of CCA into economic and social development strategies, plans, programmes and projects. The SE/CNEDD will be Implementing Agency and chair the Project Steering Committee (PSC). It will be in charge of the coordination and implementation of each activity to contribute to the success of the project's actions and impacts. The SE/CNEDD will ensure the coordination between project stakeholders and ministries involved and that all activities implemented are in line with the rationale of sustainability and gender equality.

Outcomes	Outputs	Institutions
Institutions of coordination, animation, resource mobilization, and impetus for reforms and monitoring and evaluation of effects and impacts		
Outcome 1 Integrate climate change adaptation in relevant water-related budgeting and planning frameworks at national and local levels, with a focus on water resources management measures	1.1 CCA is integrated into national and local budgeting and planning frameworks, especially for the water sector	Departments for Rural Development Ministry of Finance Cellule Eau-Environnement ; Cellule Agriculture-Elevage Ministry of Agriculture and Livestock
	1.2 National, subnational and local stakeholders are trained on mainstreaming CCA practices for enhanced and sustainable water resources management	Governor Executive Secretary of the CNEDD Ministry of Environment and Sustainable Development (ME/DD) Ministry of Agriculture and Livestock Ministry of Finance National Directorate of Meteorology Ministry of Hydraulics and Sanitation Ministry of Planning 3N Initiative High Commission 3N Regional Coordination Unit

	<p>1.3 Good CCA practices and information is shared between stakeholders to facilitate the implementation of the sectoral NAP</p>	<p>Governor Regional Council Regional Directorates of Planning, Community Development, Agriculture, Environment, Livestock, Hydraulics and Scientific Research (INRAN) Communes Prefectures National Directorate of Meteorology</p>
	<p>1.4 Campaigns are launched to inform and sensitize CCA and water resources management, and aware-ness is raising among the population on the effects of climate change on water resources</p>	<p>Commune National Directorate of Meteorology Ministry of Population, Child Protection and Advancement of Women Universities of Tahoua, Tillabéry et Zinder de Maradi</p>
<p>Outcome 2 Disseminate economically sustainable hybrid village water systems and multipurpose infrastructures</p>	<p>2.1 Hybrid household water supply solutions and smallholder irrigation systems are successfully pro-moted in vulnerable communities</p>	<p>Regional Directorates of Planification, Community Development, Agriculture, Environment, Livestock, Hydraulics and Scientific Research (INRAN) Ministry of Hydraulics and Sanitation Ministry of Agriculture and Livestock Governor</p>
	<p>2.2 Climate-smart water facilities are installed in the targeted sites</p>	<p>Prefecture 3N Initiation Regional Coordination Regional Council National Directorate of Meteorology</p>

<p>Outcome 3</p> <p>Establish evidence-based knowledge to inform policies and investments on adaptation in the water sector</p>	<p>3.1 Tailored information services and products on water are set up to respond to the private sector and decision-makers audience needs</p>	<p>Ministry of Hydraulics and Sanitation Ministry of Environment and Sustainable Development (ME/DD) Governor Universities of Tahoua, Tillabéry et Zinder de Maradi Communes</p>
	<p>3.2 Knowledge management and M&E systems are established in the water sector</p>	<p>I 3N High Commission Ministry of Hydraulics and Sanitation Ministry of Environment and Sustainable Development (ME/DD) Governor Universities of Tahoua, Tillabéry et Zinder de Maradi I 3N Regional Coordination</p>
	<p>3.3: An online community platform is implemented</p>	<p>Ministry of Hydraulics and Sanitation Ministry of Environment and Sustainable Development (ME/DD) Ministry of Agriculture and Livestock Ministry of Population, Child Protection and Advancement of Women Regional Directorates of Planification, Community Development, Agriculture, Environment, Livestock, Hydraulics and Scientific Research (INRAN) Communes</p>

<p>Project implementation</p>	<p>Governor Regional Coordination of the Initiative 3N Executive Secretariat of CNEDD (Rio Conventions Focal Point) Ministry of Environment and Sustainable Development (ME/DD) CNEA Ministry of Hydrolics and Sanitation Ministry of Planning Communes I 3N High Commission</p>
--------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

41. The stakeholder involvement strategy will be based on the project’s sites in order to be in line with the process of decentralization and transfer of competencies of sectorial ministries to local territories.

At project start:

42. This phase requires information and awareness-raising activities for stakeholders. These actions will aim to inform stakeholders on the issues, objectives, and project activities, as well as about their positive and negative effects and the measures proposed to mitigate and/or optimize these effects, and finally to inform them on the mechanism provided for their effective involvement in the project.

43. In practice, a series of briefings and awareness-raising workshops will need to be organized in the framework of the project for target communities in target villages. These meetings will bring together not only the traditional authorities (chiefs), but also local elites and local politicians (MPs, mayors). The gender aspect must be taken into account by ensuring the representation of women, young people, and all social strata. These briefings will be organized in collaboration with local administrative authorities.

During the implementation phase:

44. The involvement of local communities in the implementation of project activities will be achieved by (i) prioritizing local people for project recruitment and permanently strengthening their capacities to prepare for the post-project phase, and, (ii) establishing partnerships with local organizations already working with communities (NGOs, CSOs, associations) in the implementation of project activities under the project and building their capacity to achieve better results.

45. At the local level, the project will establish a multi-stakeholder platform, which will include representatives from the following organizations: local NGOs, women and youth associations, local authorities, and famers’ associations. In the project area, the project will facilitate the establishment of a platform composed of local elected MPs,

senators, and mayors. At the regional level, the project will establish a governance platform, which will be chaired by each Governor and will be composed of various heads of departmental services, the private sector, NGOs, and elected representatives.

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)

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).

46. In 2014, the Nigerien population was estimated at 18.2 million people, 52% of whom were women (in Tondikiwindi 50,26%; Ouallam 51,71%; Tenihya 51,55%; Taknamat 50,9%; Tchintabaraden 50,09%; Kao 50,90%; Tabalak 50,38%). The country encourages gender equality and women's rights: the Nigerien Constitution grants equal rights regardless of gender, and Niger ratified both the Convention on the Elimination of All forms of Discrimination against Women (CEDAW) in 1999 and the Optional Protocol on violence against women in 2004 . Niger has also signed but not ratified the Protocol to the African Charter on Human and Peoples' Rights on the Rights of Women in Africa and set up a Ministry of Social Development, Population, Advancement of Women and Protection of Children since 1998. In spite of those political efforts, women's empowerment in Niger remains extremely limited; the country is ranked 157 out of 159 in the Gender Inequality Index.

47. In Niger, women have a major role in agriculture production, performing most of the agricultural tasks , including the fetching of water. Women's agricultural livelihoods are relatively low compared to men, because they generally face more severe constraints than men in accessing productive resources (land, agricultural inputs, technologies, credits, etc.). This vulnerability is further exacerbated by the high dependency of the sector on rain-fed agriculture inducing serious implications on women and their

households in the case of severe weather disruptions such as drought and flood. Drought-induced yields reduction and water scarcity prevent women from generating income to provide food to their households and forces them to go farther and longer in search of water despite insecurity. The decrease in water points and grazing land is also forcing pastoralists to move farther away with their livestock, and the family is then left entirely to the woman's responsibility. This situation has many negative implications for the livelihoods of women and for their households, especially female-headed, which comprise 32% of the households in Niger. Considering gender issues when addressing the resilience of rural communities to climate change is therefore essential. According to UN Women, it is estimated that if the gender gap in agricultural productivity in Niger is closed, there would be an increase in crop yields of 10% to 30% per annum and an additional GDP increase of about 0.25% annually. This would translate into a financial gain of approximately US\$ 17 million per year, an amount which could lift over 25,000 Nigeriens out of poverty.

