United Nations
Climate Change

Compilation of project profiles from the NAP Writing Support

VERSION OF SEPTEMBER 2022

LEG - Least developed countries Expert Group
UNFCCC

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Preface

1. INTRODUCTION

To facilitate communication of the contents of NAPs on priority adaptation projects, programmes and policies identified by countries, the LEG is producing this compilation to serve as a tool for publicizing their priorities. It is targeted at those in a position to support the LDCs either further develop these into proposals for submission to a funding target, or to those able to offer funding to the implement these projects.

These compilations will remain living documents and will be updated as more project ideas come, and more NAPs are submitted.

2. SECTIONS

This first compilation contains the following:

- Project ideas from the LDCs developed during the NAP writing workshops in 2022, for the LDCs that participated in those workshops.
    - The project profiles collected here are the result of the two NAP Writing Workshops that took place on March 24th to 26th and July 12th to 15th 2022 in Nairobi, Kenya and in Siem Reap, Cambodia respectively. They summarize project ideas and concepts for implementing adaptation solutions from least developed countries developed during the workshop and continued through follow-up activities.

3. CONTACT

For further information and to connect with each country team, contact the National Focal Points directly, or through the LEG at LEGHelp@unfccc.int

The work on NAPs under the UNFCCC and Paris Agreement is supported through the Response Subdivision of the Adaptation Division at the UNFCCC. For more information please visit NAP Central or send an email to napcentral@unfccc.int

Bangladesh: Integrated Coastal Area Management in Bangladesh

National adaptation plan (NAP) writing workshops 2022–2023
Project idea workout
Version of 12 July 2022

1. PROBLEM STATEMENT AND ITS NATIONAL CONTEXT

What is the specific climate-related problem to be addressed? What are specific risks and vulnerabilities and what are main climate impact drivers? Be as specific as possible.

The specific climate-related problems are as follows:

- Sea-level rise
- High salinity in shallow groundwater in the coastal area

Specific Risk and Vulnerabilities:

- The coastal area covers 32% of the country which is very vulnerable due to sea-level rise and storm surges.
- Almost 26 million people are currently exposed to very high salinity in shallow groundwater
- Loss of agricultural production
- Climate-induced migration/displacement in the coastal region

2. CLIMATE CHANGE CONTEXT (TO THE EXTENT KNOWN)

Provide details on the following:

- Systems at risk and the climate change problem (i.e., the hazard) affecting them;
- How climate change has led to the specific impacts for which the proposed adaptation action is considered necessary, or how future projections of climate change will lead to those impacts;
- Linkage between climate change problem to risk – to a particular system, or section of the population – by examining the vulnerability of that system or group to the specific climate hazard;
- If a plausible future scenario (under climate change and related social economic drivers) exists, include information about how the risks and vulnerabilities are likely to change in the medium and long-term.

Sea Level Rise (SLR) is one of the biggest threats for Bangladesh among all the external drivers related to climate change. Global warming is causing the sea-level rise and increasing the vulnerability of low-lying coastal areas of Bangladesh. Future sea-level rise is projected (IPCC, 2021) to be between 0.11-0.12 m in the near term, 0.23-0.27 m in the mid-term, and 0.54- 0.86 m in long term. There is, however, substantial uncertainty in the long-term projections of the sea-level rise near Bangladesh coast according to IPCC with estimates of rising up to 1.75 m in some global models.

The existing coastal protection system (i.e., coastal polders, sea dykes, or embankments) is at risk due to sea-level rise. Some protective infrastructures need to be constructed in several vulnerable areas. Also, some communities are forced to displace due to water logging, salinity intrusion, and other external drivers. The livelihoods of the coastal communities become more vulnerable day by day.

3. ADAPTATION GOAL (S) OF THE PROJECT

State a goal for adaptation given the problem described above for the project. A goal would be a medium- to long-term outcome that is desired for the issue captured in the problem statement.

Ensure coastal protection and the livelihoods of the coastal communities (long-term goal)

4. OBJECTIVES AND ACTIVITIES TO MEET THE GOAL (S)

What are project objectives to be pursued to contribute to achieving the goal and describe the activities to be carried out to achieve each objective. This will have to be refined later and aligned with the project approach of the delivery partner and the Fund policy you would apply to.

The key objective of the project is to establish integrated coastal management to tackle sea-level rise and storm surges in Bangladesh.

The key activities are as follows:

- Construct, repair, and rehabilitate coastal polders, sea dykes, or embankments considering the sea level rise and extreme storm surge height under varying climate change scenarios.
- Enhance inside and outside polder management for proper drainage system and sediment management through innovative and indigenous water resources management techniques.
- Ensure regular and timely operation and maintenance (O&M) of coastal polders.
- Enhance functional participatory water management and effective co-management of water regulation structures.
- Introduce a climate-smart integrated approach for agricultural production.

5. PROJECT DETAILS

Project title: <give a project name that communicates the main thrust of the project>

Integrated Coastal Area Management in Bangladesh

Project site and scale (national/ sub-regional/ district level):

National

Potential Proponent/Executing Entity (name of organization):

Ministry of Environment, Forest and Climate Change

Potential Accredited entity :

UNEP/UNDP

Project partners (other additional partner organizations to be engaged in implementation):

WMO

6. MAIN ACTORS (IN THE COUNTRY/PROJECT AREA)

List the main actors that will have a role to play in the project development and implementation.

Actor (institution, agency, etc.)	Type of institution	Role or Responsibility in the project
MOEFCC/DOE	GO	• Preparation of the Project Concept Note • Development of the Project Proposal • Project Implementation
BWDB	GO	• Provide support as a partner during project implementation
LGED	GO	• Provide support as a partner during project implementation
DDM	GO	• Provide support as a partner during project implementation
WMO	International Organization	• Provide technical assistance • Development Partner
NGOs	NGO	• Provide support during project implementation

7. NEXT STEPS

Identify and briefly describe next steps that you will undertake to further develop this into a concept note, including processing through the GCF NDA (or relevant national focal point for the LDCF or AF if that is the target), identification of an accredited delivery partner, including timelines. These can also include: synthesize available information to provide broader context for the project description; identify and organize meeting(s) with proposed accredited entity to secure their engagement; organize meetings with key stakeholders; , etc.

- Organize a consultation meeting with relevant stakeholders by August 2022
- Update and finalize the draft concept by September 2022
- Concept approval from the NDA and submit to GCF by October

8. TECHNICAL ASSISTANCE NEEDS

Briefly describe what technical support will be needed immediately to advance the work and possible ways to mobilize the support. Also include specific support that the LEG and GCF (if idea is targeting the LDCF or AF, then include reference to them) can provide.

- Support requires strengthening technical capacity to prepare project proposals and concept notes.
- Exchange of experiences and proven best adaptation practices in the coastal area management.

Bangladesh: Development of Climate Resilient Cropping Systems in Bangladesh

National adaptation plan (NAP) writing workshops 2022–2023
Project idea workout
Version of 12 July 2022

1. PROBLEM STATEMENT AND ITS NATIONAL CONTEXT

What is the specific climate-related problem to be addressed? What are specific risks and vulnerabilities and what are main climate impact drivers? Be as specific as possible.

The specific climate-related problems are as follows:

- **Floods**: Increase in frequent and severe floods in the central part and flash floods in the north-eastern part of the country
- **Droughts**: Intensification of droughts in the north-western part
- **Erratic Rainfall**: Low and erratic rainfall in the north-west and western part
- **Salinity Intrusion**: Increase salinity intrusion in the southern part

Specific Risk and Vulnerabilities:
Threats to agricultural production for:

- Very high salinity in shallow groundwater in the coastal region;
- Water-logging and flash floods in the north-eastern part;
- Low and erratic rainfall causes loss of agricultural production in the north-west and western part;
- Soil erosion (including riverbank, coastal, and landslides) affects agricultural production.

2. CLIMATE CHANGE CONTEXT (TO THE EXTENT KNOWN)

Provide details on the following:

- Systems at risk and the climate change problem (i.e., the hazard) affecting them;
- How climate change has led to the specific impacts for which the proposed adaptation action is considered necessary, or how future projections of climate change will lead to those impacts;
- Linkage between climate change problem to risk – to a particular system, or section of the population – by examining the vulnerability of that system or group to the specific climate hazard;
- If a plausible future scenario (under climate change and related social economic drivers) exists, include information about how the risks and vulnerabilities are likely to change in the medium and long-term.

Climate change has resulted in increasingly frequent and severe floods in the central part of the country; flash floods in the north-eastern and eastern parts of Bangladesh, adjacent to Meghalaya and Tripura; and droughts and low and erratic rainfall in north-western and western Bangladesh. Salinity is likely to increase in the south-western and south-central parts of the country; rainfall is likely to become more erratic in the Chittagong Hills; and, the coastal islands will face increased salinity and cyclonic weather.

These changes will require farmers to modify their current cropping systems or change to alternative systems. Research is needed to delineate newly developing climate hotspots, and develop and field test alternative systems, adapted to likely future conditions so that choices are available for farmers as climatic conditions change. The associated seed supply and extension mechanisms also have to be developed.

3. ADAPTATION GOAL (S) OF THE PROJECT

State a goal for adaptation given the problem described above for the project. A goal would be a medium- to long-term outcome that is desired for the issue captured in the problem statement.

Development of climate resilient cropping systems towards addressing food security in Bangladesh

4. OBJECTIVES AND ACTIVITIES TO MEET THE GOAL (S)

What are project objectives to be pursued to contribute to achieving the goal and describe the activities to be carried out to achieve each objective. This will have to be refined later and aligned with the project approach of the delivery partner and the Fund policy you would apply to.

The key objective of the project is to develop and strengthen climate-resilient cropping systems appropriate for different agro-climatic regions and sub-regions.

The key actions are as follows:

1. Revisit and revise present agro-ecological zones vulnerable to climate change and climate-related hazards.
2. Develop climate resilient cropping patterns suited to different regions of the country based on the revised agro-ecological zones and observed phenological and life cycle changes of plants.
3. Conduct field-level trials of climate resilient cropping patterns and associated water management systems.
4. Develop organized seed production and supply system and extension mechanisms.
5. Identify/develop production technologies (i.e., mulching, water management, polytunnels, raised beds, etc.) as appropriate for crop production in climate-vulnerable areas.
6. Develop early warning and weather forecasting for crop production against diseases, insects, drought, flood, storms, tidal surges, etc.

Tentative Budget: 350.0 million USD

Tentative Duration: 5 Years

5. PROJECT DETAILS

Project title: <give a project name that communicates the main thrust of the project>

Development of Climate Resilient Cropping Systems in Bangladesh

Project site and scale (national/ sub-regional/ district level):

National

Potential Proponent/Executing Entity (name of organization):

Ministry of Agriculture (MoA)

Potential Accredited entity :

UNEP/FAO

Project partners (other additional partner organizations to be engaged in implementation):

WMO

6. MAIN ACTORS (IN THE COUNTRY/PROJECT AREA)

List the main actors that will have a role to play in the project development and implementation.

Actor (institution, agency, etc.)	Type of institution	Role or Responsibility in the project
Ministry of Agriculture	Government Institution	• Project Concept Preparation • Development of the Project Proposal • Project Implementation
Department of Agricultural Extension	Government Institution	• Implementing Agency
Department of Environment	Government Institution	• Provide technical support as a partner during project implementation
Bangladesh Meteorological Department	Government Institution	• Provide relevant data and information
WMO	International Agency	• Provide technical assistance (climatic data and information)

7. NEXT STEPS

Identify and briefly describe next steps that you will undertake to further develop this into a concept note, including processing through the GCF NDA (or relevant national focal point for the LDCF or AF

if that is the target), identification of an accredited delivery partner, including timelines. These can also include: synthesize available information to provide broader context for the project description; identify and organize meeting(s) with proposed accredited entity to secure their engagement; organize meetings with key stakeholders; , etc.

- Organize a consultation meeting with relevant stakeholders by September 2022
- Update and finalize the draft concept by December 2022
- Concept approval from the NDA by January 2023
- Proposal submission to GCF by February 2022

8. TECHNICAL ASSISTANCE NEEDS

Briefly describe what technical support will be needed immediately to advance the work and possible ways to mobilize the support. Also include specific support that the LEG and GCF (if idea is targeting the LDCF or AF, then include reference to them) can provide.

- Support requires for strengthening technical capacity
- Exchange of experiences and proven best adaptation practices in developing climate resilient cropping system.
- Support needs from WMO for relevant climatic/meteorological data and information and results of some climate model

Benin: Building Climate resilient agro-communities in Benin

National adaptation plan (NAP) writing workshops 2022–2023
Project idea workout
Version of 12 July 2022

1. PROBLEM STATEMENT AND ITS NATIONAL CONTEXT

What is the specific climate-related problem to be addressed? What are specific risks and vulnerabilities and what are main climate impact drivers? Be as specific as possible.

- Risk of reduced agricultural yield in Benin, country with high poverty rate
- Climate change may cause Benin to become more arid in the North and an increase in erosion and land degradation. The North is already arid and climate change may lead to severe loss in crop productivity or even total crop failure while, the South faces floods.
- Increasing rainfall variability and uncertainty is causing challenges to farmers in terms of production (planting date, what seed to use)
- Subsistence farming facing land availability and quality challenge (mountainous area, protected areas and decreasing soil fertility in the North- Floods and high population density in South)
- Currently there is limited climate information services in this area

2. CLIMATE CHANGE CONTEXT (TO THE EXTENT KNOWN)

Provide details on the following:

- Systems at risk and the climate change problem (i.e., the hazard) affecting them;
- How climate change has led to the specific impacts for which the proposed adaptation action is considered necessary, or how future projections of climate change will lead to those impacts;
- Linkage between climate change problem to risk – to a particular system, or section of the population – by examining the vulnerability of that system or group to the specific climate hazard;
- If a plausible future scenario (under climate change and related social economic drivers) exists, include information about how the risks and vulnerabilities are likely to change in the medium and long-term.

Vulnerability studies have shown that

- the temperature will increase, and this will affect crop production in the area (Type, cropping season)
- spatial distribution of rainfall is bound to change, although direct changes are uncertain

3. ADAPTATION GOAL (S) OF THE PROJECT

State a goal for adaptation given the problem described above for the project. A goal would be a medium- to long-term outcome that is desired for the issue captured in the problem statement.

To create a climate resilient community that thrives on livelihoods related to subsistence agriculture

4. OBJECTIVES AND ACTIVITIES TO MEET THE GOAL (S)

What are project objectives to be pursued to contribute to achieving the goal and describe the activities to be carried out to achieve each objective. This will have to be refined later and aligned with the project approach of the delivery partner and the Fund policy you would apply to.

1. To provide communities with appropriate climate information services (nationally);

Activities

1. To Carry out participatory rural appraisal for the diagnosis of climate change impacts and risks;
2. To sensitize communities for a behavior change.
2. To support farmers to identify most appropriate climate-smart agriculture practices (seed types, soil improvement/organic fertilizers; water management through damming and drip irrigation, water harvesting, study AEZ-what crops to plant in future, diversify livelihoods etc);

Activities

1. To carry out an inventory and prioritization of the most appropriate climate-smart agriculture practices per area
2. Support the communities in developing non- agricultural related income generating activities for women in rural areas
3. Create solutions to address risks associated with crop production (e.g. micro insurance – at local level, or as part of national sovereign insurance through Africa Risk Capacity)

Activities

1. To promote the most relevant CSA practices per area;
2. Lobbing for micro-insurance for smallholder farmers.
4. Improve agricultural value-chains to address poverty and livelihood issues, especially for women farmers (more value crops, markets), also linked to national and global dynamics also; financial arrangements appropriate to the community, e.g. micro finance, local investment clubs …)

Activities

1. Develop value-chains for potential crops
5. … rural migration …

5. PROJECT DETAILS

Project title: <give a project name that communicates the main thrust of the project>

Building climate resilient agro-communities in Benin

Project site and scale (national/ sub-regional/ district level):

National

Potential Proponent/Executing Entity (name of organization):

Potential Accredited entity :

Fonds National pour L'Environnement et le Climat (FNEC)

Project partners (other additional partner organizations to be engaged in implementation):

Ministry of Agriculture, traditional authorities and selected local NGOs

6. MAIN ACTORS (IN THE COUNTRY/PROJECT AREA)

List the main actors that will have a role to play in the project development and implementation.