48. The project will ensure that women and the youth benefit directly from the activities and infrastructures that will be put in place. Component 1 will give women access to trainings and workshops on resilient water resources management practices and benefits. This will reduce the existing gender gap on technology access and agricultural productivity and result in women empowerment and a lightened workload. These results will also be obtained with the Component 2 and the development of climate-resilient water systems. This will significantly reduce the impacts of droughts on agricultural yields and water scarcity hence reducing the length of women's often dangerous daily journeys to fetch water and the threats of food insecurity caused by crop loss. As a result, women and youth will have more time available for other activities, whether it is income-generating activities or the participation to the citizen life of their village or to access education. Gender issues will finally be considered within all the decision-making processes of Component 3, thus ensuring a participation and consideration of women within the community platform and monitoring plans. This will include integrating women's perspectives and making use of their specific knowledge of adaptation, as well as local survival strategies.

49. Consequently, by diminishing water-related issues and agricultural gender gap, the project will lead to an improvement of women and therefore household livelihoods and to women empowerment with education and visibility in decision-making processes. The project has therefore been carefully designed to maximize the potential for contributing to women's empowerment and for gender mainstreaming. It will consider gender issues to ensure equal participation of men and women in decision-making processes, and in the implementation of adaptation activities. The project team will also ensure that these activities do not exacerbate gender inequalities.

50. Finally, the project is based on the principle that gender mainstreaming will lead to more resilient communities and therefore more successful adaptation. It will ensure the participation of the most vulnerable groups, including women and youth, in the document preparation process and will also ensure that they are the main beneficiaries of the investments made under Component 2.

Documents

Title

Submitted

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

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;

Improving women's participation and decision making

Generating socio-economic benefits or services or women

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

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.

Project risks				
Description	Type	Impact, Probability and risk assessment	Mitigation Measures	Owner
Extreme climate events such as floods and droughts could disrupt project activities and/or damage ecosystems and infrastructure.	Environmental	P=3 I=3 <i>Medium</i>	Coordination will be undertaken with partners for disaster response to ensure the protection of the implemented hybrid systems and irrigated water infrastructures. An appropriate emergency plan will be drawn to take quick action. Where damage occurs before ecosystem management adaptation approaches can reduce the impacts of extreme events, supplementary infrastructural approaches and planting will be undertaken.	<i>Project manager</i>

<p>The preparation, construction and operation of some hydrological infrastructures could have temporary detrimental effects on physical, biological or human environments.</p>	<p>Environmental and social</p>	<p>P=3 I=2 Low</p>	<p>Environmental and social studies conducted prior to any infrastructure work susceptible to have a negative impact will analyse the risks and the best mitigation measures.</p>	<p><i>Project Manager</i></p>
<p>Limited capacity within relevant ministries for supporting the NAP process</p>	<p>Organizational Environmental and Social</p>	<p>P=1 I=3 Low</p>	<p>A major part of the project aims to strengthen institutional and technical capacity for planning, designing and implementing local level adaptation actions. Technical capacity building expertise will be contracted to work with and train local technical staff.</p>	<p><i>Project manager and national authorities Project Manager and local/regional authorities</i></p>
<p>Irrigation work could generate real or perceived usage conflicts between communities as well as put pressure on ecosystems</p>	<p>Organizational Environmental and Social</p>	<p>P=1 I=3 Low</p>	<p>Environmental and Social studies will ensure that the design of any irrigation work does not infringe on other communities' usage of the water resource. In the same spirit, environmental studies will ensure that reserved ecological debits are respected in cases where the water withdrawal is non-marginal. All such infrastructures will include a broad group of stakeholders in their design and preparation as to minimize risks of conflict. All stakeholders will have access to the governance body responsible for the infrastructure as well as formal means to voice their concerns.</p>	<p><i>Project manager and national authorities Project Manager and local/regional authorities</i></p>

Weak coordination with on-going adaptation process	Organizational	P=2 I=2 <i>Medium</i>	An operational coordination and consultation mechanisms will be established to ensure ownership of the process and engagement by all actors. In addition, SE/CNEDD is a central actor in climate-related initiatives, and its role as implementing partner will facilitate the coordination between on-going initiatives.	<i>Project Manager and implementing partner</i>
Low capacity of local communities to maintain and sustain water infrastructures	Organizational	P=2 I=3 <i>Low</i>	Relevant trainings and sensitization activities will be conducted under outcome 2 to support local communities to maintain and sustain the water infrastructures and understand the need for their involvement in the sustainability of the infrastructures.	<i>National and local authorities</i>

51. As per standard UNDP requirements, the Project Manager will monitor risks quarterly and report on the status of risks to the UNDP Country Office. The UNDP Country Office will record progress in the UNDP ATLAS risk log. Risks will be reported as critical when the impact and probability are high (i.e. when impact is rated as 5, and when impact is rated as 4 and probability is rated at 3 or higher). Management responses to critical risks will also be reported to the GEF in the annual PIR.

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.

1. Below is a list of the institutional arrangements for project implementation:

- Project Board: The Project Board will take corrective action as needed to ensure the project achieves the desired results. The Project Board will hold project reviews to assess the performance of the project and appraise the Annual Work Plan for the following year. In the project's final year, the Project Board will hold an end-of-project review to capture lessons learned and discuss opportunities for scaling up and to highlight project results and lessons learned with relevant audiences. This final review meeting will also discuss the findings outlined in the project terminal evaluation report and the management response.
- Project Implementing Partner: The Implementing Partner is responsible for providing any and all required information and data necessary for timely, comprehensive, and evidence-based project reporting, including results and financial data, as necessary and appropriate. 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 by and generated by the project supports national systems.
- UNDP Country Office: The UNDP Country Office will support the Project Manager as needed, including through annual supervision missions. The annual supervision missions will take place according to the schedule outlined in the annual work plan. Supervision mission reports will be circulated to the project team and Project Board within one month of the mission. The UNDP Country Office will initiate and organize key GEF M&E activities including the annual GEF PIR, the *independent mid-term review* and the independent terminal evaluation. The UNDP Country Office will also ensure that the standard UNDP and GEF M&E requirements are fulfilled to the highest quality.
- The UNDP Country Office is responsible for complying with all UNDP project-level M&E requirements as outlined in the UNDP POPP. This includes ensuring the UNDP Quality Assurance Assessment during implementation is undertaken annually; that annual targets at the output level are developed, and monitored and reported using UNDP corporate systems; the regular updating of the ATLAS risk log; and the updating of the UNDP gender marker on an annual basis based on gender mainstreaming progress reported in the GEF PIR and the UNDP ROAR. Any quality concerns flagged during these M&E activities (e.g. annual GEF PIR quality assessment ratings) must be addressed by the UNDP Country Office and the Project Manager.
- The UNDP Country Office will retain all M&E records for this project for up to seven years after project financial closure in order to support ex-post evaluations undertaken by the UNDP Independent Evaluation Office (IEO) and/or the GEF Independent Evaluation Office (IEO).
- Project Management Unit: located within the SE/CNEDD, it is the operational body in charge of planning, management, and coordination of the implementation of the project. It will be placed under the authority of the project manager, and it will include one finance and administration staff, one water management expert, and one monitoring evaluation expert. In addition, 4 United Nations volunteers will be recruited to support the national project management unit.
- UNDP-GEF Unit: Additional M&E and implementation quality assurance and troubleshooting support will be provided by the UNDP-GEF Regional Technical Advisor and the UNDP-GEF Directorate as needed.

2. The project will also put an emphasis on the creation of partnerships at the national and regional level to ensure the sustainability of the actions. It will capitalize and create synergies with past and existing CCA GEF-financed projects such as:

<p>(Closed) Scaling up Community-Based Adaptation (CBA) in Niger: Large-scale Transposition of Community Adjustment in the Maradi Region</p> <p>Responsible institution: UNDP,</p> <p>Implementing entity: SE / CNEDD</p> <p>Budget: US\$4.876 million</p> <p>Donors: UNDP, GEF-LDCF, Government of Niger</p> <p>Period: 2014-2018</p>	<p>The project ensured the integration of climate issues into development plans and strategies at the local and regional levels, by creating the capacity to adopt and to implement agricultural and rural systems as well as adaptable measures, guided by reliable technical advice on climate and agriculture, and strives to support a process to create more climate-resilient economies.</p>	<p>Thanks to the project, the capacities of the municipal authorities will be strengthened with regard to climate change. Local development plans will be revised to integrate climate change, using the guide and methodology developed by CNEDD.</p>	<p>The project is a good entry point for integrating climate change into local development plans. Project experiences will be capitalized, for the elaboration of the local drinking water supply and sanitation plans, integrating CCA considerations (output 3.3).</p>
----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<p>(Closed) Climate Information and Prospective Development Project (PDIPC) - Pilot Program for Climate Resilience (PPCR).</p> <p>Responsible institution: Min. of Community Development and Land Use Planning and (MDC/AT)</p> <p>Implementing entity: Directorate of National Meteorology (DMN / Min of Transport)</p> <p>Budget: US\$15,000,000 (US\$11,000,000 loan, US\$4,000,000 grant)</p> <p>Donors: AfDB, IFC</p> <p>Period: Project approval July 2012 / Closing date October 2018</p>	<p>The project is part of Niger's PPCR and aims to (a) improve the quality of climate information and products, (b) improve climate modeling, prediction, and information dissemination, making it available to key users (in this case, farmers and pastoralists) in a way that they can easily understand it, and c) strengthen the EWS (early warning system) and develop an electronic platform for sharing and analyzing meteorological information.</p>	<p>The quality and availability of climate information is crucial in the NAP process This project focuses on building the capacity of the National Meteorological Directorate which plays a central role in providing climate information, climate data and conducting vulnerability analyzes and designing vulnerability scenarios.</p>	<p>The LDCF-funded project will back on the climate information platform established, to support the the climate vulnerability assessment of targeted communes (Output 1.3).</p> <p>Climate information generated by the proposed project could also inform the electronic platform established under the PDIPC initiative.</p> <p>The two projects will work jointly to develop training modules on (output 1.2)</p>
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<p>(Closed) Implementation of NAPA priority interventions to build resilience and adaptive capacity of the agriculture sector in Niger</p> <p>Institution responsible: UNDP</p> <p>Executing entities: SE/CNEDD, municipalities, Ministry of Agriculture, Ministry of Water</p> <p>Budget: \$8.1m</p> <p>Donors: Global Environment Facility – Least Developed Countries Fund (GEF-LDCF), Canada, UNDP, Government</p> <p>Project period: 2010 - 2015</p>	<p>The project focused on activities at local level, where it has played a key role in eight communes in eight different regions of Niger in raising awareness of climate change and in enhancing resilience through income- generating activities (IGA) and more resilient agricultural techniques in particular. The new phase of the project, under Canadian funding, focuses on further strengthening the livelihoods of local population and on disseminating best practices.</p>	<p>Through the project, stakeholders have been trained on climate change at local level, and the capacities of² the municipalities' authorities have been built with regards to climate change and management. The local development plans have been revised to mainstream climate change, using the guide and methodology developed by the CNEDD.</p>	<p>The project collected and analysed information, experiences, and lessons learned to produce and disseminate knowledge that can be shared and usefully applied in other contexts. This project could provide entry points for scaling up opportunities under the NAP process.</p>
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<p>(Closed) Implementing NAPA Priority Interventions to Build Resilience and Adaptive Capacity of the Agriculture Sector to Climate Change (GEF ID 3916)</p> <p>Responsible entity: GEF-funded NAPA</p> <p>Implementing entity: National Council for Environment and Sustainable Development</p> <p>Budget: US\$ 7 million</p> <p>Starting date: March 2009</p> <p>Closing Date: April 2013</p>	<p>The project included a set of measures to enhance adaptation of the agriculture and water resources sectors to address urgent and anticipated climate change impacts.</p>	<p>The project has developed a series of successful adaptation measures and practices in the sector of agriculture.</p>	<p>The proposed project collected and analysed information, experiences, and lessons learned to produce and disseminate knowledge that can be shared and usefully applied in other contexts. This project could provide entry points for scaling up opportunities under the NAP process. Adaptation measures and techniques developed by the project will be capitalized by the proposed project during the design and implementation of water adaptation techniques for agriculture (Outcome 2).</p>
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<p>(Closed) Integrating Climate Resilience into Agricultural and Pastoral Production for Food Security in Vulnerable Rural Areas through the Farmers Field School Approach (GEF ID 4702)</p> <p>Responsible entity: FAO</p> <p>Implementing entities: Ministry of Agriculture and Husbandry (MAE) in collaboration with the SE/CNEDD, the Ministry of Territory Plan, Ministry of Environment (ME) and Secretariat of the Rural Development Strategy (SDR)</p> <p>Budget: US\$ 3.8 million</p> <p>Donors: LDCF, Ministry of Agriculture</p> <p>Starting date: June 2012</p> <p>Closing date: 2016</p>	<p>The project contributed to the integration of climate resilience into agricultural and pastoral production for food security in vulnerable rural areas of Niger through the Farmers Field School.</p>	<p>This LDCF project addressed the need for developing proven and cost-effective outreach and extension approaches and methods in order to allow for an effective up-scaling of CCA strategies and practices, required to ensure increased climate resilience of Niger's key agricultural and agro-pastoral production systems, and lessen the vulnerability to climate change of on-going and future investments in the agro-pastoral sector.</p>	<p>The proposed project will capitalize on lessons learned, from the implementation of Farmers Field School, in particular methods used and their efficiency, for the development of hybrid village water systems and multipurpose infrastructures Outcome 2).</p>
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

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)?

National benefits

54. The project builds on a relevant national framework of CCA-related policies, defined and implemented through budget allocations. This facilitates the mainstreaming of adaptation at all levels of the country:

- The project will advance the NAP process in the water sector, through the establishment of sectoral institutional mechanism steering the process and liaising with the national level (Output 1.1.), the development of climate-related skills among key staff in national institutions and decision-makers (Output 1.2.), the generation of climate evidence-based to inform adaptation planning in this sector (Output 1.3.), and the development of indicators and markers to facilitate CCA mainstreaming into planning and budgeting.
- The project will complete the NAPA adaptation measures, as well as match orientation of the PRS and SDR priorities.
- National capacities for coordination and climate mainstreaming in planning and budgeting processes, will be improved through capacity building of key personnel from all relevant institutions on climate change, and budget tagging and tracking tools for climate finance. These concerted efforts by the SE/CNEDD, the National Commission for Water and Sanitation (CNEA), and the Ministries of Planning and Finance will contribute to the implementation of progressive procedures and tools that can facilitate CCA integration into budget processes.
- By designing, demonstrating, and disseminating integrated water management techniques aligned with adaptation priorities, the project support the implementation of the PANGIRE, and contributes to strengthen the adaptive capacity of population in line with sectoral objectives.
- The project “Scaling up Community Based Adaptation (CBA) in Niger is an appropriate entry point for integrating climate change into local development plans. Project experiences will help to apply the methodology in revising local drinking water sanitation plans. In addition, the implementation of NAPA priority intervention in Niger has played a key role in raising awareness of climate change and in enhancing resilience through income generating activities and more resilient agricultural techniques in particular. The project will therefore build on these experiences to sustain their impacts in the long-term and scale-up opportunities in the NAP process.
- The GCF NAP project, will advance medium and long-term adaptation planning and budgeting in Niger. This project will be implemented in close cooperation with the GCF-financed NAP initiative, to avoid duplications and achieve the highest possible impacts for climate change adaptation planning at the national level.