Actor (institution, agency, etc.)	Type of institution	Role or Responsibility in the project
Direction of Climate change management	Government	Leading the process of concept note formulation
Ministry of agriculture	Government	Associated in the project development and implementation
FNEC	Government (financial institution)	Assist in the whole process (concept note development to project development and implementation)
Local and traditional authorities,		Give their opinion on the local needs and appropriate appraoch
Local NGOs		Associated in project developments and implementation
Beneficiary community		Project development and implementation
Private sector	Private	Associated in project developments and implementation

7. NEXT STEPS

Identify and briefly describe next steps that you will undertake to further develop this into a concept note, including processing through the GCF NDA (or relevant national focal point for the LDCF or AF if that is the target), identification of an accredited delivery partner, including timelines. These can also include: synthesize available information to provide broader context for the project description; identify and organize meeting(s) with proposed accredited entity to secure their engagement; organize meetings with key stakeholders; , etc.

8. Discuss with the National Direction of Climate change about the idea; end of July
9. Discuss the idea with the GCF NDA; August
10. Discuss with the national accredited entity (FNEC); August
11. Organize meetings with key stakeholders; September-December
12. Develop and finalize the concept note (Climate change direction and FNEC); December
13. *Validate the concept note with* key stakeholders; January 2023
14. Get the non-objection letter from the NDA; January 2023

15. Submission to the GCF. February 2023

8. TECHNICAL ASSISTANCE NEEDS

Briefly describe what technical support will be needed immediately to advance the work and possible ways to mobilize the support. Also include specific support that the LEG and GCF (if idea is targeting the LDCF or AF, then include reference to them) can provide.

- Financial assistance for specific studies from FNEC;
- Financial assistance for the development of the concept note;
- Technical assistance from LEG (Reviewing the concept note);

Benin: Integrated water resources management for community better resilience to climate change

National adaptation plan (NAP) writing workshops 2022–2023
Project idea workout
Version of 12 July 2022

1. PROBLEM STATEMENT AND ITS NATIONAL CONTEXT

What is the specific climate-related problem to be addressed? What are specific risks and vulnerabilities and what are main climate impact drivers? Be as specific as possible.

- Benin belongs to three transboundary basins, Niger Mono and Volta basins
- The estimated national surface water quantity is 13 million m^3/year
- Most of the rivers take their sources in the North and go to sea crossing the whole country
- Yet, while the North, which provides the country with most of its food, has a long dry season, the south is flooded, and agriculture is rainfed.
- Climate change exacerbates water problems with longer dry season in the north and higher evapotranspiration. This leads to drier soils, less infiltration, and more erosion in the lower altitudes of the country, more floods events.
- Many rivers dry up
- Lack of water resources management affect activities like agriculture, fishery, husbandry.
- Women and young girls go farther to look for water for domestic use

2. CLIMATE CHANGE CONTEXT (TO THE EXTENT KNOWN)

Provide details on the following:

- Systems at risk and the climate change problem (i.e., the hazard) affecting them;
- How climate change has led to the specific impacts for which the proposed adaptation action is considered necessary, or how future projections of climate change will lead to those impacts;
- Linkage between climate change problem to risk – to a particular system, or section of the population – by examining the vulnerability of that system or group to the specific climate hazard;
- If a plausible future scenario (under climate change and related social economic drivers) exists, include information about how the risks and vulnerabilities are likely to change in the medium and long-term.

Vulnerability studies have shown that

- The four (4) watersheds of Benin (Niger, Ouémé-Yéwa, Volta and Mono-Couffo) are exposed to climate change
- Climate hazards include floods, excessive heat, acute drought, late and violent rains

- The most affected activities are subsistence farming, livestock farming, fishery and cash crop farming.
- The drying up of rivers lead to energy problems with frequent power cut, the modification of the habitats of certain animal and plants species
- Frequents floods lead to more mosquitoes and the development of malaria

3. ADAPTATION GOAL (S) OF THE PROJECT

State a goal for adaptation given the problem described above for the project. A goal would be a medium- to long-term outcome that is desired for the issue captured in the problem statement.

To improve the resilience of Benin communities through integrated water resource management

4. OBJECTIVES AND ACTIVITIES TO MEET THE GOAL (S)

What are project objectives to be pursued to contribute to achieving the goal and describe the activities to be carried out to achieve each objective. This will have to be refined later and aligned with the project approach of the delivery partner and the Fund policy you would apply to.

1. To provide communities with appropriate climate information services (nationally);

Activities

1. To Carry out participatory rural appraisal for the diagnosis of climate change impacts and risks in water sector;
2. To sensitize communities for a behavior change.

2. To improve water sector governance

Activities

1. To strengthen Institutional capacity in the water sector
2. To provide specific water rights to water users through the elaboration/establishment of water laws
3. To strengthen water users' capacity for the operationalization of water regulations

3. To improved water resources (surface water and groundwater) knowledge

Activities

1. To conduct available water resources assessment per hydrological watershed
2. To establish a water information system
4. To promote integrated water resources management through sensitizations, and development of infrastructures, and technologies development

Activities

1. To carry out awareness campaigns for water use efficiency in all sectors
2. To develop irrigation systems in appropriate areas
3. To promote infrastructures and technologies for water reuse in all sectors

5. PROJECT DETAILS

Project title: <give a project name that communicates the main thrust of the project>

Integrated water resource management for Community better resilience to climate change

Project site and scale (national/ sub-regional/ district level): National

National

Potential Proponent/Executing Entity (name of organization):

Directorate general of water and Directorate General of Environment and Climate

Potential Accredited entity :

Fonds National pour L'Environnement et le Climat (FNEC)

Project partners (other additional partner organizations to be engaged in implementation):

Ministry of Agriculture, traditional authorities and selected local NGOs

6. MAIN ACTORS (IN THE COUNTRY/PROJECT AREA)

List the main actors that will have a role to play in the project development and implementation.

Actor (institution, agency, etc.)	Type of institution	Role or Responsibility in the project
Direction of Climate change management	Government	Leading the process of concept note formulation
Directorate general of water	Government	Associated in the project development and implementation
FNEC	Government (financial institution)	Assist in the whole process (concept note development to project development and implementation)
Local and traditional authorities,		Give their opinion on the local needs and appropriate appraoch
Local NGOs		Associated in project developments and implementation
Beneficiary community		Project development and implementation
Private sector	Private	Associated in project developments and implementation

7. NEXT STEPS

Identify and briefly describe next steps that you will undertake to further develop this into a concept note, including processing through the GCF NDA (or relevant national focal point for the LDCF or AF if that is the target), identification of an accredited delivery partner, including timelines. These can also include: synthesize available information to provide broader context for the project description; identify and organize meeting(s) with proposed accredited entity to secure their engagement; organize meetings with key stakeholders; , etc.

- Discuss with the National Direction of Climate change about the idea; end of July
- Discuss the idea with the GCF NDA; August
- Discuss with the national accredited entity (FNEC); August
- Organize meetings with key stakeholders; September-December
- Develop and finalize the concept note (Climate change direction and FNEC); December
- *Validate the concept note with* key stakeholders; January 2023
- Get the non-objection letter from the NDA; January 2023
- Submission to the GCF. February 2023

8. TECHNICAL ASSISTANCE NEEDS

Briefly describe what technical support will be needed immediately to advance the work and possible ways to mobilize the support. Also include specific support that the LEG and GCF (if idea is targeting the LDCF or AF, then include reference to them) can provide.

- Financial assistance for specific studies from FNEC;
- Financial assistance for the development of the concept note;
- Technical assistance from LEG (Reviewing the concept note);

Bhutan: Urban Resilience

National adaptation plan (NAP) writing workshops 2022–2023
Project idea workout
Version of 12 July 2022

1. PROBLEM STATEMENT AND ITS NATIONAL CONTEXT

What is the specific climate-related problem to be addressed? What are specific risks and vulnerabilities and what are main climate impact drivers? Be as specific as possible.

As per World Bank 2015, the growth rate of Bhutan's urban population was the highest among the eight South Asian countries, at **5.7 percent per year from 2000-2010**.

The increasing rural-urban migration accompanied by increasing population has led to haphazard development of the major cities like Thimphu and Phuentsholing including the squatter settlements thereby putting pressure on the environment, land, housing, and other infrastructure and basic services/amenities like water supply, waste, electricity etc.

These cities face numerous problems and challenges associated with managing and developing these infrastructures. **The share of urban poverty increased from 1.9% in 2007 to 4.6% in 2012**. The condition will further deteriorate as the urban population is projected to increase further from **38% in 2017 to around 58% by 2047**.

These underlying problems, if not addressed, will make these cities more vulnerable to the impacts of climate change. Climatic events such as erratic and heavy rainfall are becoming more common with frequent landslides and road/drainage blockades crippling the whole urban road and drainage networks, affecting and multiplying the damage to other infrastructures including the water supply networks and human settlement. Climate change impacts disproportionately affect vulnerable groups, especially the elderly and sick people, and the economically disadvantaged urban populace. These include, but are not limited to, the increased risk of water- and vector-borne diseases, heat stress, and physical injuries from climate-induced hazards. The need to build resilience to climate change impacts and implement disaster risk reduction measures has never been greater than now.

The proposed project will build on risk-informed planning (climate, disaster, socio-economic assessments), review and implement the Thimphu Structure Plan, Regional Master Plan, Comprehensive National Development Plan (CNDP), NDC2, NAP, and other relevant documents.

2. CLIMATE CHANGE CONTEXT (TO THE EXTENT KNOWN)

Provide details on the following:

- Systems at risk and the climate change problem (i.e., the hazard) affecting them;
- How climate change has led to the specific impacts for which the proposed adaptation action is considered necessary, or how future projections of climate change will lead to those impacts;
- Linkage between climate change problem to risk – to a particular system, or section of the population – by examining the vulnerability of that system or group to the specific climate hazard;
- If a plausible future scenario (under climate change and related social economic drivers) exists, include information about how the risks and vulnerabilities are likely to change in the medium and long-term.

Climatic events such as erratic and heavy rainfall are becoming more common with frequent landslides and road/drainage blockades crippling the whole urban road and drainage networks, affecting and multiplying the damage to other infrastructures including the water supply networks and human settlement. Climate risk assessments from NAP increasingly point out to high vulnerabilities of the urban areas particularly Thimphu and Paro given their high exposure. As per NAP Climate Change Vulnerability Analyses(CCVA) mapping, a total population of 235,558 out of 797,264 by 2027 (almost one third of total population) and **287,916 out of 851,176 by 2037 (almost 34% of the total population)** will be exposed to the climate risks in these two major urban centers.

Poor air and water quality, insufficient water availability, waste-disposal problems, and high energy consumption are exacerbated by the increasing population density and demands of urban environments. Strong city planning will be essential in managing these and other difficulties as the world's urban areas swell.

3. ADAPTATION GOAL (S) OF THE PROJECT

State a goal for adaptation given the problem described above for the project. A goal would be a medium- to long-term outcome that is desired for the issue captured in the problem statement.

The main goal of the proposed project is to build the urban resilience of Thimphu-Paro region and enhance its climate and disaster resilience by 2034.

4. OBJECTIVES AND ACTIVITIES TO MEET THE GOAL (S)

What are project objectives to be pursued to contribute to achieving the goal and describe the activities to be carried out to achieve each objective. This will have to be refined later and aligned with the project approach of the delivery partner and the Fund policy you would apply to.

Obj 1: Assess and map hazards and risks for Urban resilience in the national capital region
Activity 1: map all hazards and risks Thimphu-Paro region will be exposed to
Activity 2: carry out a thorough desk review of the Thimphu Structure Plan, Regional Master Plan, CNDP, NDC2, NAP, and other relevant documents
Activity 3: Storm water management incorporating sustainable urban drainage systems

Obj 2: Enhance the resilience of urban assets and services against manmade and natural hazards including climate change impacts;
Activity 1: incorporate Nature-based Solutions to enhance the climate- and disaster-resilience of the region.
Activity 2: Implement effective early warning systems, emergency disaster response, and post disaster recovery

Obj 3: Demonstrate integrated programming through Innovation, technology partnership, inclusivity, and sustainable finance for impactful design and results.
Activity 1: Improve infrastructure design standards to take into consideration natural hazard and climate change risks (e.g., through climate proofing measures) and provide adequate operations and maintenance resources to maintain performance.
Activity 2: Preserve natural ecosystem functions such as natural drainage channels, green space, and natural buffers to protect properties from flooding, storm surge, and erosion.

Obj 4: Build resilience of the urban communities and enhance urban governance.
Activity 1: develop a geodatabase of the existing, natural and man-made resources including infrastructures, water resources, forest, and environmentally and ecologically sensitive areas to enable evidence-based decision making including climate change adaptation while carrying out the project.
Activity 2: assess and adopt various adaptation and mitigation aspects into the urban planning and progress towards an informed planning process.
Activity 3: Develop landscape masterplan

Obj 5: Carry out an analysis of investment options and recommend prospects of investment options in the urban sector.
Activity 1: develop suitable PPP models to support growth of the region in a climate and disaster resilient manner.

5. PROJECT DETAILS

Project title: <give a project name that communicates the main thrust of the project>

Urban Resilience

Project site and scale (national/ sub-regional/ district level):

Thimphu and Paro

Potential Proponent/Executing Entity (name of organization):

GEF-LDCF

Potential Accredited entity :

UNDP

Project partners (other additional partner organizations to be engaged in implementation):

Royal Commission for Urban Development, Thimphu Thromde (Municipality), Paro Dzongkhag (District), NEC

6. MAIN ACTORS (IN THE COUNTRY/PROJECT AREA)

List the main actors that will have a role to play in the project development and implementation.

Actor (institution, agency, etc.)	Type of institution	Role or Responsibility in the project
Royal Commission for Urban Development/MoWHS	Government Agency	Implementing Partner
National Environment Commission	Government Agency	Responsible Party
Ministry of Finance	Government Agency	Responsible Party
Thimphu Thromde (municipality)	Local Government	Responsible Party
Paro Dzongkhag (District) Administration	Local Government	Responsible Party

7. NEXT STEPS

Identify and briefly describe next steps that you will undertake to further develop this into a concept note, including processing through the GCF NDA (or relevant national focal point for the LDCF or AF if that is the target), identification of an accredited delivery partner, including timelines. These can also include: synthesize available information to provide broader context for the project description; identify and organize meeting(s) with proposed accredited entity to secure their engagement; organize meetings with key stakeholders; , etc.

Timeline:
August - November 2022: Concept note preparation
December 2022: PIF approval
Jan 2023 - June 2024: Detailed Project Proposal Development
July - December 2024: GEF-LDCF to review the draft Project document
January 2025: GEF approval
2025 - 2030: Actual Project implementation

Total Budget: USD 20 million

9. TECHNICAL ASSISTANCE NEEDS

Briefly describe what technical support will be needed immediately to advance the work and possible ways to mobilize the support. Also include specific support that the LEG and GCF (if idea is targeting the LDCF or AF, then include reference to them) can provide.

GEF-LDCF

1. review of the PIF and approval
2. Review of draft project document and support for swift approval

Bhutan: Advancing Climate Resilience for Water Sector in Bhutan (ACREWAS)

National adaptation plan (NAP) writing workshops 2022–2023
Project idea workout
Version of 12 July 2022

1. PROBLEM STATEMENT AND ITS NATIONAL CONTEXT

What is the specific climate-related problem to be addressed? What are specific risks and vulnerabilities and what are main climate impact drivers? Be as specific as possible.

According to the Notre Dame Global Adaptation Initiative (ND-GAIN) Matrix, Bhutan is the **32nd most vulnerable** and the **60th most ready country** to the impacts of climate change.

Climate change has affected the communities reliant on irrigation and domestic water sources such as spring and streams through variation in rainfall pattern and temperature. Water infrastructure used to harvest and convey water is vulnerable to physical damage by floods and landslides, leading to water insecurity among both rural and urban areas.

The Advancing Climate Resilience for Water Sector in Bhutan (ACREWAS) project seeks to address the shortages and declining quality of water due to climate induced variation in weather patterns and hazards. **The proposed project are in alignment with the Water Flagship Programme which aims to achieve 24*7 access to safe and adequate drinking irrigation water, the adaptation priorities under water sector under the Bhutan's first National Adaptation Plan (NAP), and the Country Work Program which is the overarching document for guiding climate actions for the next 10 years.**

2. CLIMATE CHANGE CONTEXT (TO THE EXTENT KNOWN)

Provide details on the following:

- Systems at risk and the climate change problem (i.e., the hazard) affecting them;
- How climate change has led to the specific impacts for which the proposed adaptation action is considered necessary, or how future projections of climate change will lead to those impacts;
- Linkage between climate change problem to risk – to a particular system, or section of the population – by examining the vulnerability of that system or group to the specific climate hazard;
- If a plausible future scenario (under climate change and related social economic drivers) exists, include information about how the risks and vulnerabilities are likely to change in the medium and long-term.

The latest regional **Coupled Model Intercomparison Project Phase (CMIP-6)** model projections for the South Asia region suggest that there will be an **increase** in **precipitation with enhanced variability, a decline in glaciers and an increase in glacial runoff**. There will also be **more intense and frequent heat-waves and humid heat stress**.

Climate projections for Bhutan suggest an **increase in temperatures** which are likely to **trigger heat-waves and droughts and contribute to glacial and snow melt**. The Third National Communication (TNC) to the UNFCCC confirms that Bhutan is likely to face an **increase in frequency and magnitude of extreme rain events and windstorms causing flash floods and landslides**. Bhutan is already experiencing wide ranging impacts of climate change, and increasing the incidences of water sources drying up.

The Climate risk assessment for the water sector under the NAP (mixed approach of top-down and bottom-up assessment) further supports the above impact. The water resources assessment (national to Dzongkhag and Gewog level) identifies **Punatsangchhu basin as a hotspot with the highest likelihood of increased duration and frequency of low flows**. The **10-year precipitation events increase most in the gewogs located in central Bhutan across the Punatsangchhu basin**. An **increase of landslide risk** (RCPs 4.5 and 8.5) is projected in the **upstream region of Punatsangchhu basin. Increase in frequency of droughts and extreme rain events** is projected in both Gasa and Tsirang. The climate projection analysis also finds that the **risk of Glacial Lake Outburst Floods (GLOFs) increases** due to climate change, of which the Punatsangchhu Basin has the highest number of glaciers and glacial area, and is one of the main glacier-fed rivers of Bhutan.

Site specific climate trends were analyzed as part of the Project Preparatory Group process, which suggest an **increase in the amount and variability of rainfall and temperature** under both the RCPs. Therefore, the project is proposed to be implemented in the Punatsangchhu Basin in order to enhance the climate resilience for water sector.

3. ADAPTATION GOAL (S) OF THE PROJECT

State a goal for adaptation given the problem described above for the project. A goal would be a medium- to long-term outcome that is desired for the issue captured in the problem statement.

The main goal of the ACREWAS project is to enhance resilience for sustainable economic well-being of the people of Bhutan through climate adaptation of the water sector.

4. OBJECTIVES AND ACTIVITIES TO MEET THE GOAL (S)

What are project objectives to be pursued to contribute to achieving the goal and describe the activities to be carried out to achieve each objective. This will have to be refined later and aligned with the project approach of the delivery partner and the Fund policy you would apply to.

Obj 1: Strengthened water governance, institutions, and financing mechanism in support of climate-resilient water management

Activity 1: Development of water standards and tools.
Activity 2: Carry out participatory assessments and develop plans for water sources.
Activity 3: Develop Dzongkhag Water Master Plans and Punatsangchhu river basin management plan.
Activity 4: Support the establishment of a River Basin Committee (RBC) and RBC Secretariat for Punatsangchhu river basin.
Activity 5: Support the formation and strengthening of capacities of community based water sector institutions (Water User Association).
Activity 6: Assess and introduce a water tariff system.
Activity 8: Assess private sector engagement in the water sector through pilot PPP model in water utility services.

Obj 2: Nature-based solutions for sustainable & climate- resilient watersheds, and livelihood enhancement
Activity 1: Revive spring sources, restore degraded catchment watershed areas and enhance recharge areas.
Activity 2: Strengthen monitoring of forest conditions, spring discharges and rainfall.
Activity 3: Formulate community-based watershed and forest management plans for improved health of watersheds.
Activity 4: Establish and up-scale PES systems through community engagement for improved management of water catchment areas.
Activity 5: Introduce and expand existing climate smart agricultural techniques and restore degraded lands.
Activity 5: Engage corporate, private and civil society entities in watershed and restoration rehabilitation.

Obj 3: Enhanced adaptive capacity of water infrastructure to climate-induced water shortages and quality deterioration through climate-proofing, private sector engagement, and technology deployment
Activity 1: Ensure climate resilient domestic water supply systems for reliable drinking water i
Activity 2: Demonstrate climate-resilient integrated drinking water and dryland irrigation water supply scheme.
Activity 3: Integrate innovative IoT and ICT based SCADA technologies with water collection, storage transmission and distribution networks supported by the project.
Activity 4: Support youth-based start-up enterprises for automated water infrastructure management.

Obj 4: Strengthened awareness and knowledge sharing mechanism established.
Activity 1: Develop awareness packages through documentation of good practices on water conservation and sustainable water resources management, lessons learned from the project and on policy, regulations and approaches for IWRM.
Activity 2: Sensitize and create awareness to generate public action for conservation and sustainable management of water resources.
Activity 3: Align and update technical and engineering curricula of relevant agencies with modern and emerging technologies for climate resilience.
Activity 4: Support diagnosis, analytical capacity and water quality testing.
Activity 5: Institute mechanisms and build capacities for regular reporting and sharing of data, as well as assessment, management and utilization of water resources and infrastructures.

Activity 6: Publish and disseminate State of the Basin Report (SOBR) for the Punatsangchhu River Basin.

5. PROJECT DETAILS

Project title: <give a project name that communicates the main thrust of the project>

Advancing Climate Resilience for Water Sector in Bhutan (ACREWAS)

Project site and scale (national/ sub-regional/ district level):

Punatsangchhu Basin (Gasa, Punakha and Tsirang)

Potential Proponent/Executing Entity (name of organization):

GEF-LDCF

Potential Accredited entity :

UNDP

Project partners (other additional partner organizations to be engaged in implementation):

Ministry of Works and Human Settlement, Ministry of Agriculture and Forests, Ministry of Finance, National Environment Commission, Gasa, Puanakha and Tsirang Dzongkhag (District)

6. MAIN ACTORS (IN THE COUNTRY/PROJECT AREA)

List the main actors that will have a role to play in the project development and implementation.

Actor (institution, agency, etc.)	Type of institution	Role or Responsibility in the project
Department of Engineering Services, MoWHS	Government Agency	Implementing Partner
National Environment Commission	Government Agency	Responsible Party
Ministry of Finance	Government Agency	Responsible Party
Gasa Dzongkhag (District) Administration	Local Government	Responsible Party
Punakha Dzongkhag (District) Administration	Local Government	Responsible Party
Tsirang Dzongkhag (District) Administration	Local Government	Responsible Party

7. NEXT STEPS

Identify and briefly describe next steps that you will undertake to further develop this into a concept note, including processing through the GCF NDA (or relevant national focal point for the LDCF or AF if that is the target), identification of an accredited delivery partner, including timelines. These can also include: synthesize available information to provide broader context for the project description; identify and organize meeting(s) with proposed accredited entity to secure their engagement; organize meetings with key stakeholders; , etc.

Timeline:
1. Obtain Co-financing letters from Implementing partner (MoWHS) and Responsible Parties (MoAF, NEC, Gasa, Punakha and Tsirang Districts): July 2022.
2. Conduct GEF National Steering Committee Meeting: July - August, 2022.
3. Submission of the draft Project Document to UNDP Regional Office, Bangkok: September - October, 2022.
4. Submission of Project Document to GEF Secretariat: November - December, 2022.
5. Review and endorsement by GEF Secretariat: December 2022
6. Actual implementation: 2023-2027

Total Budget: USD 8.9 million

8. TECHNICAL ASSISTANCE NEEDS

Briefly describe what technical support will be needed immediately to advance the work and possible ways to mobilize the support. Also include specific support that the LEG and GCF (if idea is targeting the LDCF or AF, then include reference to them) can provide.

GEF-LDCF
1. Review of the project document and approval.
2. Support in the organization of the Inception Workshop after project endorsement.
3. Support in implementing social and environmental safeguards.

Burkina Faso: Project de renforcement de la résilience des systèmes agro-sylvo-pastoraux et des communautés locales dans les régions du Nord, du Centre-Nord, du Plateau Central et du Centre-Sud

Atelier PNA – canevas PNUE
Note conceptuelle de projet

9. INFORMATIONS GÉNÉRALES

Titre du projet : Projet de renforcement de la résilience des systèmes agro-sylvo-pastoraux et des communautés locales dans les régions du Nord, du Centre-Nord, du Plateau Central et du Centre-Sud

Site et échelle du projet : niveau national/ sous-régional/district: régions du Nord, du Centre-Nord, du Plateau Central et du Centre-Sud

Promoteur/Entité d'exécution : nom de l'organisation: Ministère en charge de l'Environnement

Entité accréditée : nom de l'organisation qui exécutera le projet avec l'entité d'exécution: UICN

Partenaires du projet : autres organisations partenaires engagées dans la mise en œuvre: Ministère en charge de l'agriculture et des ressources animals, les collectivités territoriales, le secteur privé, les communautés locales, les ONG et associations, les PTF

10. DESCRIPTIF DU PROJET

Contexte et base de référence : 2 paragraphes expliquant le contexte général du projet et le problème que l'on veut résoudre. Décrire le contexte de la communauté cible/ des bénéficiaires (moyens de subsistance, ethnicité, genre, géographie, écosystèmes, contexte politique etc). Décrivez le risque climatique que ce projet cherche à traiter.

Dressez la liste des scénarios climatiques disponibles/des données disponibles pour étayer la proposition de projet et définissez les informations manquantes à ce stade.

- pays sahélien dont l'agriculture, essentiellement pluviale, occupe 81,6% des ménages ;
- la zone du projet représente 20% du territoire national. Elle est caractérisée par les zones agro-climatiques qui comprennent la zone sub-sahélienne et la zone Sub soudanienne, avec une pluviométrie, très variable et irrégulière qui décroît du Sud- vers le Nord ;
- avec un indice de vulnérabilité de 61,65, il est classé au 33ème rang des pays les plus vulnérables au monde et 16ème au plan africain (FERDI, 2020) ;
- la vulnérabilité des ménages ruraux se traduit aujourd'hui par plus de 20 % de la population (plus de 3,5 millions de personnes) en proie à l'insécurité alimentaire et nutritionnelle ;

- la dégradation des terres affecte environ 19 % du territoire national soit 5 160 000 ha - entre 2002 et 2017 ;
- Scénarii climatiques : Période 2041- 2050 :
    - Selon le RCP 4,5 : augmentation de la température de 2°C, diminution des précipitations de 1% , la recharge de la nappe diminue de 1%, réduction de l'humidité du sol de 6%
    - Selon le RCP 8,5 : augmentation de la température de 3°C, augmentation des précipitations de 4% , la recharge de la nappe augmente de 18%, augmentation de l'humidité du sol de 2%

  Période 2071-2100
    - Selon le RCP 4,5: augmentation de la température de 2°C, augmentation des précipitations de 1% , la recharge de la nappe diminue de 2%, réduction de l'humidité du sol de 5%
    - Selon le RCP 8,5: augmentation de la température de 3°C, augmentation des précipitations de 4% , la recharge de la nappe augmente de 17%, réduction de l'humidité du sol de 6%

Problématique : Décrivez quel est le problème sous-jacent avec une perspective d'adaptation au changement climatique ? Quels sont les facteurs non climatiques et quels sont les facteurs de changement climatique ? Décrivez les raisons principales et les principaux obstacles (sociaux, sexospécifiques, fiscaux, réglementaires, technologiques, financiers, écologiques, institutionnels, etc.) qui doivent etre addressés

- La faible productivité agro-sylvo-pastorale accroît l'insécurité alimentaire dans les régions ciblées. Cette situation est due en partie à la dégradation accélérée des terres accentuée par le phénomène de la sécheresse ;
- Facteurs non climatiques : mauvaises pratiques agricoles, analphabétisme, technologies non adaptées ;
- Facteurs climatiques : rareté des pluies, mauvaise répartition spatio-temporelle, vagues de chaleur. Ces facteurs climatiques ont pour effets la réduction des rendements agro-sylvo-pastoraux qui impactent l'atteinte de la sécurité alimentaire. Les tendances climatiques montrent que ces facteurs climatiques vont crescendo depuis 1980.
- Facteurs humains : pauvreté, pesanteurs socio-culturelles,
- Facteurs non humains : utilisation des techniques non adaptées,
- Obstacles: pésanteurs socio-culturelles pour l'application de certaines techniques agricoles, la pauvrété qui limite les moyens financiers des producteurs dans l'acquisition des meilleures technologies.

Objectifs du projet : Indiquez brièvement le but général du projet, quel est le ou les objectifs d'adaptation à poursuivre pour atteindre ce but, et décrivez les activités qui seront utilisées pour soutenir les objectifs. Ces éléments devront être ajustés pour s'aligner sur la politique du Fonds auquel vous postulez.

L'objectif global du projet est d'améliorer la résilience des systèmes agro-sylvo-pastoraux et des communautés locales aux changements climatiques par l'application des bonnes pratiques de gestion durable des terres dans les régions du Nord, du Centre-Nord, du Plateau Central et du Centre-Sud ;

Objectifs spécifiques : il s'agira de :
- augmenter la productivité agro-sylvo-pastorale;
- améliorer le revenu des bénéficiaires ;
- améliorer la gouvernance institutionnelle nationale et locale en matière de gestion durable des terres ;
- intégrer des actions en lien avec la neutralité en matière de dégradation des terres dans les planifications au niveau national et local

Activités:
- Récuperer 130 000 ha de terres dégradées;
- Aménager 50 ha de forêts dans chaque région ;
- Réduire l'incidence des feux de brousse de 50% ;
- Aménager et exploiter quatre (04) zones de pâture ;
- Appuyer 500 femmes et jeunes à la mise en place d'AGR durables;
- Vulgariser les bonnes pratiques agricoles

Parties prenantes : dressez la liste des parties prenantes qui auront un rôle à jouer dans le projet et qui sont susceptibles d'être affectées positivement et/ou négativement par le projet. Réalisez une carte pressentant les pouvoirs et les intérêts des parties prenantes.

Partie prenante	Type d'institution	Role / Responsabilité dans le projet	Susceptibles d'être impactés positivement ou négativement par le projet
Ministère en charge de l'environnement	publique	Entité d'exécution	Impact positif
Ministère en charge de l'agriculture et des ressources halieutiques	publique	Partenaire d'exécution	Impact positif
Ministère en charge de l'économie	publique	Tutelle financière	Impact positif
UICN	Internationale	Entité accréditée	Impact positif
Collectivités territoriales de la zone d'intervention du projet	communautaire	bénéficiaire	Impact positif
Les communautés locales	communautaire	bénéficiaire	Impact positif
La secteur privé	privée	Partenaire d'exécution, partenaire de financement	Impact positif
Les ONG et Associations	Société civile	Accompagnement dans l'exécution	Impact positif
Les PTF	International et national	Financement	Impact positif

11. PROCHAINES ÉTAPES

Identifiez et décrivez brièvement les prochaines étapes que vous entreprendrez pour développer davantage cette note conceptuelle, notamment le calendrier. Il peut s'agir de: collecter des données

et entreprendre une analyse pour combler les lacunes en matière information; identifier et organiser une ou plusieurs réunions avec l'entité accréditée proposée afin d'obtenir son engagement; organiser des réunions avec les principales parties prenantes ; élaborer une carte des intérêts/pouvoirs des parties prenantes ; élaborer une théorie du changement ; planifier une étude de préfaisabilité, etc.

- Prise de contact avec l'entité accréditée;
- Consultation des parties prenantes;
- Consultation du public;
- Collecte et analyse des données;
- Développement de la note conceptuelle en partenariat avec toutes les parties prenantes;
- Soumission

Burundi: Flood Control Project in the Agriculture Sector

National adaptation plan (NAP) writing workshops 2022–2023
Project idea workout
Version of 12 July 2022

1. PROBLEM STATEMENT AND ITS NATIONAL CONTEXT

What is the specific climate-related problem to be addressed? What are specific risks and vulnerabilities and what are main climate impact drivers? Be as specific as possible.

- Floods in the agricultural sector
- Risks and vulnerabilities: Clogging of agricultural dams, destruction of houses, loss of life landslides, strong winds, siltation of marshes, destruction of hydroelectric dams.
- The main factors of climate impacts: rugged soils; lack of vegetation cover, overexploitation of agricultural soils due to high population density, lack of efficient land use plans; lack of public awareness of the effects of climate change

2. CLIMATE CHANGE CONTEXT (TO THE EXTENT KNOWN)

Provide details on the following:

- Systems at risk and the climate change problem (i.e., the hazard) affecting them;
- How climate change has led to the specific impacts for which the proposed adaptation action is considered necessary, or how future projections of climate change will lead to those impacts;
- Linkage between climate change problem to risk – to a particular system, or section of the population – by examining the vulnerability of that system or group to the specific climate hazard;
- If a plausible future scenario (under climate change and related social economic drivers) exists, include information about how the risks and vulnerabilities are likely to change in the medium and long-term.