55. The proposed project will specifically focus on CCA and the water sector. The valorization of water resources offers a specific opportunity to ensure the provision of CCA services at the national level. The sector is recognized and promoted as a key pillar in the overall economic development of the country. Because of the close tie with the GCF- NAP project, the proposed LDCF project will pave the way for the sectoral NAP on water resources management. In addition, by implementing CCA interventions, the proposed project will support the GoN in reaching its development targets and the SDGs.

Local adaptation benefits

56. In the same way that the national government will benefit from significant capacity building, both departmental and municipal authorities will be strengthened in their capacity to incorporate climate risks and opportunities in their planning and budgeting work related to water resources management. As for the local population, the benefits would be plural:

57. Water for agriculture: At the local level, the second component will introduce hybrid solutions that offer sustainable opportunities to facilitate smallholders' access to alternative sources of irrigation for their high-value vegetable crops through small-scale irrigation schemes, even in case of droughts. These improved methods will enable the development of a higher quantity but also a better quality in vegetable and crop production. Moreover, irrigation ponds (manual or gravity irrigation) will secure the development of livestock, including dairy production. In addition, access to water will reinforce the resilience of nomad and sedentary livestock by improving the herd's health, and hence decreasing the vulnerability of breeders.

58. Drinking water: Rural communities will benefit from a safer and climate resilient drinking water access. This will improve health and sanitation conditions. Indirectly, with a larger production of vegetables, meat, and milk, the nutritional situation of the population is also expected to improve. When rural communities find a way to build and operate their own water supply systems, they inevitably build multipurpose systems, which combine household drinking water supplies with a variety of productive uses of water. Multi-purpose village water supply systems follow the pattern of diverse productive uses of water already integrated by rural communities into the systems they build for themselves. In addition, the implementation of productivity optimization methods and access to markets adapted to the village context will follow the integration of hybrid systems.

59. Social benefits: The proposed project will impact the social sector as well. In order to ensure the continued existence of the irrigation infrastructures (manual or gravity irrigation), communities must manage it. In order to organize this maintenance, a participatory approach by all the villagers is anticipated, mostly from the youth and women who are generally the most excluded from these maintenance tasks. The idea is to select several young villagers on a voluntary basis to ensure the maintenance of the irrigation ponds. They will be trained to learn relevant skills related to water management in the context of climate change. Thus, irrigation ponds will produce social benefits in terms of integration and participation of excluded populations (youth and women) in the daily decision-making of the targeted communities, and will generate a positive impact on the rate of employment. As a result, the maintenance of irrigation ponds will further develop the associative life of communities but also political and civil life by implementing an administration board to manage the new infrastructures.

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.

60. The output 3.3 will directly contribute to the knowledge management strategy of the project. An online community platform will be set up to foster partnerships between local authorities and beneficiaries, to enable them to assess progress made, and support the scaling up of local experiences, through the availability of options impact assessments and appraisal. Under this project, such partnerships will be extended to research institutions intervening in the water sector, including local and international research centers, in order to support the performance and impact assessments in the intervention sites, using the monitoring and evaluation framework established under the output 3.2.

61. It is expected that the SE/CNEDD, coordinating this platform, will facilitate its expansion to other vulnerable sector, therefore paving the way for the NAP process, and the sectoral NAPs. Adequate trainings will be designed and provided to the partners to efficiently perform reviews and identify options and opportunities for scaling-up. This platform, by

receiving inputs from stakeholders on innovative climate change adaptation approaches and practices for sustainable water management, as well as thorough reviews of these options, will be an open source database between all the actors to reinforce the multilateral communication and provide up to date information for the widespread upscaling of successful adaptation practices, including by building on the activities conducted under the Outcome 2.

62. This platform will also be informed by the platform developed under the PDIPC for sharing and analyzing meteorological information. For instance, by sharing information and gathering knowledge, it will highlight success factors of local experience in PDCs and Local Water and Sanitation Plans (PLEA). Based on the assessment of the potential, opportunities and lessons learned from intervention sites and project investments, including from the private sector, this output will also support the development of a strategy for the scaling up of successful initiatives. These lessons learned will feed into the strengthening of the institutional framework, supported under the Outcome 2.

63. In addition, the project will support the development of the NAP process in the water sector, using the knowledge and lessons learned collected following the M&E framework (output 3.2) for the field-tested interventions (outcome 2). This will be also strengthened with the information collected in the on-line platform (output 3.3) which will give a broader range of data, in particular for the water sector.

64. Finally, the training of trainers approach will enable the spreading of the knowledge to a wide range of decision makers and small holder farmers, including women.

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.

This project is consistent with Nigerien national priorities as detailed below:

- The National Adaptation Programme of Action to Climate Change (NAPA), adopted by Niger in 2006, aims at implementing the National Strategy and its Action Plan on Climate change and variability, in order to mitigate the adverse effects of climate change on most vulnerable populations, in view of sustainable development and poverty reduction in Niger. The planned activities with LDCF support would add value to the 2006 NAPA by addressing medium- and long-term adaptation needs as part of development planning processes. It will also provide a strong strategic plan and policy dialogue embracing and integrating sector-wide and programmatic approaches in a coherent policy institutional and regulatory framework. Furthermore, the project is supporting the implementation of following NAPA priorities:
 - o Priority#3: rehabilitation of ponds for the development of irrigated agriculture. Under component 2, the project expects to establish multi-purpose infrastructures in sensitive ponds allowing surrounding communities to restore agriculture practices;
 - o Priority #4: diversification and intensification of irrigated agriculture. With the promotion of hybrid system solutions, sufficient water will be made available to meet the participating villagers' needs both for clean drinking and small plot irrigation.

- o Priority #13: bank protection and rehabilitation of silted ponds with the realisation of multi-purpose infrastructures to protect infrastructure and agricultural land from erosion and flooding; and
- o Priority #14: strengthening technical capacity of rural producers. training will be providers to young and women on river protection techniques, the maintenance of infrastructure and socio-environmental monitoring, etc.
- Niger Intended Nationally Determined Contribution (INDC), submitted in September 2016. The INDC indentified the water sector as a priority adaptation intervention, after agriculture (with an accent on climate-smart agriculture), animal husbandry and forestry. Considering that water is directly supporting climate-smart agriculture and animal husbandry, this project is strongly aligned with the priorities defined under the INDC. The NDC for Niger is not available yet.
- Niger National Adaptation Plan (NAP). This project is supporting the implementation of the NAP roadmap defined by the Government of Niger and will directly support the formulation of the NAP framework for the water sector.