- Risky systems:
    - The agricultural system (livestock)
    - The urban development system
    - The Land Management System

- climate change has led to the specific impacts for which the proposed adaptation measure is considered necessary: low adaptive capacity, the country's level of development is low, the level of education of the population low
- future projections predict flooding on the rise but the country is planning strategies to deal with flood-related impacts

- The problem is the danger already identified on the ground while the risks can lead to problems. Flood risks

- Plausible future scenario include information on howrisks and vulnerabilitiesare likely to change in the medium and long term:

  Deforestation due to overpopulation, cramped agricultural land due to the search for agricultural land, poor cultivation practices

3. ADAPTATION GOAL (S) OF THE PROJECT

State a goal for adaptation given the problem described above for the project. A goal would be a medium- to long-term outcome that is desired for the issue captured in the problem statement.

The main objective of adaptation to the problems described above: to ensure the security and nutrition of the population

4. OBJECTIVES AND ACTIVITIES TO MEET THE GOAL (S)

What are project objectives to be pursued to contribute to achieving the goal and describe the activities to be carried out to achieve each objective. This will have to be refined later and aligned with the project approach of the delivery partner and the Fund policy you would apply to.

The specific objectives:

1. ensure the well-being of the population
2. reducing greenhouse gas emissions

specific activities:

1.1 development of agricultural land
1.2 raising public awareness of resilience (schooling, training, early warning)
1.3 the fight against endemic diseases due to climate change
2.1 reforestation of degraded land
2.2 systematic replacement of mineral fertilizers by organic fertilizers
2.3 Agroforestry and installation of anti-erosion hedges

5. PROJECT DETAILS

Project title: <give a project name that communicates the main thrust of the project>

Flood Control Project in the Agriculture Sector

Project site and scale (national/ sub-regional/ district level):

national level

Potential Proponent/Executing Entity (name of organization):

Ministry of the Environment, Agriculture and Livestock

Potential Accredited entity :

UNDP

Project partners (other additional partner organizations to be engaged in implementation):

FAO, AfDB,..

6. MAIN ACTORS (IN THE COUNTRY/PROJECT AREA)

List the main actors that will have a role to play in the project development and implementation.

Actor (institution, agency, etc.)	Type of institution	Role or Responsibility in the project
Geographical Institute of Burundi (IGEBU)	Personalized institution of a scientific character	Early warning, real-time climate monitoring,
Burundian Office for the Protection of the Environment (OBPE)	Personalized institution of a scientific character	Greenhouse gas inventory
General Directorate of Agriculture	Personalized institution of a scientific character	Raising public awareness and wanting to implement the project

7. NEXT STEPS

Identify and briefly describe next steps that you will undertake to further develop this into a concept note, including processing through the GCF NDA (or relevant national focal point for the LDCF or AF if that is the target), identification of an accredited delivery partner, including timelines. These can also include: synthesize available information to provide broader context for the project description; identify and organize meeting(s) with proposed accredited entity to secure their engagement; organize meetings with key stakeholders; , etc.

After identifying the area of action of the project and the elaboration of the conceptual note of the project and its validation at the international level, it is submitted to the designated national authority (DNA) for its approval and the same entity will pass it to the etape of its mission to the green climate fund.

To multiply the chances of financing, we will go the same document to the other technical and financial partners (FEM, AF, FPMA,...)

8. TECHNICAL ASSISTANCE NEEDS

Briefly describe what technical support will be needed immediately to advance the work and possible ways to mobilize the support. Also include specific support that the LEG and GCF (if idea is targeting the LDCF or AF, then include reference to them) can provide.

Technical assistance: capacity building,technology transfer,assistance for the development of the concept note,assistance in adequate equipment for equipment

Burundi: Food security in the face of drought in the northern region

National adaptation plan (NAP) writing workshops 2022–2023
Project idea workout
Version of 12 July 2022

1. PROBLEM STATEMENT AND ITS NATIONAL CONTEXT

What is the specific climate-related problem to be addressed? What are specific risks and vulnerabilities and what are main climate impact drivers? Be as specific as possible.

- **The specific problem related to the climate to be treated**: Drought in the northern region of the country
- **the risks and vulnerabilities**: food insecurity, loss of fauna and flora, loss of human lives, placement of the population inside the country and outside the country, land conflicts,...
- **the main factors of climate impact**: the rainfall nature of agriculture, the low knowledge of the population with regard to climate change, low level of agricultural technology

2. CLIMATE CHANGE CONTEXT (TO THE EXTENT KNOWN)

Provide details on the following:

- Systems at risk and the climate change problem (i.e., the hazard) affecting them;
- How climate change has led to the specific impacts for which the proposed adaptation action is considered necessary, or how future projections of climate change will lead to those impacts;
- Linkage between climate change problem to risk – to a particular system, or section of the population – by examining the vulnerability of that system or group to the specific climate hazard;
- If a plausible future scenario (under climate change and related social economic drivers) exists, include information about how the risks and vulnerabilities are likely to change in the medium and long-term.

- The systems at risk and the problem of climate change: is the agricultural system and the problem is disruption of rainfall
- climate change has led to the specific impacts for which the proposed adaptation measure is considered necessary as a result of the poor cultivation practices practised by the population of this region in previous years and if nothing is done as appropriate remedial measures, the impacts will not cease to manifest themselves.
- Link between the problem of climate change and the risk: poor agricultural practices, lack of awareness in this region for good management of agricultural land have gradually led to the installation of these drought risks
- To solve this problem, medium-term scenarios are to be considered: capacity building of the population in this region, reforestation, watershed management in the region, development of resilience strategies

3. ADAPTATION GOAL (S) OF THE PROJECT

State a goal for adaptation given the problem described above for the project. A goal would be a medium- to long-term outcome that is desired for the issue captured in the problem statement.

The overall objective is **to ensure food security in the** face **of recurrent drought in the northern region**.

4. OBJECTIVES AND ACTIVITIES TO MEET THE GOAL (S)

What are project objectives to be pursued to contribute to achieving the goal and describe the activities to be carried out to achieve each objective. This will have to be refined later and aligned with the project approach of the delivery partner and the Fund policy you would apply to.

- Specific objectives :
    1. improve environmental protection through better management of natural resources
    2. train and strengthen the capacity of technical services in the region

- the activities to be carried out to achieve each objective:

1.1 tree planting
1.2 contouring of contour lines
1.3 installation of anti-erosion hedges
2.1 development of training plans
2.2 organization of training workshops

5. PROJECT DETAILS

Project title: <give a project name that communicates the main thrust of the project>

Food security in the face of drought in the northern region

Project site and scale (national/ sub-regional/ district level):

northern region of Burundi

Potential Proponent/Executing Entity (name of organization):

Ministry of the Environment, Agriculture and Livestock

Potential Accredited entity :

UNDP

Project partners (other additional partner organizations to be engaged in implementation):

FAO; AfDB; GCF ;FA ;...

6. MAIN ACTORS (IN THE COUNTRY/PROJECT AREA)

List the main actors that will have a role to play in the project development and implementation.

Actor (institution, agency, etc.)	Type of institution	Role or Responsibility in the project
Geographical Institute of Burundi (IGEBU)	Government	Early warning, data collection and processing
Burundian Office for the Protection of the Environment (OBPE)	Government	Greenhouse gas inventory, multiplication of forest plans
Directorate-General for Agriculture and Livestock (DGAE)	Government	Adoption of drought-resistant plans

7. NEXT STEPS

Identify and briefly describe next steps that you will undertake to further develop this into a concept note, including processing through the GCF NDA (or relevant national focal point for the LDCF or AF if that is the target), identification of an accredited delivery partner, including timelines. These can also include: synthesize available information to provide broader context for the project description; identify and organize meeting(s) with proposed accredited entity to secure their engagement; organize meetings with key stakeholders; , etc.

After identifying the area of action of the project and developing the concept note and its validation by stakeholders, it is submitted to the designated national authority for approval and then submitted to the Green Climate Fund.
To increase the chances of financing, the same document is submitted to other technical and financial partners (GEF, FPMA, AfDB,...)

8. TECHNICAL ASSISTANCE NEEDS

Briefly describe what technical support will be needed immediately to advance the work and possible ways to mobilize the support. Also include specific support that the LEG and GCF (if idea is targeting the LDCF or AF, then include reference to them) can provide.

Technical assistance: capacity building, technology transfer, assistance in the development of the concept note and adequate equipment.

Cambodia: Promoting and up-scaling climate smart farming system that resilient to climate change

National adaptation plan (NAP) writing workshops 2022–2023
Project idea workout
Version of 13 July 2022

1. PROBLEM STATEMENT AND ITS NATIONAL CONTEXT

What is the specific climate-related problem to be addressed? What are specific risks and vulnerabilities and what are main climate impact drivers? Be as specific as possible.

In today's Cambodia, raising awareness about climate change and introducing technologies to increase production is not enough to help farmers minimize climate change impacts. Farmers can face the risk of limited availability of quality inputs, such as seeds and fertilizer or might lose income as a result of volatile markets.

2. CLIMATE CHANGE CONTEXT (TO THE EXTENT KNOWN)

Provide details on the following:

- Systems at risk and the climate change problem (i.e., the hazard) affecting them;
- How climate change has led to the specific impacts for which the proposed adaptation action is considered necessary, or how future projections of climate change will lead to those impacts;
- Linkage between climate change problem to risk – to a particular system, or section of the population – by examining the vulnerability of that system or group to the specific climate hazard;
- If a plausible future scenario (under climate change and related social economic drivers) exists, include information about how the risks and vulnerabilities are likely to change in the medium and long-term.

The agriculture, forestry and fisheries sectors, which are highly dependent on the climate, accounted for 26 percent of the GDP in 2012. These sectors are also crucial in supporting livelihoods for a large part of the population. Based on data from the past 20 years, losses in production were mainly due to flooding (about 62%) and drought (about 36%). Under future climate conditions, most of Cambodia's agricultural areas will be exposed to higher drought and flood risks. The growing period for most agricultural areas will be less than five months. The impact of climate change on yields is quite significant. Under the high emission scenario (B1), the wet season rice yield (rain-fed) will decrease continuously until 2030, 2050 and 2080. And, it could fall by up to 70% of current yield levels. Similarly, for dry season rice (irrigated rice), yields could decrease by 40%. Under the low emission scenario (A2), the yield decrease is much less, ranging from 60% to about 20%.

3. ADAPTATION GOAL (S) OF THE PROJECT

State a goal for adaptation given the problem described above for the project. A goal would be a medium- to long-term outcome that is desired for the issue captured in the problem statement.

Income of rural households increased by >50%; and Improve practices

4. OBJECTIVES AND ACTIVITIES TO MEET THE GOAL (S)

What are project objectives to be pursued to contribute to achieving the goal, and describe the activities to be carried out to achieve each objective. This will have to be refined later and aligned with the project approach of the delivery partner and the Fund policy you would apply to.

- Objective: To build capacities, knowledge and awareness of small farmers on climate-smart agriculture techniques.
- Activities: Soft: farming system, technical package, crop tolerance
- Activities: Hard: infrastructure to store water,

5. PROJECT DETAILS

Project title: <give a project name that communicates the main thrust of the project>

Project site and scale (national/ sub-regional/ district level):

Potential Proponent/Executing Entity (name of organization):

Potential Accredited entity :

Project partners (other additional partner organizations to be engaged in implementation)

6. MAIN ACTORS (IN THE COUNTRY/PROJECT AREA)

List the main actors that will have a role to play in the project development and implementation.

Actor (institution, agency, etc.)	Type of institution	Role or Responsibility in the project

7. NEXT STEPS

Identify and briefly describe next steps that you will undertake to further develop this into a concept note, including processing through the GCF NDA (or relevant national focal point for the LDCF or AF if that is the target), identification of an accredited delivery partner, including timelines. These can

also include: synthesize available information to provide broader context for the project description; identify and organize meeting(s) with proposed accredited entity to secure their engagement; organize meetings with key stakeholders; , etc.

- Discussion of Partnership agreement between MAFF and GIZ (August 2022)
- Meeting with provincial administration, PDAFF and stakeholders (Kampong Thom and Siem Reap) (October 2022)
- Develop concept note (Nov 2022)
- MAFF request to MOE for letter of Support (Nov 2022)
- GIZ sub concept note to GCF (Dec 2022)
- Endorsement letter from focal points

8. TECHNICAL ASSISTANCE NEEDS

Briefly describe what technical support will be needed immediately to advance the work and possible ways to mobilize the support. Also include specific support that the LEG and GCF (if idea is targeting the LDCF or AF, then include reference to them) can provide.

- GIZ and LEG

Cambodia: Capacity building and awareness raising on climate change and DRR for FWUC

National adaptation plan (NAP) writing workshops 2022–2023
Project idea workout
Version of 13 July 2022

1. PROBLEM STATEMENT AND ITS NATIONAL CONTEXT

What is the specific climate-related problem to be addressed? What are specific risks and vulnerabilities and what are main climate impact drivers? Be as specific as possible.

With the effect of Global warming Cambodia face the difficulty to prevent loss of water from evaporation. Ground water requires recharging annually from rainwater. Due to climate change impacts on the amount of rainwater needed to recharge ground water, the recharge rate is seriously reduced, leading to Cambodian farmers having insufficient ground water for farming. Problems of increased flood and drought, changes in water supply and water quality, and competition for water. The irregular seasonal times of wet and dry months caused by climate change, especially during the last few decades, has impacts on water resources management and development efforts. At the same time, there is increased demand for water from emerging sectors, including industry, livestock, domestic use, and especially agriculture. Coupled with seasons changing due to climate change, this creates many more social problems.

2. CLIMATE CHANGE CONTEXT (TO THE EXTENT KNOWN)

Provide details on the following:

- Systems at risk and the climate change problem (i.e., the hazard) affecting them;
- How climate change has led to the specific impacts for which the proposed adaptation action is considered necessary, or how future projections of climate change will lead to those impacts;
- Linkage between climate change problem to risk – to a particular system, or section of the population – by examining the vulnerability of that system or group to the specific climate hazard;
- If a plausible future scenario (under climate change and related social economic drivers) exists, include information about how the risks and vulnerabilities are likely to change in the medium and long-term.

Based on data from the past 20 years, losses in production were mainly due to flooding (about 62%) and drought (about 36%). Under future climate conditions, most of Cambodia's agricultural areas will be exposed to higher drought and flood risks. The growing period for most agricultural areas will be less than five months. The impact of climate change on yields is quite significant.

- Agriculture, representing 26.5% of GDP in 2015 according to the National Institute of Statistics (NIS), is highly dependent on rainfall and on the annual flooding/recession of the Tonle Sap Great Lake.
- Water resources: rural communities mostly affected by climate impacts are highly dependent on water resources for agricultural production. Sustainable irrigation systems and sound freshwater management are critical to build the resilience of the country.
- Infrastructure is critically affected by the increasing occurrence and severity of floods resulting in high maintenance costs and the recurrent need to upgrade rural roads and irrigation infrastructure.
- Coastal development: Coastal resources already face a number of environmental pressures, including over-fishing and over-exploitation of forests and mangrove ecosystems that lead to increased erosion. Climate change adds to existing challenges through sea level rise, saline intrusion and coastal erosion.

3. ADAPTATION GOAL (S) OF THE PROJECT

State a goal for adaptation given the problem described above for the project. A goal would be a medium- to long-term outcome that is desired for the issue captured in the problem statement.

Enough water supply for agriculture 3 time per years

4. OBJECTIVES AND ACTIVITIES TO MEET THE GOAL (S)

What are project objectives to be pursued to contribute to achieving the goal, and describe the activities to be carried out to achieve each objective. This will have to be refined later and aligned with the project approach of the delivery partner and the Fund policy you would apply to.

- Objective 1: To build capacities, knowledge and awareness to National, Sub national and Farmers Water User Community on climate-smart Irrigation techniques.
- Activities: Soft: Establish Farmer Water User Community (FWUC), FWUC Network and Develop smart Irrigation Operation Manual, Smart Reservoir Operation Manual

- Objective 2: Rehabilitation and modernization of irrigation system
- Activities: Hard: Rehabilitation of Irrigation systems and Modernization of Irrigation System.

5. PROJECT DETAILS

Project title:

Capacity building and awareness raising on climate change and DRR for FWUC

Project site and scale (national/ sub-regional/ district level):

national and sub-national

Potential Proponent/Executing Entity (name of organization):

GIZ and AFD

Potential Accredited entity:

GIZ and AFD

Project partners (other additional partner organizations to be engaged in implementation):

GIZ and AFD

6. MAIN ACTORS (IN THE COUNTRY/PROJECT AREA)

List the main actors that will have a role to play in the project development and implementation.

Actor (institution, agency, etc.)	Type of institution	Role or Responsibility in the project
MoWRAM	PDoWRAM	Implementer
MAFF	PDAFF	Facilitator
MoE	PED	Facilitator
MRD	PoRD	Facilitator

7. NEXT STEPS

Identify and briefly describe next steps that you will undertake to further develop this into a concept note, including processing through the GCF NDA (or relevant national focal point for the LDCF or AF if that is the target), identification of an accredited delivery partner, including timelines. These can also include: synthesize available information to provide broader context for the project description; identify and organize meeting(s) with proposed accredited entity to secure their engagement; organize meetings with key stakeholders; , etc.

- Discussion of Partnership agreement between MOWRAM, GIZ and AFD (end 2022)
- Meeting with provincial administration, PDOWRAM and stakeholders (Stung Sangke River Basin of Battambang province)
- Develop concept note (Q1 2023)
- MOWRAM request an official letter to MOE for GCF (Q1 2023)
- AFD and GIZ submit concept note to GCF (Q2 2023)

8. TECHNICAL ASSISTANCE NEEDS

Briefly describe what technical support will be needed immediately to advance the work and possible ways to mobilize the support. Also include specific support that the LEG and GCF (if idea is targeting the LDCF or AF, then include reference to them) can provide.

- GIZ, AFD, LEG and WMO

Central African Republic: Système d'alerte précoces et Réduction des Risques-Catastrophes (PSAPRRC)

Atelier PNA – canevas PNUE
Note conceptuelle de projet

Project/Programme Title: Early Warning and Disaster Risk Reduction System (EWDRRS)

Country(ies): Central African Republic

National Designated Authority(ies) (NDA): National Climate Coordination (Ministry of Environment et Sustainable Dévelopement)

Executing Entities: xxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

Accredited Entity(ies) (AE): xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

Date of first submission/ version number: [2020-dec-31] [V.0]

Date of current submission/ version number 2021-March-31] [V.0]

A. Project / Programme Information (max. 1 page)			
A.1. Project or programme	☒ Project ☐ Programme	**A.2. Public or private sector**	☒ Public sector ☐ Private sector
A.3. Indicate the result areas for the project/programme	Mitigation: Reduced emissions from: ☒ Energy access and power generation ☐ Low emission transport ☐ Buildings, cities and industries and appliances ☒ Forestry and land use Adaptation: Increased resilience of: ☒ Most vulnerable people and communities		

	☒ Health and well-being, and food and water security ☒ Infrastructure and built environment ☒ Ecosystem and ecosystem services		
A.4. Estimated mitigation impact (tCO2eq over lifespan)		**A.5. Estimated adaptation impact (number of direct beneficiaries and % of population)**	1.7 million people (25% of the total population)
A.6. Indicative total project cost (GCF + co-finance)	Amount: USD 13,9 Millions	**A.7. Indicative GCF funding requested (max 10M)**	Amount: USD 9,9 Millions
A.8. Mark the type of financial instrument requested for the GCF funding	☒ Grant ☐ Loan ☐ Guarantee Other: specify_____		
A.9. Estimated duration of project/ programme:	a) période de décaissement : 2021-2026	**A.10. Estimated project/ Programme lifespan**	5 years
A.11. Is funding from the Project Preparation Facility needed?	Yes ☒ No ☐	**A.12. Confirm overall ESS category is minimum to no risk[1]**	☒ C or I-3
A.13. Provide rational for the ESS categorization (100 words)	In reference to the environmental and social standards of the International Finance Corporation (IFC), the Project is classified in category C because the activities will have practically no adverse impacts on the environmental and social components of the environment and specifically in terms of environmental and social risks, based on the proposed components, the project is a concrete response to the reduction of environmental risks, in particular relating to external events caused by climate change, notably to reduce the vulnerability of local populations to climate change and to improve living conditions. This categorisation takes into account the environmental and social protection requirements of the VCF as well as the requirements specified in the environmental code on environmental impact studies applicable in the Central African Republic.		
A.14. Has the CN been shared with the NDA?	Yes ☒ No ☐	**A.15. Confidentiality[2]**	☐ Confidential ☒ Not confidential
A.16. Project/Programme rationale, objectives and approach of	This project aims to develop a strategic climate risk and disaster management framework to contribute to the growth of the green economy through resilient development in CAR by strengthening the technical and operational capacities of national institutions to plan for, prevent and manage risks and disasters. It also aims to strengthen the resilience of		

[1] Refer to the SAP ESS Guidelines
[2] Concept notes (or sections of) not marked as confidential may be published in accordance with the Information Disclosure Policy (Decision B.12/35) and the Review of the Initial Proposal Approval Process (Decision B.17/18).

programme/project (max 100 words)	local people's livelihoods through informed decision making. The proposed actions have been identified through an inclusive participatory approach with the contribution of different stakeholders (government, international communities and local populations) due to the recurrence of extreme climatic events (floods, droughts, forest fires...) that the country has experienced in a context of socio-political and economic fragility. With an estimated total cost of USD 9.9 million, the project is divided into three components: 1. Component 1: Technical and operational capacity building for climate risk management 2. Component 2: Capacity building in climate information provision and integration into national and local development plans and adaptation capacities 3. Component 3: Building resilience to climate change at national, regional and community levels The project will be implemented by the Central African government following an inclusive and participatory approach with the support of UNDP and the Green Climate Fund and other financial partners present in CAR. The project will directly benefit more than 1.5 million people (50% of the total population), particularly the most vulnerable segments of the population, namely women and unemployed youth.

B. Project / Programme details (max. 3 pages)

B.1. Context and Baseline (max. 1 page)

Describe the climate vulnerabilities and impacts, GHG emissions profile, and mitigation and adaptation needs that the prospective intervention is envisaged to address

The CAR has a humid tropical climate. The average annual temperatures across the country range from 23°C in the south to 27°C in the north. Rainfall varies between 1600 mm at the edge of the dense forest in the southwest and 800 mm in the savannah zone in the north (Kembe 2008). According to the World Bank, since 1978 the average temperature has increased by about 0.3°C per decade and future projections indicate an increase of 0.7-3°C by 2080. Precipitation data indicate a decrease of about 19 mm/year over the period 1978-2009 with interannual variations followed by a slight increase in rainfall in recent years. In particular, this is due to the increase in mean sea surface temperature (SST) and also to extreme weather events. Projections indicate an increase in the annual average of about 5% with more recurrent extreme events accompanied by droughts and floods.

Variation and modification of climate parameters significantly and recurrently affects public safety, infrastructure, community livelihoods and economic development in general, including the agriculture, forestry, water resources, energy transport and health sectors. The frequency of recurrence appears to be reducing from an average of 10 years to around two to three years. Agriculture and livestock represent 43.2% of the country's GDP and are dependent on climatic conditions will be the most affected sectors if no action is taken to predict extreme events and will affect this main source of income for at least 75% of the population. As an illustration, three quarters of the seedlings were lost during the rainy season, and livestock (both large and small) were decimated. In 2009, the socio-economic impact of the floods caused damage and annual losses estimated at 7 million USD for the city of Bangui alone and left more than ten thousand households homeless, and this number is increasing year after year. In October 2019, the Central African Red Cross counted more than 60,000 homeless people affected by the latest floods throughout the country, including 14,590 in Bangui and Bimbo. In the prefecture of Ouham, for which information is available, nearly 6,700 hectares of agricultural plots were flooded. The most affected areas include Bangui and its surroundings, as well as the prefectures of Basse-Kotto, Lobaye, Mbomou, Nana-Gribizi, Ombella M'poko, Ouaka, Ouham and Vakaga. The living conditions of the population, already very poor (70%) living on less than USD 1 per day, victims of the politico-military crisis for almost two decades, with approximately 2.6 million people in need of humanitarian assistance and 1.7 million in critical situation in need of emergency multisectoral assistance, will see their living conditions exacerbated by the catastrophic risks due

to floods, epidemics such as COVID-19, cholera, Meningitis, Ebola etc. And they are unaware of the risks of disasters and ill-prepared to respond and thus become victims of enormous damage.

It should also be understood that the surprise effect of risks and disasters in CAR has been aggravated not only by the absence of a national policy, inclusive response strategies and operational plans, but also by: i) a lack of a strategic and legislative framework to regulate disaster risk reduction, ii) weaknesses in humanitarian coordination capacities or a lack of a designated horizontal and vertical coordination structure (e.g., the limited mandate of the department in charge of humanitarian affairs), iii) the lack of a national disaster risk management strategy and a lack of a national disaster risk management strategy. (e.g., the limited mandate of the department in charge of humanitarian affairs for multi-sectoral coordination of disaster response and the lack of synergy between the Ministry of Civil Protection and other organisations involved in prevention and management of response plans), (iii) lack of human and material resource capacity due to insufficient qualified personnel to make seasonal and climatic forecasts, the non-existence of a network or stations for data collection throughout the country and information on the most vulnerable areas difficulties in linking climate information production services to institutional stakeholders and communities; and the lack of capacity and tools for translating forecasts to improve understanding and application of forecasting products and services by agencies and communities who are the end users.

Other factors that increase the vulnerability of the population to risks and disasters are: rapid and uncontrolled urbanisation and the uncontrolled settlement of populations in flood-prone areas, and inadequate drainage systems. Drought often causes severe fires in arable and forest lands, and increases annual crop losses due to traditional bushfire practices that are strongly embedded in the habits of local communities with a destructive potential for the environment and an aggravating factor of climate change.

Another important factor in the vulnerability of populations and their ecosystems to the adverse effects of climate change in CAR is the absence of a functional early warning system to monitor, analyse and forecast climate hazards and disseminate related information for informed risk and disaster planning and management. This lack of technical capacity results in, inter alia, poor understanding of current and future risks, limited and inadequate response to impending disasters, seriously compromising human well-being and sustainable human development. In addition, the research and training framework for resilient agro-pastoral development (e.g., resistant and improved varieties) to climate change is ineffective, increasing the degree of vulnerability of populations to risks and disasters. Of the more than twenty existing agro-climatological and meteorological monitoring stations, most were destroyed during the political and military conflicts that the country has experienced. Of the country's 43 main cities, only three of the fifteen (15) non-automatic meteorological stations are operational. This inadequacy does not allow CAR to identify the meteorological trends necessary to establish reliable forecasts. The studies carried out by ASECNA have highlighted the following weaknesses in the country: the difficulty of setting up stations in inhospitable areas; the lack of funds for the rehabilitation and operation of equipment in the meteorological stations managed by the Direction de la Météorologie Nationale (DMN); the lack of qualified personnel; and the inadequate training of technical personnel for the maintenance of equipment;

The risks and disasters linked to climate change will exacerbate the vulnerability of 2.6 million people in need of humanitarian assistance linked to the politico-military crisis, of which 1.7 million in critical situation need emergency multisectoral assistance.

The interventions proposed under this project will contribute to the national priorities defined by the government in the framework of :

- National Recovery and Peacebuilding Plan for the Central African Republic (RCPCA) including the following three pillars: (i) Pillar 1: Supporting Peace, Security and Reconciliation; (ii) Pillar 2: Renewing the social contract between the state and society; (iii) Pillar 3: Ensuring economic recovery and the revival of productive sectors.
- National Determined Contribution (NDC, 2021) submitted to the Glasgow COP-26 on Climate Change aiming in particular at Adaptation Option 1: Adjusting the policy framework Objective 1. Integrate climate change adaptation measures into development policies and programmes for the most vulnerable priority sectors3; Objective 2. Improve awareness, education and communication on adaptation and climate change risks; Adaptation Option 2: Improving knowledge of resilience to climate change: Objective 3. Strengthen capacity to manage climate data at national, regional and local levels; Objective 4. Study the resilience mechanisms of agro-sylvo-pastoral systems; Objective 5. Establish an early warning system Adaptation Option 7: Improving public health systems: Objective 21. Develop an effective surveillance, prevention and response system for human diseases related to climate change. Adaptation Option 8: Sustainable water resources management: Objective 27. Develop a monitoring system for ground and surface water resources;

    - Country document for the mobilisation of the Green Climate Fund,
    - National Adaptation Programme, PANA (2008) whose priorities were reflected in the NDC (2015) and NDC (2021) defined at the strategic level priority actions relating to the establishment of an early warning and information system and the strengthening of adaptive capacities to floods and droughts and the strengthening of adaptive capacities in order to combat the adverse effects and capitalise on the positive effects of climate change

La Communication Nationale, dans le cadre de la Convention Cadre des Nations Unies sur le Changement Climatique, qui préconise le renforcement des systèmes d'observation existant et les programmes en cours ; le développement des télécommunications entre les stations et la promotion de la bonne gestion et du fonctionnement relatifs à la transmission, l'exploitation, l'utilisation et l'archivage des données climatiques ; l'amélioration de la qualité des données et l'accessibilité en temps réel et à moindre frais des données ; le renforcement des capacités humaines, institutionnelles et techniques des organes de presse pour répondre aux besoins d'information des populations ; la participation au programme de protection des données hydro-météorologiques ouvert aux pays membres de l'OMM ; l'intégration de la Stratégie Nationale de la Météorologie dans le RCPCA ; et enfin, le développement d'un cadre de partenariat pour la diffusion des informations météorologiques et le transfert de technologie.

The objective of this project is to develop strategic management of climate-related risks and disasters for climate-resilient development in CAR. To this end, the project is structured around the following components and activities

Component 1: Strengthening technical and operational capacities for climate risk management

For this component, the Project will strengthen the human and technical capacities of the National Hydro-Agro-Meteorological Service in order to establish reliable seasonal and climatic forecasts and mitigate risks or prevent disasters. This includes strengthening and/or rehabilitating stations for data collection, processing, archiving and dissemination of hydro-meteorological and agro-meteorological information in the most vulnerable agro-ecological zones. It is also a question of establishing a reliable communication or data transfer system between the various local stations and a national coordination centre capable of disseminating accurate information in real time. It also involves developing and implementing an institutional and human capacity building strategy based on a prior capacity building needs assessment and institutional analysis carried out as part of the feasibility studies. Human capacity building could include, inter alia, the training of national experts on the use and maintenance of the early warning system, including the analysis, interpretation and communication of hydro-meteorological and agro-meteorological information for risk forecasting and disaster management. Particular emphasis will be placed on training women and youth. Institutional capacity building could include restructuring the National Hydro-Meteorological and Agro-Meteorological Service into an observatory

(decision support tool) and strengthening the capacities of the Directorate General of Civil Protection and the fire and rescue centres, which are now equipped with adequate logistics and fully functional. In terms of outputs and indicative activities, these include

Output 1.1: Improved climate observations, hydrometeorological monitoring capacity and infrastructure.

Activity 1.1.1 Expand coverage of hydrometeorological observation networks to ensure adequate observation and monitoring of the climate system as an important aspect of detecting adverse changes in the climate system throughout the country. They are important for initializing forecast models and validating their outputs. They are also important for obtaining climate information and services for decision-making, such as early warning and response. The aim is to rehabilitate the 13 meteorological stations destroyed during the politico-military crisis and to establish at least 10 additional stations in the country's agro-ecological zones.

Activity 1.1.2 Modernise and automate the hydrometeorological observation networks, using possible emerging cost-effective technologies. This would include automating meteorological and hydrological stations/posts/transmissions (e.g. for water levels in rivers), improving radar systems to ensure adequate coverage, increasing the number of sensors in existing stations (e.g. for agro-meteorology), and improving the quality of the weather forecast. This will be achieved through a number of activities, such as the development of new equipment (e.g. for agromet), upgrading and calibration of equipment, digitisation of records and acquisition of the necessary software, accompanied by a sustained programme of training of Meteo Directorate staff and capacity building.

Activity 1.1.3 Strengthen the Quality Management System in NHD covering the entire value chain of climate services (institutional, operational infrastructure, human resources, systems and processes). Among other things, this will ensure sustained operations and maintenance.

Output 1.2: Strengthened impact-based modelling and forecasting.

Activity 1.2.1 Enhance the Numerical Weather Prediction (NWP) system and related weather forecasting and production process in the Meteo Directorate to improve the accuracy and timeliness of weather forecasts and to enable efficient production and dissemination of relevant weather information and products. NWP models and available data will be improved, including the implementation of a verification system for NWP data and final products. The weather forecasting process will also be upgraded with forecaster workstations, warning software and an automated production system to allow for the efficient delivery of an increased number of tailored end products to end users.

Activity 1.2.2: Introduce and promote the use of models and tools to predict floods, water availability, flood location, and other key climate-related elements in the country. Priority will be given to the introduction of models, tools, methods, systems, processes and products for operational climate services. In addition, the GIS capabilities of the NDB will be improved.