The project is also aligned with national priorities such as:

- The **2017-2021 Economic and Social Development Plan (PDES)**, was adopted by the Council of Ministers of Niger. It followed the 2012-2015 PDES, the Poverty Reduction Strategy and the Accelerated Poverty Reduction Strategy and aims to be the framework for all development strategies in Niger. It identifies five priorities: cultural renaissance, social development and demographic transition, accelerating economic growth, improving governance, peace and security, and sustainable environmental management. Its Priority Action Plan includes a budget line for the promotion of CCA and CCM measures. The PDES dedicates an entire program to improve development management. With regards to budget programming, the PDES is implemented through the Multiannual Budget and Economic Programming Document (DPBEP) and the Multiannual Expenditure Programming Documents (DPPD) of sectoral ministries covering a period of three years. They are updated through the annual macroeconomic and budgetary framework exercises. The PDES orientations reflect the various initiatives taken by the GoN to advance the adaptation agenda.
- The Niger Government created a High Commission for the 3N Initiative (“the Nigeriens Nourish the Nigeriens Initiative, or I3N, in 2011 and a strategy was adopted in April 2012. The I3N is integrated in the PDES as the third priority axis. Its objective is to build national capacities with regards to food production, supply and resilience to food crises and disasters. The I3N is a high level initiative supported by the President. It has a lot of visibility and its cross-sectoral nature would also constitute a good entry point for climate mainstreaming, especially as food security and climate change are closely linked in Niger. Climate change is supposed to be addressed in one of the working groups. There could be a focus in ensuring climate change activities are monitored through its M&E system under development.
- The National Mechanism for Disaster and Food Crises Prevention and Management (DNPGCCA) and the CNEDD are both under the Prime Minister’s office and this should in theory facilitate synergies. The DNPGCCA is developing a database which could be linked to the climate information platform as there are some overlaps in data collection and management. Climate change mainstreaming could also intervene at local level with closer relations between DRR/DRM mechanisms and CCA activities, especially with regards to information management and early warning systems.

C. Describe The Budgeted M & E Plan:

Monitoring and Evaluation Plan and Budget:			
GEF M&E requirements	Responsible Parties	Indicative costs (US\$)	Time frame
Inception Workshop	Implementing Partner PM/Coordinator	Total: 30,000	Within 60 days of CEO endorsement of this project.
Inception Report	PM/Coordinator	None	Within 90 days of CEO endorsement of this project.
Monitoring of indicators in project results framework	M&E Specialist	Per year: 5,000	Annually prior to GEF PIR. This will include GEF core indicators.
GEF Project Implementation Report (PIR)	RTA UNDP Country Office ^[1] PM/Coordinator	None ¹³	Annually typically between June-August
Monitoring all risks (UNDP risk register)	UNDP Country Office Coordinator/M&E Specialist/UNVs	10,000	On-going.
Monitoring of stakeholder engagement plan	UNVs	20,000	On-going.
Monitoring of gender action plan	UNVs	19,600	On-going.
Supervision missions	UNDP Country Office	None ^[2]	Annually
Oversight missions	RTA and BPPS/GEF	None ¹⁴	Troubleshooting as needed
Mid-term LDCF Core indicators	PMU	USD 9,750	Before mid-term review mission takes place.
Independent Mid-term Review (MTR) ⁵⁶	Independent evaluators	USD 30,000	January 2023

Monitoring and Evaluation Plan and Budget:			
GEF M&E requirements	Responsible Parties	Indicative costs (US\$)	Time frame
Terminal <i>LDCF</i> Core indicators	Project Coordinator / UNVs	<i>USD 10,000</i>	Before terminal evaluation mission takes place
Independent Terminal Evaluation (TE)	Independent evaluators	USD 40,000	<i>Add date included on cover page of Project Document</i>
TOTAL indicative COST		USD 194,350	

This table aims at providing more clarity on the overall M&E activities to be conducted during implementation, and the indicative costs are not additional to the total budget presented in section X of the project document (no double-costing).

[1] Or equivalent for regional or global project

[2] 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
Adriana Dinu Director, Sustainable Development (Environment) a.i. Executive Coordinator, Global Environmental Finance United Nations Development Programme	8/28/2018	Henry Rene Diouf	2912503321	henry.rene.diouf@undp.org
Pradeep Kurukulasuriya	2/8/2019	Henry Rene Dious	2912503321	henry.rene.diouf@undp.org
Pradeep Kurukulasuriya, UNDP GEF Executive Coordinator	12/3/2019	Clotilde Goeman		clotilde.goeman@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).

		<p>This project will contribute to the following Sustainable Development Goal (s): SDG 2 – End hunger, achieve food security and improved nutrition and promote sustainable agriculture; SDG 5 – Achieve gender equality and empower all women and girls; SDG 6 – Clean water and sanitation; 8 – Promote inclusive and sustainable economic growth, employment, and decent work for all; SDG 9 – Build resilient infrastructure; and SDG 13 – Take urgent action to combat climate change and its impacts.</p>					
		<p>This project will contribute to the following UNDAF/Country Programme Outcome 2: By 2018, national, regional, and local institutions are using appropriate systems and mechanisms for disaster risk prevention/risk management/disaster management, sustainable environmental management and food security.</p>					
		<p>This project will contribute to the following UNDP Strategic Plan 2018-2021 Signature solution 3: Enhance national prevention and recovery capacities for resilient societies</p>					
	Objective and Outcome Indicators	Unit of measurement	Baseline	Mid-term Target	End of Project Target	Source of verification	Assumptions

Project Objective: Strengthen the capacity of national and local institutions and communities to plan and budget for climate change adaptation, while seizing opportunities in the water sector to improve local adaptation and resilience in Niger.	Indicator 1: Local, national and sector wide policies, plans and processes developed and strengthened to identify, prioritize and integrate adaptation strategies and measures related to the water sector	4	25 documents (plans, policies and processes) in the water sector were reviewed to identify entry points for the integration of CCA as a result of the project activities	25 documents (plans, policies and processes) revised by local and national institutions as a result of the project activities	Activity reports Revised documents	National and local institutions are willing to participate in the project activities and to integrate CCA into plans, policies, processes and budgets.
	Indicator 2: Number of direct beneficiaries with decreased vulnerability to climate change and level of decrease	The indicator will be updated according to the baseline during the first year of implementation.	10,000 beneficiaries (at least 50% women) see their average vulnerability reduced by 10% (characterized by rate of access to water, resilience to water scarcity and floods and agricultural yields).	42,450 beneficiaries (at least 50% women) see their average vulnerability reduced by 30% (characterized by rate of access to water, resilience to water scarcity and floods).	Survey in local communities in each target commune	The effects of the projects are significant and occur quickly enough to be reflected in a decrease in vulnerability. In addition, other factors are less important and will not impede attribution. All targeted villages participate actively and implementation goes well.

Component 1: Improving the planning of adaptation in the water sector	Indicator 3: Number of municipalities integrating CCA in relation with water sector into their public policies	8 municipalities targeted by the project PANA resilience integrate CCA into their public policies	The additional 7 municipalities have taken steps to integrate climate change adaptation in these documents.	An additional 7 municipalities have successfully integrated climate change adaptation in these documents.	Consultation with municipalities	UNDP takes practical steps to ensure the inclusion of the CNEDD's guidelines on IDCC in their public policies before validation.
	Indicator 4: Percentage of increase of budget for CCA)	0	20% increase in budget for CCA	25% increase in budget for CCA	post workshop evaluation questionnaire twice a year Survey within NGOs and extension services Activity reports	Politicians and institutions are willing to integrate coordination and consultation to improve their decisions-making processes.
Component 2: Developping field-tested knowledge for IWRM	Indicator 5: Number of people with more secured access to water	0	At least 10,000 people from targeted municipalities with improved access to water services as a result of the project	At least 42,450 of people from targeted municipalities with improved access to water services as a result of the project	Field visits	All targeted villages participate actively and implementation of those infrastructures goes well.
	Indicator 6: Hectare benefitting from better water management	0	500 ha will benefit from better water management	1,765 ha will benefit from better water management.	Field visits Activity reports	All targeted villages participate actively in the surveys and implementation of those infrastructures goes well.

Component 3: Fostering evidence-based decision-making processes	Indicator 7: Availability of a database on climate change adaptation in the water sector for technical partners	0	N/A	A database on CCA related to water sector is available and regularly updated	Number of connection Number of activities listed on the database Number of information loading on the data base	There is a good coordination and cooperation among the stakeholders of the project.
----------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------	---	-----	------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------

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).

STAP Comment	Response
Under Output 1.2, the focus is on getting a good understanding of climate change adaptation through to stakeholders. However, Component 3 is all about building evidence-based policy decisions. STAP believes that one cannot be achieved without the other. That is, getting a grasp on climate change adaptation will rely on having a good understanding of climate science, projections, and uncertainties. Activities under Output 1.2 and Component 3 should therefore not be conducted independently, and should remain tightly connected through the next stages of project design.	The outcomes are all strongly interconnected and will be implemented as such. The project team will ensure that all the activities are conducted in a comprehensive manner. A mention was made under the description of output 1.2 on the need to connect with the outcome 3.
STAP welcomes the focus in Component 2 on water systems and improving water availability and access. We do recommend that in the process of project development, it would be helpful to draw from (and connect to) the substantial set of sustainable land management interventions in Niger; which share many of the same intervention modalities and objectives. Further, this component is really about access to adaptation finance at the local level; and the PIF does not elaborate how the interventions proposed (Outputs 2.1 and 2.2 are all about creating new infrastructure) would more generally improve provision of, and access to finance.	During the PPG, the different stakeholders and project managers were informed about the initiative and were included in the list of stakeholders to connect with during the implementation. Besides, it is expected that lessons learned collected through the different land management interventions, in particular in terms of drought and flood management, in Niger will feed the on-line community platform, therefore informing the design of the LDCF interventions and future interventions. As regards the access to adaptation finance, while it was mentioned in the component title, it was not reflected in the activities, nor in the outcome title. The component has therefore been renamed “Developping field-tested knowledge for IWRM” to align with the planned activities. However, it is worth pointing that the project will improve the access to financing for adaptation by supporting the increasing in national and local adaptation budgets.

<p>Finally, food security and livelihood security are important dimensions of building resilience. The project may want to draw from the substantial experience with social protection interventions, as they are likely to be relevant for both Components 1 and 3. See, for example: Devereux, Stephen. "Social protection for enhanced food security in sub-Saharan Africa." Food Policy 60 (2016): 52-62.</p> <p>Hoddinott, John, Susanna Sandström, and Joanna Upton. "The impact of cash and food transfers: Evidence from a randomized intervention in Niger." (2014).</p>	<p>While the outcome 2 will support food security and livelihoods by improving the access to water for agriculture, the project focuses on water resources sector and the outcome 1 and 3 will not directly target the support to social protection interventions. However we take note of these resources and it was shared with the UNDP colleagues working on the NAP-GCF proposal for their consideration.</p>
Germany comment	Response
<p>Germany appreciates that the PIF addresses: 1) improving planning of adaptation; 2) using sector-wide approach to access to adaptation finance at local level; 3) evidence based policy decisions. The aforementioned are of outmost importance in achieving the project's objective, however, it is not clearly indicated how these three components form a coherent and integrated approach. Whereas component 1) and 3) seem to feed well into each other, the linkage of those to component 2) ("mass dissemination of economically sustainable hybrid village water systems and multipurpose infrastructure") is less clear. Germany therefore kindly suggests to clarify the linkages between the components and to elaborate as to how they work together to coherently contribute to the project's objective.</p>	<p>To strengthen the coherence between the outcomes and to avoid overlapping with the NAP-GCF project, outcomes 1 and 3 were revised and now focus exclusively on the water sector. Consequently, the activities carried out under outcome 2, with the introduction of water infrastructures for drinking and agriculture, are providing very relevant lessons learned for the strengthening of the water adaptation framework.</p>
<p>Germany welcomes the PIF's objective of mass dissemination of economically sustainable hybrid village water systems and multipurpose infrastructure. It would be favorable to highlight the various socio-economic benefits that could be achieved. While effective water resource management is key, the PIF falls short in mentioning the impacts of climate change on the targeted communities and households, and how the foreseen measures are to address them. Germany therefore strongly recommends to highlight adaptation aspects, and to specify how the resources will be used in more detail under component 2).</p>	<p>In-depth details about the vulnerability of the targeted sites were provided in the Development Challenge section and under outcome 2 (without LDCF intervention). In addition, the Prodoc offers details on how the activities to be conducted will provide adaptation benefits under the section "IV. Results and Partnerships".</p>
<p>Germany welcomes the PIF's alignment with Niger's national priorities, as outlined in national strategies and plans i.a. PDES (Economic and Social Development Plan). Given that the institutional and strategic framework have evolved in the past two years and taking into account the international developments since, Germany kindly recommends to a) update the linkages to development plans; b) update progress under the NAP process; c) include a reference to Niger's NDC.</p>	<p>The relevant policies and plans were updated in the Prodoc to address the changes in the political context in Niger over the last years since the PIF submission. This was done through a desk review from the formulation team (international and national consultants) as well as meetings with a large range of stakeholders. This update was also approved by national actors during the validation workshop held in August 2018. The NAP process has also been largely discussed in the Prodoc, in particular with the strong linkages that were established with the NAP-GCF project. As for the NDC, a mention was made in the Prodoc and the project is well aligned with identified adaptation priorities.</p>

In addition, Germany would like to mention that two programmes funded by the German government, might be to overlap with some of the proposed activities: a. “Programme for rural development and productive agriculture: promotion of productive agriculture (PROMAP)” (2016-2018), implemented by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH on behalf of Federal Ministry for Economic Cooperation and Development (BMZ), especially with a view to component 2). b. “Promotion de la Petite Irrigation et de la Sécurité Alimentaire - PISA” (2015/2019), implemented by Kreditanstalt für Wiederaufbau (KfW), especially with a view to component 2).

Both projects were included in the Prodoc and CEO-ER to ensure the activities are coordinated during implementation.

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

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

PPG Grant Approved at PIF: 150,000			
<i>Project Preparation Activities Implemented</i>	<i>GETF/LDCF/SCCF/CBIT Amount (\$)</i>		
	<i>Budgeted Amount</i>	<i>Amount Spent Todate</i>	<i>Amount Committed</i>
Technical assistance (design technical elements as well as all the required financial and administrative components of the project)	86,950.00	27,475.26	59,474.74
Conducting missions to the project sites	36,050.00	5,923.43	30,126.57
Stakeholder consultation and validation workshop	27,000.00	1,413.70	25,586.30
Total	150,000	34,812.39	115,187.61

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.

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

GEF 7 TAXONOMY

Annex C

Please identify the taxonomic information required in Part I, Item G by ticking the most relevant keywords/ topics/themes that best describe the project.