Activity 1.2.2 Make accurate impact-based forecasts - these are forecasts that take into account the vulnerability of people, livelihoods and assets, as well as the hydrometeorological hazard. This activity will introduce tools and methodologies to enable the NDB to access vulnerability and exposure information for targeted forecast users. In addition, it will introduce risk matrices combining impact with probability and will help NDB staff to build capacity to understand the relationships between spatial and temporal variations in vulnerability and exposure for various hazards such as floods.

Output 1.3: Harmonised vulnerability assessment and reporting on climate change impacts

Activity 1.3.1 Establish a common process for reporting climate information at the national level, building on existing national assessments and other documentation. Support capacity development of government entities, national scientific and educational communities to help the country comply with its regional and international obligations to report on climate-related agreements and frameworks.

Activity 1.3.2 Conduct harmonised assessments of CAR's vulnerability to climate change. This will be done through the collection and analysis of climate data and information, accompanied by training of relevant stakeholders, and will serve as a key resource for the government and stakeholders considering extending. . .the long-term impacts of climate change and adaptation scenarios.

Output 1.3: Access, analysis and use of climate information.

Activity 1.3.1 Establish a climate information system for the systematic collection, archiving, processing, management and dissemination of climate information for decision making. This includes hardware, software and human/social infrastructure, as well as systems and protocols for data access and information sharing. This intervention will build the capacity of the e-infrastructure, including climate data, information and knowledge management systems, data analysis, computing infrastructure and data governance.

Activity 1.3.2 Implement a user interface platform for climate information. This will strengthen interactions between the National Meteorological Directorate (as producers) and users of climate services to co-design and co-produce user-driven products and services for sectors such as agriculture and livestock, water management, health and tourism, and downscaled information products for communities, taking into account gender and age dimensions. It will also build the capacity of users to apply climate information in evidence-based decisions and livelihood strategies in ways that enable them to derive maximum benefits and impacts.

Activity 1.3.3 Improve the Numerical Weather Prediction (NWP) system and related weather forecasting and production process in the Meteo Directorate to improve the accuracy and timeliness of weather forecasts and to enable the efficient production and dissemination of relevant weather information and products. NWP models and available data will be improved, including the implementation of a verification system for NWP data and final products. The weather forecasting process will also be upgraded with forecaster workstations, warning software and an automated production system to allow for the efficient delivery of an increased number of tailored end products to end users.

Activity 1.3.4 Introduce and promote the use of models and tools to forecast floods, water availability, flood location, drought and other key climate-related elements of the country. Priority will be given to the introduction of models, tools, methods, systems, processes and products for operational climate services. In addition, the GIS capacity of the National Database (NDB) will be improved.

Activity 1.3.5 Establish an accurate impact-based forecasting system - forecasts that take into account the vulnerability of people, livelihoods and assets, as well as hydrometeorological hazard. This activity will introduce tools and methodologies to enable the NDB to access vulnerability and exposure information for targeted forecast users. In addition, it will introduce risk matrices combining impact with probability and will help NDB staff to strengthen their capacity to

understand the relationships between spatial and temporal variations in vulnerability and exposure for various hazards such as floods.

Output 1.4: Strengthened impact-based modelling and forecasting.

Activity 1.4.1 Improve the Numerical Weather Prediction (NWP) system and the associated weather forecasting and data production process in the Meteo Directorate to improve the accuracy and timeliness of weather forecasts and to enable the efficient production and dissemination of relevant weather information and products. NWP models and available data will be improved, including the implementation of a verification system for NWP data and final products. The weather forecasting process will also be upgraded with forecaster workstations, warning software and automated production system to allow for the efficient dissemination of more customised end products to end users.

Activity 1.4.2 Introduction and use of models and tools to forecast floods, water availability, flood location, and other key elements related to the country's climate. Priority will be given to the introduction of models, tools, methods, systems, processes and products for operational climate services. In addition, the GIS capabilities of the NDB will be improved.

Activity 1.4.3 Development of accurate impact-based forecasts - forecasts that take into account the vulnerability of people, livelihoods and assets, as well as hydrometeorological hazard. This activity will introduce tools and methodologies to enable the NDB to access vulnerability and exposure information for targeted forecast users. In addition, it will introduce risk matrices that combine impact with probability and will help NDB staff build capacity to understand the relationships between spatial and temporal variations in vulnerability and exposure for various hazards such as floods.

Component 2: Capacity building in climate information provision and its integration into national and local development plans and adaptation capacities

As a first step, the Project will carry out an assessment of the specific needs of the different sectors and institutions for hydro-meteorological and agro-meteorological information for decision making (e.g. flood and/or drought warning, water management, etc.). Special efforts will be made to mobilise and establish partnerships with the private sector and to strengthen inter-institutional coordination. Secondly, the Project will develop in consultation with end-users products tailored to their specific needs. Specifically, the Project will facilitate the integration of climate risks into ongoing and future planning and budgeting processes at national and local levels, as well as the development of stakeholders' capacities to better assimilate and use climate information for informed decision-making. A climate information communication strategy (e.g. creation of radio and television weather stations, training of journalists in meteorological communication, etc.) adapted to the local context with particular emphasis on the socio-cultural realities of each priority agro-climatic zone will be developed and implemented. The project will strengthen research institutions (e.g. the Central African Agricultural Research Institute, ICRA), with a view to better understanding the effects of climatic variations on local crop varieties, as well as developing and popularising improved species adapted to climatic conditions. In order to ensure the sustainability of its interventions, a strategy for mobilising medium and long-term funding will be developed. For this component, the following indicative outputs are expected

Output 2.1: Institutional, policy and financial frameworks for climate information services and early warning

Activity 2.1.1 Establish an inter-ministerial and multi-stakeholder climate services and early warning coordination platform, which will assist policy and decision makers to coordinate and use climate information and services to inform decisions, integrated policies, manage the implementation of these policies, coordinate actions that will stimulate uptake

of and investment in climate services, and foster relationships with neighbouring countries such as Georgia on climate services.

Activity 2.1.2 Development of a national policy and financial framework for effective climate services, This will facilitate the integration of climate services into key policies, strategies, plans and budgets and thus lay the foundation for the use of climate information in decision-making. In addition, it will facilitate long-term sustainable service delivery beyond the life of the project by identifying funding modalities for climate information products and promoting integration into the national budget.

Output 2.2: Access, analysis and use of climate information.

Activity 2.2.1 Establish a climate information system for the systematic collection, archiving, processing, management and dissemination of climate information for decision making. This includes hardware, software and human/social infrastructure, as well as systems and protocols for data access and information sharing. This intervention will build the capacity of the e-infrastructure, including climate data, information and knowledge management systems, data analysis, computing infrastructure and data governance.

Activity 2.2.2 Develop a user interface platform for climate information. This will strengthen interactions between the NHD (as producers) and users of climate services to co-design and co-produce user-driven products and services for sectors such as agriculture and livestock, water management, health and tourism, and downscaled information products for communities, taking into account gender and age dimensions. It will also build the capacity of users to apply climate information in evidence-based decisions and livelihood strategies in ways that enable them to derive maximum benefits and impacts.

Activity 2.2.3 Improve the Numerical Weather Prediction (NWP) system and related weather forecasting and production process in the Meteo Directorate, to improve the accuracy and timeliness of weather forecasts and to enable efficient production and dissemination of relevant weather information and products. NWP models and available data will be improved, including the implementation of a verification system for NWP data and final products. The weather forecasting process will also be upgraded with forecaster workstations, warning software and automated production system to allow for the efficient dissemination of more customised end products to end users.

Activity 2.2.4 Introduce and promote the use of models and tools to forecast floods, water availability, flood location, and other key elements related to the country's climate. Priority will be given to the introduction of models, tools, methods, systems, processes and products for operational climate services. In addition, the GIS capabilities of the NDB will be improved.

Activity 2.2.5 Make accurate impact-based forecasts - forecasts that take into account the vulnerability of people, livelihoods and assets, as well as hydrometeorological hazard. This activity will introduce tools and methodologies to enable the NDB to access vulnerability and exposure information for targeted forecast users. In addition, it will introduce risk matrices that combine impact with probability and will help NDB staff build capacity to understand the relationships between spatial and temporal variations in vulnerability and exposure for various hazards such as floods.

Component 3: Building resilience to climate change at national, regional and community levels

The Project will develop a Natural Risk Reduction Plan (PRRN) as a planning and decision-making tool defining, for the city of Bangui and its surroundings, a mapping of natural hazards (e.g. flooding, etc.) and their intensity, the rules of good land use, as well as the associated zoning plans. The Project will also work towards the integration of the PRRN into national and local land use planning initiatives (e.g. National Land Use Plan, National Land Use Plan, etc.). Following the PRRN, the Project will draw up for each commune a Document d'information communal sur les risques majeurs (DICRIM) enabling the Mayor to inform the population of the safeguard measures to be taken in response to the risks in the commune. On the other hand, the Project will develop departmental/communal contingency plans as a tool to manage events of any kind, including emergencies, to coordinate the actions of a network of Civil Protection actors in the broad sense (public, private actors) in the preparation phase and in emergency situations, to provide elements of real-time decision support through procedural guides and finally to develop a shared risk culture and operational culture (action/reaction).

Output 3.1: Multi-hazard early warning system

Activity 3.1.1 Systematic data collection, processing and analysis and climate risk assessment to improve risk knowledge. In order to understand system dynamics, this would be combined with mapping and assessment of critical social, economic and environmental drivers of change at national and EU levels, and across sectors, space and time.

Activity 3.1.2 Design and implementation of impact-based and multiple risk forecasting models to predict hazards by location and potential impact. This would include the development, dissemination and use of risk maps (e.g. floods) combined with socio-economic data for planning and response to slow and rapid onset hazards.

Activity 3.1.3 Establish a comprehensive climate-related risk warning and prevention service. This would include the development and use of a vulnerability and exposure data monitoring tool to maintain relevant impact-based forecasting models over time and the provision of actionable information for effective response measures.

Output 3.2: Dissemination and communication of climate risk information and early warning messages

Activity 3.2.1 Develop and implement coordinated and integrated protocols and related capacity to communicate risk information, early warnings and early action messages in a timely manner. This would include the establishment of common alert protocols for warnings, the use of SMS, social media channels and interactive feedback loops for users.

Activity 3.2.2 Strengthen national, sub-national and community capacity to implement mitigation and preparedness measures in the window between a forecast and the potential event. This would include awareness raising and advocacy activities, as well as the establishment of an enabling legal and policy framework for early action.

Activity 3.2.3 Strengthen national and community response capacity and develop standard operating procedures or early action plans for institutions, sectors and decentralised levels of disaster management planning. This would include awareness-raising and sensitization activities, and the establishment of an enabling legal and policy framework for early warning.

Output 3.3 Sectoral and community awareness, education and outreach on climate risks

Activity 3.3.1 Develop and implement comprehensive national climate risk awareness programmes through workshops, seminars and campaigns to prepare the public to adapt to climate change, secure their lives, property and livelihoods in the event of climate-related hazards such as floods, and adopt alternative livelihood strategies.

Activity 3.3.2 Development and dissemination of targeted climate information and warning products for agriculture, water management, tourism, health and other relevant sectors. In addition to the development of sectoral climate change response strategies, this will improve their response capacity.

Output 3.4: Enhanced community capacity to respond to climate risks and hazards

Activity 3.4.1 Implement community-based early warning systems and community-based climate risk management approaches to complement the national MSEAS in selected communities, taking into account the needs of women, disadvantaged and vulnerable groups. The selected communities will be relatively at risk, have short lead times for extreme events, have technical constraints for national systems to serve them effectively (e.g. due to their remote mountain locations).

Activity 3.4.2 Involve and train selected communities in the design, implementation and operation of early warning systems, including improving community understanding of climate-related hazards and exposure, establishing a monitoring and early warning service;

Activity 3.4.3 Establish appropriate dissemination and communication channels and build the capacity of communities to respond to climate-related hazards to secure their lives, property and livelihoods.

Activity 3.4.4 Establish pilot community-based climate information and early warning centres in prefectures (Basse-Kotto, Lobaye, Mbomou, Nana-Gribizi, Ombella M'poko, Ouaka, Ouham, and Vakaga) to serve as a "meeting point" This could involve the use or rehabilitation of an existing facility or the construction of new facilities to strengthen the already established network.

This project has real transformational potential in that it will promote the transfer of new technologies and the emergence of a new approach to climate risk management based on integrated, participatory and sustainable planning. Risk management will no longer be done in an ad hoc manner, but rather in a strategic manner based on integrated development plans and programmes. Similar projects have never been implemented in the least developed countries of Central Africa. In the specific case of the Central African Republic, sporadic support is provided by development partners, notably the European Union for capacity building of the Directorate General of Civil Protection and some fire and rescue centres, as well as the Programme for the Rehabilitation and Strengthening of the Resilience of the Socio-Ecological Systems of the Lake Chad Basin (PRESIBALT) funded by the African Development Bank. This project is therefore timely and the lessons learned can be replicated in other countries in the region. In terms of costs and benefits, the project interventions are well documented as several similar projects have been implemented in a relatively identical context.

UNDP is an accredited agency, very well placed to oversee the implementation of this project in the context of global and national solidarity, particularly given its role as a reference and implementation framework for development and recovery programmes and projects in the country. UNDP has a broad comparative advantage in the supervision of large-scale projects and programmes in Africa and in CAR in particular. UNDP has extensive experience in similar

interventions in several countries around the world, in the country and has a pool of experts committed at the regional level to contribute to the achievement of the planned results. UNDP has a long history of partnership with the Government of the Central African Republic in the areas of development support, and targeted interventions at the policy and community level. UNDP and the government have worked together to support groups and associations, focusing on women and marginalized groups and to develop policy frameworks in the areas of governance, recovery and development. The government partnered with UNDP to integrate the green economy into national policies, plans and programmes, and biodiversity conservation. UNDP has supported the MEEDD in establishing a trust fund for sustainable financing of protected areas, an initiative that has been praised by various stakeholders.

Some potential risks that may hamper the effective implementation of the Project and mitigation measures are as follows

Lack of human resources and data requirements: Regarding human resources, the Project will recruit international consultants to be joined by national consultants to ensure knowledge transfer. In parallel, the training of local people in number and quality will be integrated as an essential element of all project interventions. With regard to data, the Project will carry out an inventory of available data during the feasibility studies and a strategy will be developed for acquiring and improving the quality of data as needed.

Weak local communication infrastructure: The Project will favour the use of the mobile telecommunication network (GSM) for the operation of the early warning system as it provides the most reliable means of communication. However, if necessary, the Project may make use of other locally available means of communication when the latter is lacking, such as radio or satellite communication. Cloud computing will also be used in data management to ensure the security of the data and information produced.

Low institutional support and political commitment: This project is in line with CAR's national priorities for climate change adaptation and therefore has strong support from its government. UNDP will use this comparative advantage to establish strategic partnerships with other development partners in CAR. Direct links with ongoing or planned interventions by the government, development partners, the private sector and civil society will be established in order to raise co-financing and to promote the adherence and ownership of the Project's interventions by stakeholders. In this regard, COMIFAC will ensure the participation of a multitude of stakeholders during the Project's feasibility studies.

B.3. Expected project results aligned with the GCF investment criteria (max. 1 page)

The potential impacts of the Project in relation to the VCF investment criteria are as follows:

Potential impact: The Project will directly benefit at least 1.7 million more vulnerable people, particularly women and youth, by providing them with timely and up-to-date information to integrate risks into their daily activities. In addition to improved access to improved seeds, the integration of climate risks into decision-making will enable them to increase production, which will enhance their adaptive capacity and reduce exposure to climate hazards.

Paradigm shift: The project will fundamentally change the current approach to climate risk and disaster management to one of forward-looking, integrated planning for climate risks by improvising through their integration into ongoing and future development programmes and plans. In addition, the proposed project will generate and disseminate critical information on climate risks that will enable the Central African government to design and implement transformational policies and plans to reduce the exposure and vulnerability of its population and productive sectors of the economy, particularly around critical infrastructure (roads, bridges, sanitation facilities, etc.) to the hazards and impacts of climate change. The project will therefore bring about a paradigm shift towards evidence-based early warning policies and practices for climate adaptation, risk reduction and multi-hazard.Furthermore, the project will contribute to the establishment of an enabling environment through the strengthening of the institutional capacities of the National Meteorological Service, the General Directorate of Civil Protection and Fire and Rescue Centres and the Ministry of Humanitarian Affairs as well as the strengthening of human capacities for the production and effective use of climate

information. The project will catalyse and increase the use of climate information and innovative approaches across government entities and stakeholders as follows

Innovation: The project will create an enabling environment for a new and innovative business model for the provision and development of climate information-based services to different economic actors including the private and informal sector, which will contribute to long-term sustainability beyond the project duration. It is expected that the project will have a transformational impact on national institutions through the use of modern technology and the strengthening of its data collection and analysis capacities. And moreover its communication network that connects climate information producers directly to users (private, informal, grassroots communities).

Potential for scaling up: The project will have a transformative impact on climate and weather risk management in the Central African Republic and the Central African sub-region. The project will also facilitate a better understanding of the long-term impacts of climate change. This will have a strong development potential, facilitated by existing regional cooperation mechanisms within the COMIFAC space. In addition, the establishment of pilot early warning systems in the targeted regions for community use will have a strong potential for replication in other communities in the Central African Republic and neighbouring countries. Replication will be facilitated by matching the collection and analysis of hydrometeorological data to specific climate change threats and thus aggregating the information to meet the needs of specific end-users at the sectoral and community levels.

In addition, the lessons learned from the implementation of the project, which is the first of its kind in Central Africa, can be replicated in other countries in the region.

Sustainable development potential: The project will have significant long-term economic, social and environmental co-benefits. Economically, the integration of climate risk into decision-making will prevent increased productivity in the agricultural, transport and infrastructure sectors and thus reduce the income of poor and vulnerable people. Socially, disaster losses are generally disproportionately inflicted on the poor and vulnerable, who make up 70% of the Central African population, as a result of a combination of factors such as lack of capacity to create adaptation conditions and slower recovery rates. This leads to entrenched inequalities within societies and perpetuates and increases suffering. Furthermore, the Project through its various activities will be a direct and indirect source of employment for a large number of people, especially youth and women. This will result in significant social co-benefits, including the strengthening of social cohesion and stability through the social inclusion of the unemployed exposed to social ills. The project is fully aligned with the Sustainable Development Goals (SDGs), the decisions of the Paris Agreement and the Sendai Framework.

Need of the beneficiary: The project responds to a fundamental need of the CAR, that of equipping itself with an integrated climate risk management system. Indeed, CAR is one of the most vulnerable countries to climate risks in the world. However, the CAR does not yet have a climate risk management system. It is with this in mind that the implementation of an integrated planning approach for climate risk management has been selected by the Central African Government as an absolute adaptation priority in its NAPA and NDC.

Country ownership: This project is being developed at the initiative of the Central African Government in order to implement its adaptation priorities as identified in the NAPA and the NDC. It has been developed following a participatory approach involving a wide range of civil society, public and private sector actors following the CVF Public Consultation Guidelines with a particular focus on the participation of women and youth (see validation report).

Effectiveness and efficiency: The Project will be implemented using best practices and technologies in order to ensure a level of effectiveness and efficiency above the relevant standards. The Project also intends to generate significant co-financing from other financial partners in CAR in order to minimise total implementation costs.

C. Indicative financing / Cost information (max. 2 pages)

C.1. Financing by components (max ½ page)

Component	Indicative cost (USD)	GCF financing		Co-financing		
		Amount (USD)	Financial Instrument	Amount (USD)	Financial Instrument	Name of Institutions
Component 1:	5,5 Millions	3,5 Millions	Subvention	2 Million	Subvention	Banque Mondiale/FAO
Component 2:	4,2 Millions	3,2 Millions	Subvention	1 Million	Subvention	PNUD
Composante 3:	3 Millions	3 Million	Subvention	1 Million	Subvention	OMM
Indicative total cost (USD)	13,9 Millions	9,9 Millions		4 Million		

C.2. Justification of GCF involvement (max 1/2 page)

CAR's financial needs amount to USD 3.802 billion over the commitment period, i.e. USD 2.248 billion for mitigation (USD 2.022 billion conditional) and USD 1.554 billion (USD 1.441 billion conditional) for adaptation (NDC 2015). The CAR will not be able to meet its international commitments to combat climate change without the support of its international technical and financial partners, in particular the GCF. Indeed, CAR is recovering from more than two decades of politico-military instability which ravaged the country's economy and led to the collapse of the main productive sectors . In 2014, gross national income (GNI) per capita was the lowest in the world, estimated at USD 600 (PPP). The country 's public finances have been in acute crisis with domestic revenues averaging only 6% of GDP during the transition. The stock of debt increased to just over 50% of GDP in 2014 and domestic arrears grew rapidly from about USD 40 million in 2013 to USD 290 million in 2014. This has undermined the state's weak capacity to deliver basic services and is so far likely to undermine CAR's strong commitment to meet its international commitments to combat climate change. CAR 's technical and financial partners will therefore be called upon to provide significant support to accompany the Government's ongoing efforts to strengthen peace and security, and lay the foundations for recovery and sustainable economic development

This proposed project is in line with CVF Council decision B.22/11 on the Fund's 2020-2021 work programme on supporting the adaptation planning process that contributes to strengthening national adaptation governance and coordination , a strong climate science and knowledge base, transformative plans and strategies to catalyse action and investment, and adaptation projects prioritising technical assistance to the vulnerable country.

It is expected that the project will generate interest in the private sector and other stakeholders in the use of climate information products and the various institutions involved in water management, but cost recovery is not considered feasible during the project period. Bilateral donor support is currently not available for the required scaling up. The CVF is best placed to provide this grant, as no other funding institution, private company or donor is currently likely to do so. The Central African population is also not in a position to pay for climate information services and cost recovery for these essential services for the public is therefore not feasible. Since it can be difficult to leverage public and private finance for a public good of this nature, the project includes activities dedicated to mainstreaming climate information services at the national level.

The project is very well aligned with the national priorities outlined in section B.3. under "Country ownership", as well as the government's plans to strengthen the NHD. The proposed activities and outputs are fully in line with the objectives of the GCF as well as the priorities emerging in the national GCF readiness programme

C.3. Sustainability and replicability of the project (exit strategy) (max. 1/2 page)

The sustainability of the project is based on, among other things, the establishment of an enabling institutional framework and the transfer and appropriation of new early warning technologies. Indeed, capacity and institutional strengthening of the National Meteorological Service, the General Directorate of Civil Protection and the fire and rescue centres, and the integration of climate risks into development programmes and plans will ensure the sustainability of the Project's interventions beyond the implementation period. Furthermore, capacity building of stakeholders in the use and maintenance of the early warning system, as well as in the integration of climate information into decision-making processes will ensure the sustainability of the Project's interventions beyond its implementation period.

The monitoring of sustainability elements beyond the life of the Project will be done, among others, through the activities or related projects implemented by the different Project partners and whose duration extends beyond the VCF Project. To this end, a framework for consultation and exchange will be set up to strengthen synergies between the interventions of the various partners, in particular to establish potential relays between the activities in order to strengthen the sustainability of the various interventions of the FVC Project. In addition, the Central African Government is determined to continue to mobilise international funding with a view to replicating or scaling up the Project's interventions on the basis of lessons learned. The monitoring of sustainability elements could also be part of this approach in the framework of new projects or new interventions.

C.4 Stakeholders engagement in the project or programme (max ½ page)

This concept note was developed through several consultation mechanisms involving a multitude of stakeholders. At the outset, it is based on the CAR Country Programme for VFC, in which priority project ideas were previously selected following broad consultations at national and regional levels. This project is indeed one of the priority project ideas of the Country Programme which was selected following a consultation meeting between the Focal Point of the FVC and the National Coordinator of the National Climate Coordination (CN-Climat) acting as the Designated National Authority (NDA). The priority project idea that is the subject of this concept note was then presented for validation to the various stakeholders in the fight against climate change in CAR, including potential accredited implementing entities (e.g. WWF, FAO, UNDP, etc.), as part of a workshop that had among its objectives the establishment of a short list of priority project ideas and was held on 21 March 2019 in Bangui on the premises of the Ministry of the Environment, Ecology and Sustainable Development. This workshop also allowed some twenty participants to determine the various elements of the project, including the objectives, potential components and activities, implementing partners, the amount of funding required and the duration of the project. Subsequently, a validation workshop was organised from 05 to 06 June 2019 in Bangui with the aim of enabling all key stakeholders in the fight against climate change to validate this concept note in a participatory and consensual manner. This workshop was attended by 45 participants (12 women) representing various ministerial departments, including: the Prime Minister's Office, Environment and Sustainable Development, Water, Forestry, Hunting and Fishing, Rural Development, Urban Planning, Tourism, Mining, Finance, Economy, Planning and Cooperation, the University of Bangui, representatives of Civil Society Organisations, representatives of parliamentarians, as well as technical and financial partners. It is subsequently envisaged that a Project Preparation Proposal (PPF) will be submitted in order to obtain the necessary funds for the development of the project document, during which public consultations will continue.

C.5 Monitoring and Evaluation and reporting plans (max ¼ page)

UNDP will submit periodic progress reports in accordance with the VCF Project Monitoring and Evaluation Guidelines. A mid-term evaluation will be conducted between the second and third year of implementation to assess progress and

provide recommendations for the implementation of future activities. A final project report will be submitted by UNDP to the VCF no later than three months after the end of the project. In addition to the FVC monitoring missions, internal monitoring and evaluation will be conducted by the UNDP monitoring and evaluation team. The project management team in collaboration with the evaluation team will be responsible for the satisfactory implementation of the project activities. It will submit to the UNDP M&E team the project progress reports before their submission to the VCF. In addition to the daily monitoring of progress in the implementation of the Project activities, government authorities and members of civil society will be involved in the monitoring of progress in the implementation of the Project. The results of the internal monitoring and evaluation will be used to make adjustments in the activities proposed for the remainder of the project cycle. A Project Steering Committee will be established and will meet at least once a year to discuss technical aspects of the Project, as well as administrative management issues for the satisfactory implementation of the annual activity plan.

D. Annexes

☒ ESS screening check list (Annex 1)

☐ Map indicating the location of the project/programme (as applicable)

☐ Evaluation Report of previous project (as applicable)

Annex 1: Environmental and Social Screening Checklist

Part A: Risk Factors

The questions describe the "risk factors" of activities that would require additional assessments and information. Any "Yes" response to the questions will render the proposal not eligible for the Simplified Approval Process Pilot Scheme. Proposals with any of the risk factors may be considered under the regular project approvals process instead.

Exclusion criteria	YES	NO
Will the activities involve associated facilities and require further due diligence of such associated facilities?	☐	☒
Will the activities involve trans-boundary impacts including those that would require further due diligence and notification to downstream riparian states?	☐	☒
Will the activities adversely affect working conditions and health and safety of workers or potentially employ vulnerable categories of workers including women, child labour?	☐	☒
Will the activities potentially generate hazardous waste and pollutants including pesticides and contaminate lands that would require further studies on management, minimization and control and compliance to the country and applicable international environmental quality standards?	☐	☒
Will the activities involve the construction, maintenance, and rehabilitation of critical infrastructure (like dams, water impoundments, coastal and river bank infrastructure) that would require further technical assessment and safety studies?	☐	☒
Will the proposed activities potentially involve resettlement and dispossession, land acquisition, and economic displacement of persons and communities?	☐	☒
Will the activities be located in protected areas and areas of	☐	☒

ecological significance including critical habitats, key biodiversity areas and internationally recognized conservation sites?		
Will the activities affect indigenous peoples that would require further due diligence, free, prior and informed consent (FPIC) and documentation of development plans?	☐	☒
Will the activities be located in areas that are considered to have archaeological (prehistoric), paleontological, historical, cultural, artistic, and religious values or contains features considered as critical cultural heritage?	☐	☒

Part B: Specific environmental and social risks and impacts

Assessment and Management of Environmental and Social Risks and Impacts	**YES**	**NO**	**TBD**
Has the AE provided the E&S risk category of the project in the concept note?	☒	☐	☐
Has the AE provided the rationale for the categorization of the project in the relevant sections of the concept note or funding proposal?	☐	☐	☒
Are there any additional requirements for the country?	☐	☒	☐
Are the identification of risks and impacts based on recent or up-to-date information?	☒	☐	☐
Labour and Working Conditions	**YES**	**NO**	**TBD**
Are the proposed activities expected to have impacts on the working conditions, particularly the terms of employment, worker's organization, non-discrimination, equal opportunity, child labour, and forced labour of direct, contracted and third-party workers?	☐	☒	☐
Will the proposed activities pose occupational health and safety risks to workers including supply chain workers?	☐	☒	☐
Resource Efficiency and Pollution Prevention	**YES**	**NO**	**TBD**
Are the activities expected to generate (1) emissions to air; (2) discharges to water; (3) activity-related greenhouse gas (GHG) emission; and (5) waste?	☐	☒	☐
Are the activities expected to utilize natural resources including water and energy?	☐	☒	☐
Will there be a need to develop detailed measures to reduce pollution and promote sustainable use of resources?	☐	☒	☐
Community Health, Safety, and Security	**YES**	**NO**	**TBD**
Will the activities potentially generate risks and impacts to the health and safety of the affected communities?	☐	☒	☐
Will there be a need for an emergency preparedness and response plan that also outlines how the affected communities will be assisted in times of emergency?	☐	☒	☐
Will there be risks posed by the security arrangements and potential conflicts at the project site to the workers and affected community?	☐	☒	☐
Land Acquisition and Involuntary Resettlement	**YES**	**NO**	**TBD**

Will the activities likely involve voluntary transactions under willing buyer-willing-seller conditions and have these been properly communicated and consulted?	☐	☒	☐
Biodiversity Conservation and Sustainable Management of Living Natural Resources	**YES**	**NO**	**TBD**
Are the activities likely introduce invasive alien species of flora and fauna affecting the biodiversity of the area?	☐	☒	☐
Will the activities have potential impacts on or be dependent on ecosystem services including production of living natural resources?	☐	☒	☐
Indigenous Peoples	**YES**	**NO**	**TBD**
Are the activities likely to have indirect impacts on indigenous peoples?	☐	☒	☐
Will continuing stakeholder engagement processes and a grievance redress mechanism be integrated into the management / implementation plans?	☒	☐	☐
Cultural Heritage	**YES**	**NO**	**TBD**
Will the activity allow continuous access to the cultural heritage sites and properties?	☐	☒	☐
Will there be a need to prepare a procedure in case of the discovery of cultural heritage assets?	☐	☒	☐

Sign-off: *Specify the name of the person responsible for the environmental and social screening and any other approvals as may be required in the accredited entity's own management system.*

Chad: Development of a sustainable and resilient agriculture in the Lake Chad area

NAP write workshop template - UNEP
Project concept note

9. GENERAL INFORMATION

Project title:

Development of a sustainable and resilient agriculture in the Lake Chad area

Project site and scale:

sub-regional

Proponent/Executing Entity:

Ministry of Environment, Fisheries and Sustainable Development

Accredited entity:

UNDP

Project partners:

The Great Green Wall National Agency (ANGMV), SAKHAL NGO, Arbre du Sahel, ANAM, Ministere du Developpement Agricole

10. PROJECT DESCRIPTION

Context and Baseline: 2 paragraphs explaining the broad context of the project and the problem intended to be solved. Describe the context of the target community/ beneficiaries (livelihood, ethnicity, gender, geography, ecosystems, political context etc). Describe the climate risk that this project seeks to address.

List the available climate scenarios/ data available to back up the project proposal and define what information is missing at this stage.

Despite the presence of Lake Chad, the Lake Chad area faces a number of physical and anthropogenic problems that compromise the development of its agriculture, including droughts, floods, silting up of oases, deforestation, irregular rains, etc. The consequences of these phenomena are the reduction of cultivable areas, decline in soil fertility, the weakness of agricultural yields and production, etc.). The project intervention area is one of the areas where food insecurity is structurally rife. In one of his statements in 2017, the Director-General of FAO, Mr José Graziano da Silva said that: the current humanitarian crisis in the Lake Chad basin is due to food insecurity and that there is a need to invest seriously in sustainable agriculture.

At the national level, the reference scenario provided in the revised NDC reveals that GHG emissions would increase from 2018 to 2030. The concentration of gases in the atmosphere would necessarily increase the temperature in the near future. The temperature simulations of the third National Communication therefore show increases throughout the national territory by 2030, 2050 and 2100. If this trend continues in the future, the already precarious situation of ecosystems could be affected, regardless of the increase in precipitation, and the vulnerability of populations would be further accentuated. Therefore, it is imperative to develop sustainable agriculture to make vulnerable communities more resilient. The recommended measures revolve around the reduction of threats by intervening on hazards, in particular, through the development and sustainable management of land, crops diversification and the promotion of improved varieties adapted to the climate, the development of promising agricultural sectors, strengthening the local governance framework and local actors' adaptation capacities.