Level 1	Level 2	Level 3	Level 4
<input checked="" type="checkbox"/> Influencing models			
	<input type="checkbox"/> Transform policy and regulatory environments		
	<input checked="" type="checkbox"/> Strengthen institutional capacity and decision-making		
	<input checked="" type="checkbox"/> Convene multi-stakeholder alliances		
	<input type="checkbox"/> Demonstrate innovative approaches		
	<input type="checkbox"/> Deploy innovative financial instruments		
<input checked="" type="checkbox"/> Stakeholders			
	<input type="checkbox"/> Indigenous Peoples		
	<input checked="" type="checkbox"/> Private Sector		
		<input type="checkbox"/> Capital providers	
		<input type="checkbox"/> Financial intermediaries and market facilitators	
		<input type="checkbox"/> Large corporations	
		<input type="checkbox"/> SMEs	
		<input checked="" type="checkbox"/> Individuals/Entrepreneurs	
		<input type="checkbox"/> Non-Grant Pilot	
		<input type="checkbox"/> Project Reflow	
	<input checked="" type="checkbox"/> Beneficiaries		
	<input checked="" type="checkbox"/> Local Communities		
	<input checked="" type="checkbox"/> Civil Society		
		<input checked="" type="checkbox"/> Community Based Organization	
		<input checked="" type="checkbox"/> Non-Governmental Organization	
		<input type="checkbox"/> Academia	
		<input type="checkbox"/> Trade Unions and Workers Unions	
	<input checked="" type="checkbox"/> Type of Engagement		
		<input checked="" type="checkbox"/> Information Dissemination	
		<input type="checkbox"/> Partnership	
		<input checked="" type="checkbox"/> Consultation	
		<input checked="" type="checkbox"/> Participation	
	<input checked="" type="checkbox"/> Communications		
		<input checked="" type="checkbox"/> Awareness Raising	
		<input checked="" type="checkbox"/> Education	
		<input type="checkbox"/> Public Campaigns	
		<input checked="" type="checkbox"/> Behavior Change	
<input checked="" type="checkbox"/> Capacity, Knowledge and Research			
	<input checked="" type="checkbox"/> Enabling Activities		
	<input checked="" type="checkbox"/> Capacity Development		
	<input checked="" type="checkbox"/> Knowledge Generation and Exchange		
	<input type="checkbox"/> Targeted Research		
	<input checked="" type="checkbox"/> Learning		
		<input type="checkbox"/> Theory of Change	
		<input checked="" type="checkbox"/> Adaptive Management	
		<input checked="" type="checkbox"/> Indicators to Measure Change	
	<input type="checkbox"/> Innovation		
	<input checked="" type="checkbox"/> Knowledge and Learning		
		<input checked="" type="checkbox"/> Knowledge Management	

		<input type="checkbox"/> Learning	
	<input checked="" type="checkbox"/> Stakeholder Engagement Plan		
<input checked="" type="checkbox"/> Gender Equality			
	<input checked="" type="checkbox"/> Gender Mainstreaming		
		<input checked="" type="checkbox"/> Beneficiaries	
		<input checked="" type="checkbox"/> Women groups	
		<input checked="" type="checkbox"/> Sex-disaggregated indicators	
		<input checked="" type="checkbox"/> Gender-sensitive indicators	
	<input checked="" type="checkbox"/> Gender results areas		
		<input checked="" type="checkbox"/> Access and control over natural resources	
		<input checked="" type="checkbox"/> Participation and leadership	
		<input type="checkbox"/> Access to benefits and services	
		<input checked="" type="checkbox"/> Capacity development	
		<input checked="" type="checkbox"/> Awareness raising	
		<input checked="" type="checkbox"/> Knowledge generation	
<input type="checkbox"/> Focal Areas/Theme			
	<input type="checkbox"/> Integrated Programs		
		<input type="checkbox"/> Commodity Supply Chains ('Good Growth Partnership)	
			<input type="checkbox"/> Sustainable Commodities Production
			<input type="checkbox"/> Deforestation-free Sourcing
			<input type="checkbox"/> Financial Screening Tools
			<input type="checkbox"/> High Conservation Value Forests
			<input type="checkbox"/> High Carbon Stocks Forests
			<input type="checkbox"/> Soybean Supply Chain
			<input type="checkbox"/> Oil Palm Supply Chain
			<input type="checkbox"/> Beef Supply Chain
			<input type="checkbox"/> Smallholder Farmers
			<input type="checkbox"/> Adaptive Management
		<input type="checkbox"/> Food Security in Sub-Saharan Africa	
			<input type="checkbox"/> Resilience (climate and shocks)
			<input type="checkbox"/> Sustainable Production Systems
			<input type="checkbox"/> Agroecosystems
			<input type="checkbox"/> Land and Soil Health
			<input type="checkbox"/> Diversified Farming
			<input type="checkbox"/> Integrated Land and Water Management
			<input type="checkbox"/> Smallholder Farming
			<input type="checkbox"/> Small and Medium Enterprises
			<input type="checkbox"/> Crop Genetic Diversity
			<input type="checkbox"/> Food Value Chains
			<input type="checkbox"/> Gender Dimensions
			<input type="checkbox"/> Multi-stakeholder Platforms
		<input type="checkbox"/> Food Systems, Land Use and Restoration	
			<input type="checkbox"/> Sustainable Food Systems
			<input type="checkbox"/> Landscape Restoration
			<input type="checkbox"/> Sustainable Commodity Production
			<input type="checkbox"/> Comprehensive Land Use Planning
			<input type="checkbox"/> Integrated Landscapes
			<input type="checkbox"/> Food Value Chains
			<input type="checkbox"/> Deforestation-free Sourcing
			<input type="checkbox"/> Smallholder Farmers
		<input type="checkbox"/> Sustainable Cities	
			<input type="checkbox"/> Integrated urban planning

		<input type="checkbox"/> Urban sustainability framework
		<input type="checkbox"/> Transport and Mobility
		<input type="checkbox"/> Buildings
		<input type="checkbox"/> Municipal waste management
		<input type="checkbox"/> Green space
		<input type="checkbox"/> Urban Biodiversity
		<input type="checkbox"/> Urban Food Systems
		<input type="checkbox"/> Energy efficiency
		<input type="checkbox"/> Municipal Financing
		<input type="checkbox"/> Global Platform for Sustainable Cities
		<input type="checkbox"/> Urban Resilience
	<input type="checkbox"/> Biodiversity	
	<input type="checkbox"/> Protected Areas and Landscapes	
		<input type="checkbox"/> Terrestrial Protected Areas
		<input type="checkbox"/> Coastal and Marine Protected Areas
		<input type="checkbox"/> Productive Landscapes
		<input type="checkbox"/> Productive Seascapes
		<input type="checkbox"/> Community Based Natural Resource Management
	<input type="checkbox"/> Mainstreaming	
		<input type="checkbox"/> Extractive Industries (oil, gas, mining)
		<input type="checkbox"/> Forestry (including HCVF and REDD+)
		<input type="checkbox"/> Tourism
		<input type="checkbox"/> Agriculture & agrobiodiversity
		<input type="checkbox"/> Fisheries
		<input type="checkbox"/> Infrastructure
		<input type="checkbox"/> Certification (National Standards)
		<input type="checkbox"/> Certification (International Standards)
	<input type="checkbox"/> Species	
		<input type="checkbox"/> Illegal Wildlife Trade
		<input type="checkbox"/> Threatened Species
		<input type="checkbox"/> Wildlife for Sustainable Development
		<input type="checkbox"/> Crop Wild Relatives
		<input type="checkbox"/> Plant Genetic Resources
		<input type="checkbox"/> Animal Genetic Resources
		<input type="checkbox"/> Livestock Wild Relatives
		<input type="checkbox"/> Invasive Alien Species (IAS)
	<input type="checkbox"/> Biomes	
		<input type="checkbox"/> Mangroves
		<input type="checkbox"/> Coral Reefs
		<input type="checkbox"/> Sea Grasses
		<input type="checkbox"/> Wetlands
		<input type="checkbox"/> Rivers
		<input type="checkbox"/> Lakes
		<input type="checkbox"/> Tropical Rain Forests
		<input type="checkbox"/> Tropical Dry Forests
		<input type="checkbox"/> Temperate Forests
		<input type="checkbox"/> Grasslands
		<input type="checkbox"/> Paramo
		<input type="checkbox"/> Desert
	<input type="checkbox"/> Financial and Accounting	
		<input type="checkbox"/> Payment for Ecosystem Services
		<input type="checkbox"/> Natural Capital Assessment and Accounting

		<input type="checkbox"/> Supplementary Protocol to the CBD	
			<input type="checkbox"/> Biosafety
			<input type="checkbox"/> Access to Genetic Resources Benefit Sharing
	<input type="checkbox"/> Forests		
		<input type="checkbox"/> Forest and Landscape Restoration	
			<input type="checkbox"/> REDD/REDD+
		<input type="checkbox"/> Forest	
			<input type="checkbox"/> Amazon
			<input type="checkbox"/> Congo
			<input type="checkbox"/> Drylands
	<input type="checkbox"/> Land Degradation		
		<input type="checkbox"/> Sustainable Land Management	
			<input type="checkbox"/> Restoration and Rehabilitation of Degraded Lands
			<input type="checkbox"/> Ecosystem Approach
			<input type="checkbox"/> Integrated and Cross-sectoral approach
			<input type="checkbox"/> Community-Based NRM
			<input type="checkbox"/> Sustainable Livelihoods
			<input type="checkbox"/> Income Generating Activities
			<input type="checkbox"/> Sustainable Agriculture
			<input type="checkbox"/> Sustainable Pasture Management
			<input type="checkbox"/> Sustainable Forest/Woodland Management
			<input type="checkbox"/> Improved Soil and Water Management Techniques
			<input type="checkbox"/> Sustainable Fire Management
			<input type="checkbox"/> Drought Mitigation/Early Warning
		<input type="checkbox"/> Land Degradation Neutrality	
			<input type="checkbox"/> Land Productivity
			<input type="checkbox"/> Land Cover and Land cover change
			<input type="checkbox"/> Carbon stocks above or below ground
		<input type="checkbox"/> Food Security	
	<input type="checkbox"/> International Waters		
		<input type="checkbox"/> Ship	
		<input type="checkbox"/> Coastal	
		<input type="checkbox"/> Freshwater	
			<input type="checkbox"/> Aquifer
			<input type="checkbox"/> River Basin
			<input type="checkbox"/> Lake Basin
		<input type="checkbox"/> Learning	
		<input type="checkbox"/> Fisheries	
		<input type="checkbox"/> Persistent toxic substances	
		<input type="checkbox"/> SIDS : Small Island Dev States	
		<input type="checkbox"/> Targeted Research	
		<input type="checkbox"/> Pollution	
			<input type="checkbox"/> Persistent toxic substances
			<input type="checkbox"/> Plastics
			<input type="checkbox"/> Nutrient pollution from all sectors except wastewater
			<input type="checkbox"/> Nutrient pollution from Wastewater
		<input type="checkbox"/> Transboundary Diagnostic Analysis and Strategic Action Plan preparation	
		<input type="checkbox"/> Strategic Action Plan Implementation	

		<input type="checkbox"/> Aquaculture	
		<input type="checkbox"/> Marine Protected Area	
		<input type="checkbox"/> Biomes	
			<input type="checkbox"/> Mangrove
			<input type="checkbox"/> Coral Reefs
			<input type="checkbox"/> Seagrasses
			<input type="checkbox"/> Polar Ecosystems
			<input type="checkbox"/> Constructed Wetlands
	<input type="checkbox"/> Chemicals and Waste		
		<input type="checkbox"/> Mercury	
		<input type="checkbox"/> Artisanal and Scale Gold Mining	
		<input type="checkbox"/> Coal Fired Power Plants	
		<input type="checkbox"/> Coal Fired Industrial Boilers	
		<input type="checkbox"/> Cement	
		<input type="checkbox"/> Non-Ferrous Metals Production	
		<input type="checkbox"/> Ozone	
		<input type="checkbox"/> Persistent Organic Pollutants	
		<input type="checkbox"/> Unintentional Persistent Organic Pollutants	
		<input type="checkbox"/> Sound Management of chemicals and Waste	
		<input type="checkbox"/> Waste Management	
			<input type="checkbox"/> Hazardous Waste Management
			<input type="checkbox"/> Industrial Waste
			<input type="checkbox"/> e-Waste
		<input type="checkbox"/> Emissions	
		<input type="checkbox"/> Disposal	
		<input type="checkbox"/> New Persistent Organic Pollutants	
		<input type="checkbox"/> Polychlorinated Biphenyls	
		<input type="checkbox"/> Plastics	
		<input type="checkbox"/> Eco-Efficiency	
		<input type="checkbox"/> Pesticides	
		<input type="checkbox"/> DDT - Vector Management	
		<input type="checkbox"/> DDT - Other	
		<input type="checkbox"/> Industrial Emissions	
		<input type="checkbox"/> Open Burning	
		<input type="checkbox"/> Best Available Technology / Best Environmental Practices	
		<input type="checkbox"/> Green Chemistry	
	<input checked="" type="checkbox"/> Climate Change		
		<input checked="" type="checkbox"/> Climate Change Adaptation	
			<input type="checkbox"/> Climate Finance
			<input checked="" type="checkbox"/> Least Developed Countries
			<input type="checkbox"/> Small Island Developing States
			<input type="checkbox"/> Disaster Risk Management
			<input type="checkbox"/> Sea-level rise
			<input checked="" type="checkbox"/> Climate Resilience
			<input type="checkbox"/> Climate Information
			<input type="checkbox"/> Ecosystem-based Adaptation
			<input type="checkbox"/> Adaptation Tech Transfer
			<input type="checkbox"/> National Adaptation Programme of Action
			<input checked="" type="checkbox"/> National Adaptation Plan
			<input checked="" type="checkbox"/> Mainstreaming Adaptation
			<input checked="" type="checkbox"/> Private Sector
			<input checked="" type="checkbox"/> Innovation
			<input type="checkbox"/> Complementarity
			<input checked="" type="checkbox"/> Community-based Adaptation
			<input checked="" type="checkbox"/> Livelihoods
		<input type="checkbox"/> Climate Change Mitigation	

			<input type="checkbox"/> Sustainable Urban Systems and Transport
			<input type="checkbox"/> Technology Transfer
			<input type="checkbox"/> Renewable Energy
			<input type="checkbox"/> Financing
			<input type="checkbox"/> Enabling Activities
		<input type="checkbox"/> Technology Transfer	
			<input type="checkbox"/> Poznan Strategic Programme on Technology Transfer
			<input type="checkbox"/> Climate Technology Centre & Network (CTCN)
			<input type="checkbox"/> Endogenous technology
			<input type="checkbox"/> Technology Needs Assessment
			<input type="checkbox"/> Adaptation Tech Transfer
		<input type="checkbox"/> United Nations Framework on Climate Change	
			<input type="checkbox"/> Nationally Determined Contribution
		<input type="checkbox"/> Climate Finance (Rio Markers)	<input type="checkbox"/> Paris Agreement <input type="checkbox"/> Sustainable Development Goals <input type="checkbox"/> Climate Change Mitigation 1 <input type="checkbox"/> Climate Change Mitigation 2 <input type="checkbox"/> Climate Change Adaptation 1 <input type="checkbox"/> Climate Change Adaptation 2



Submitted to GEF Secretariat Review

[Go To Home](#)