Problem statement: What is the underlying problem from a climate change adaptation perspective? What are the non-climate drivers and what are the climate change drivers?

Describe the main root causes and barriers (social, gender, fiscal, regulatory, technological, financial, ecological, institutional, etc.) that need to be addressed.

Despite considerable natural resources and significant oil production since 2003, Chad remains among the poorest and least developed countries in the world; Although it has become very dependent on oil since 2003, the Chadian economy is essentially based on agriculture and livestock which are sectors very sensitive to climate change. The agriculture sector, which represents nearly ¼ of GDP and employs about 80% of the active population, is dependent on climatic conditions and strongly affected by climate change.
The obstacles to the implementation of this project can be summarized as follows:
In terms of gender, the problems are summarized in:

- Poor understanding of the concept of gender by various actors (national decision-makers, and some women themselves);
- the limited education of girls and women,
- Cultural barriers (unequal social responsibilities and low participation of women in decision-making);
- Chores for water and energy sources
- Violence and abuse of all kinds.

In terms of security, there are in particular:

- Boko haram incursions;
- Land disputes;

In terms of social and health, there is:

- The COVID-19 pandemic.

Objectives of the project: Briefly state the overall project goal, what is the adaptation objective(s) to be pursued to achieve that goal, and describe the activities to be used to support the objectives. This will have to be adjusted to be aligned with the Fund policy you are applying to.

The overall objective of the project is to develop sustainable and resilient agriculture to contribute to improving the food and nutritional security of the population due to the fact that the project area is arid and semi-arid with a prevalence of chronic food insecurity.
Specific objectives:

- Increase agricultural production by introducing good land development and sustainable management practices; (at least 75%)
- Strengthen the mechanisms for preventing and managing food crises;
- Strengthen the local governance framework and the adaptive capacities of local actors;
- Promote value chains through the diversification of crops and the development of promising agricultural sectors.

Activity 1: Sustainable land development and management
- Control and management of water resources
- Soil fertility management

Activity 2: Strengthening the local governance framework and the adaptation capacities of actors
- Strengthening the local governance framework
- Strengthening the adaptation capacities of actors
- Strengthening of the food crisis prevention and management system

Activity 3: Promotion of agricultural value chains
- Crop Diversification

Development of promising sectors

Stakeholders: list the stakeholders that will have a role to play in the project and are likely to be positively and negatively impacted by the project. Draft a power/interest map.

Stakeholder	Type of institution	Role / Responsibility in the project	Likely to be positively or negatively impacted by the project
UNDP	United Nations	UNDP will be the Executing Agency for the project. Thus UNDP will ensure the supervision of the project, and the coordination of activities ensuring that the procedures, policies and criteria of the GCF are respected and that the project fully achieves its objectives and expected results. He will also have to, in partnership with the other key partners of the project, including the ANGGW, engage in the promotion of the project to mobilize resources and create partnerships. UNDP project supervision missions will form part of the project supervision plan.	Positively
Ministry of Environment, fisheries and Sustainable Development / the Climate Change Directorate	Government	As an executing agency, the Ministry of the Environment, Fisheries and Sustainable Development, through the climate change directorate will be responsible for ensuring that the project is implemented in accordance with agreed objectives, activities, work plan and budget; achieve the objectives and demonstrate its best efforts to achieve the expected results of the project.	Positively

ANGMV (The Great Green Wall National Agency)	Government	ANGMV, as the main implementing partner, will support the executing agency in the implementation of the project by providing technical expertise and its infrastructure set up within the framework of restoration, Sustainable Land Management and natural resources, improvement of Water Resources and Biodiversity. It can also contribute to the implementation of projects/programs to reduce the vulnerability of populations and agro-silvo-pastoral systems to the effects of climate change and desertification. It will also support capacity-building activities and the improvement of conditions conducive to greater resilience to climate change, in particular, for the eradication of poverty, food insecurity and malnutrition in the Sahelian regions through the creation of Rural Production and Sustainable Development Poles; as well as helping to compile lessons learned, good practices and project successes.	Positively
ONG Sakhal	NGO	As an implementing partner, SAHAKL will support the project executing agency by providing technical expertise on seedling production, reforestation, land restoration and as well as support capacity building activities for grassroots actors, in particular women's groups, and improve conditions conducive to resilience to climate change, the fight against desertification in the region	Positively
ANAM (national Agency of Meteorology)	Governmental Agency	in order to improve agriculture we need to support the national meteorology agency institutionally and technically by providing mean of intervention including transport and weather stations and interconnection of weather stations network so that the farmer can access to weather an climate information.	
Arbre du Sahel	NGO	As an implementing partner, Arbre du Sahel will support the project executing agency by providing technical expertise on climate information, reforestation land restoration and as well as support capacity building activities for grassroots actors, in particular women's groups, and improve conditions conducive to resilience to climate change, the fight against desertification in the region	

11. NEXT STEPS

Identify and briefly describe next steps that you will undertake to further develop this concept note, including timelines. These can include: collect data and undertake analysis to fill information gaps; identify and organize meeting(s) with proposed accredited entity to secure their engagement; organize meetings with key stakeholders; elaborate a stakeholder interest/power spider map; elaborate a theory of change; plan a pre-feasibility study, etc.

- collect data and undertake analysis to fill information gaps;
- identify and organize meeting(s) with proposed accredited entity to secure their engagement;
- organize meetings with key stakeholders;
- elaborate a stakeholder interest/power spider map; elaborate a theory of change;
- plan a pre-feasibility study

Comoros: Cyclones et impactes; Amélioration

Atelier PNA – canevas PNUE
Note conceptuelle de projet

1. INFORMATIONS GÉNÉRALES

Titre du projet : Cyclones et impactes; Amélioration

Site et échelle du projet : niveau national/ sous-régional/district: niveau national

Promoteur/Entité d'exécution : nom de l'organisation: direction générale de l'environnement et des forêt

Entité accréditée : nom de l'organisation qui exécutera le projet avec l'entité d'exécution: le PNUD , AND

Partenaires du projet : autres organisations partenaires engagées dans la mise en œuvre: GFC, FVC, PNUE

2. DESCRIPTIF DU PROJET

Contexte et base de référence : 2 paragraphes expliquant le contexte général du projet et le problème que l'on veut résoudre. Décrire le contexte de la communauté cible/ des bénéficiaires (moyens de subsistance, ethnicité, genre, géographie, écosystèmes, contexte politique etc). Décrivez le risque climatique que ce projet cherche à traiter.

Dressez la liste des scénarios climatiques disponibles/des données disponibles pour étayer la proposition de projet et définissez les informations manquantes à ce stade.

Le projet vise à étudier les cyclones dans toute leur complexité et tous leurs impacts sur le territoire, les biens, l'économie… Il cherche à mieux observer et mieux comprendre, pour mieux protéger les iles Comores des cyclones que le changement climatique rend plus fréquents et plus violents.
Ce projet vise à améliorer la connaissance des cyclones et à mieux appréhender leurs impacts sur les principales terres habitées. Les travaux menés dans le cadre de ce projet visent notamment à améliorer, et à adapter au contexte insulaire, les outils de prévision cyclonique existants tout en favorisant le développement de la collaboration régionale autour de l'aléa cyclonique.
Il s'intéresse plus particulièrement à l'étude et à la prévision des précipitations cycloniques dans la région. Ce projet repose sur l'étude des précipitations cycloniques dans la région, grâce au déploiement permanent et pérenne d'un réseau de stations météorologique aux Comores. Ces données permettront le développement de modèles de prévisions pour les iles.

Problématique : Décrivez quel est le problème sous-jacent avec une perspective d'adaptation au changement climatique ? Quels sont les facteurs non climatiques et quels sont les facteurs de

changement climatique ? Décrivez les raisons principales et les principaux obstacles (sociaux, sexospécifiques, fiscaux, réglementaires, technologiques, financiers, écologiques, institutionnels, etc.) qui doivent etre addressés

Les principaux risques liés au climat incluent

- Une augmentation dans la fréquence et l'intensité des cyclones,
- Une élévation du niveau de la mer ;
- Des sécheresses ;
- Des inondations, qui pourraient ébranler les efforts de développement que le pays a entrepris au cours de la dernière décennie ;
- La majorité de la population tire ses moyens de subsistance de l'agriculture, du tourisme et de la pêche, et ces secteurs contribuent de maniéré significative à l'économie des Comores ;
- La majorité de la population vit en région côtière.

Objectifs du projet : Indiquez brièvement le but général du projet, quel est le ou les objectifs d'adaptation à poursuivre pour atteindre ce but, et décrivez les activités qui seront utilisées pour soutenir les objectifs. Ces éléments devront être ajustés pour s'aligner sur la politique du Fonds auquel vous postulez.

Le projet a pour objetif d'évaluer la vulnérabilité économique et les coûts potentiels des dommages grâce à des outils d'analyse cartographique et numérique, qui seront des outils d'aide à la décision des acteurs politiques et économiques

Parties prenantes : dressez la liste des parties prenantes qui auront un rôle à jouer dans le projet et qui sont susceptibles d'être affectées positivement et/ou négativement par le projet. Réalisez une carte pressentant les pouvoirs et les intérêts des parties prenantes.

Partie prenante	Type d'institution	Role / Responsabilité dans le projet	Susceptibles d'être impactés positivement ou négativement par le projet
Ministere de l'ammenagement du territoire	publique	coordination	
Ministere de l'interieur avec la police la gendarmerie	Publique	coordination§Execution	
la societé civile avec les ong et les associations		suivi	
Partenaires au developpement comme le pnud l'unicef Fao oms….	Internationale	mobilisation de fonds	
Secteurs privés	Privée	mobilisation	

3. PROCHAINES ÉTAPES

Identifiez et décrivez brièvement les prochaines étapes que vous entreprendrez pour développer davantage cette note conceptuelle, notamment le calendrier. Il peut s'agir de: collecter des données et entreprendre une analyse pour combler les lacunes en matière information; identifier et organiser une ou plusieurs réunions avec l'entité accréditée proposée afin d'obtenir son engagement; organiser des réunions avec les principales parties prenantes ; élaborer une carte des intérêts/pouvoirs des parties prenantes ; élaborer une théorie du changement ; planifier une étude de préfaisabilité, etc.

- La consultation public
- Collecte des données
- Cartographie et analyse des donnée
- Interpretation
- Vulgarization et soumission du programme pour fincement

Comoros: Résilience de la population côtière face aux évènements cycloniques

Atelier PNA – canevas PNUE
Note conceptuelle de projet

1. INFORMATIONS GÉNÉRALES

Titre du projet : Résilience de la population côtière face aux évènements cycloniques

Site et échelle du projet : niveau national/ sous-régional/district: Union des Comores

Promoteur/Entité d'exécution : nom de l'organisation: Ministère de l'Agriculture de la Pêche et de l'Environnement (Direction Générale de l'Environnement et des Forêts)

Entité accréditée : La Direction Générale de l'Environnement –PNUD-AND

Partenaires du projet : FVC, PNUE

2. DESCRIPTIF DU PROJET

Contexte et base de référence : 2 paragraphes expliquant le contexte général du projet et le problème que l'on veut résoudre. Décrire le contexte de la communauté cible/ des bénéficiaires (moyens de subsistance, ethnicité, genre, géographie, écosystèmes, contexte politique etc). Décrivez le risque climatique que ce projet cherche à traiter.

Dressez la liste des scénarios climatiques disponibles/des données disponibles pour étayer la proposition de projet et définissez les informations manquantes à ce stade.

Le projet vise à étudier les cyclones dans toute leur complexité et leurs impacts sur l'étendue du territoire (les biens, l'économie…). Il cherche à mieux observer et mieux comprendre, pour mieux protéger les iles Comores des cyclones que le changement climatique rend plus violents.

Ce projet vise également à améliorer les connaissances cycloniques et à mieux appréhender leurs impacts. Les travaux qui menés dans le cadre de ce projet visent notamment `améliorer la résilience des populations côtières aux évènements cycloniques el à sensibiliser ces dernières sur les actions durales à entreprendre en cas de cyclone. Il visera aussi à accroitre le système d'analyse des prévisions météorologiques et cycloniques national.
Le projet vise en fin d'inclure la gestion du CC et ses désastres dans le code de l'urbanisme établir un mécanisme de financement pérenne pour assurer la durabilité et la résilience de la zone côtière.

Problématique : Décrivez quel est le problème sous-jacent avec une perspective d'adaptation au changement climatique ? Quels sont les facteurs non climatiques et quels sont les facteurs de changement climatique ? Décrivez les raisons principales et les principaux obstacles (sociaux,

sexospécifiques, fiscaux, réglementaires, technologiques, financiers, écologiques, institutionnels, etc.) qui doivent etre addressés

- Les pertes humaines comme le cas du cyclone Kenneth en Avril 2019 (5 personnes sont mortes)
- Perte des infrastructures stratégiques (90% des infrastructures se situent dans le littoral)
- Perte des habitations
- Réduction accélérée des rendements agricoles et de la pêche
- Salinisation augmenté des aquifères côtiers
- Destruction de la biodiversité et des récifs coralliens
- Une prévalence accrue des maladies (malaria, dingue)
- Paralyse des nombreuses activités économiques

Objectifs du projet : Indiquez brièvement le but général du projet, quel est le ou les objectifs d'adaptation à poursuivre pour atteindre ce but, et décrivez les activités qui seront utilisées pour soutenir les objectifs. Ces éléments devront être ajustés pour s'aligner sur la politique du Fonds auquel vous postulez.

Le projet a pour objectif d'évaluer la vulnérabilité économique, sociale et les coûts potentiels des dommages grâce à des outils d'analyse cartographique et numérique, qui seront des outils d'aide à la décision des acteurs politiques et économiques afin de se préparer et se tenir prêt à agir.

Parties prenantes : dressez la liste des parties prenantes qui auront un rôle à jouer dans le projet et qui sont susceptibles d'être affectées positivement et/ou négativement par le projet. Réalisez une carte pressentant les pouvoirs et les intérêts des parties prenantes.

Partie prenante	Type d'institution	Role / Responsabilité dans le projet	Susceptibles d'être impactés positivement ou négativement par le projet
Ministère de l'aménagement du territoire	Publique	coordination	Indirect
Ministère de l'intérieur	Publique	Coordination/ Execution	Indirect
société civile avec les ONG et les associations		Suivi	Direct
partenaires aux développement (PNUD, OMS, PIRROI, Bénévolat, Croix rouge Comores)	Internationale	mobilisation de fonds	Direct
Secteurs privés	Privée	mobilisation	Direct

3. PROCHAINES ÉTAPES

Identifiez et décrivez brièvement les prochaines étapes que vous entreprendrez pour développer davantage cette note conceptuelle, notamment le calendrier. Il peut s'agir de: collecter des données et entreprendre une analyse pour combler les lacunes en matière information; identifier et organiser une ou plusieurs réunions avec l'entité accréditée proposée afin d'obtenir son engagement; organiser des réunions avec les principales parties prenantes ; élaborer une carte des intérêts/pouvoirs des parties prenantes ; élaborer une théorie du changement ; planifier une étude de préfaisabilité, etc.

- Un état des lieux sur les actions réalisées par le gouvernement afin de dégager les acquis, décliner les faiblesses, les lacunes et donner des orientations (Etude de faisabilité)
- Une consultation publique
- Collecte des données
- Cartographie, analyse des données et interprétations
- Vulgarisation et soumission du programme pour financement.

Democratic Republic of Congo: Projet d'Amélioration de la résilience, des écosystèmes forestières et aquatiques dans la province de l'Equateur en RDC

NAP write workshop template - UNEP
Project concept note

1. INFORMATIONS GÉNÉRALES

Titre du projet : Projet d'Amelioration de la resilience,des écosystèmes forestières et aquatiques dans la province de l'Equateur en RDC

Site et échelle du projet : niveau national/ sous-régional/district: Province de la Mongala /RD Congo

Promoteur/Entité d'exécution : nom de l'organisation: Ministère de l'Environnement et Développement Durable

Entité accréditée : Programme des Nations Unies pour le Développement (PNUD)

Partenaires du projet : Ministère de l'Amenagement du Territoire, Ministère de l'Agriculture, Peche et Elevage.

2. DESCRIPTIF DU PROJET

Contexte et base de référence : 2 paragraphes expliquant le contexte général du projet et le problème que l'on veut résoudre. Décrire le contexte de la communauté cible/ des bénéficiaires (moyens de subsistance, ethnicité, genre, géographie, écosystèmes, contexte politique etc). Décrivez le risque climatique que ce projet cherche à traiter.

Dressez la liste des scénarios climatiques disponibles/des données disponibles pour étayer la proposition de projet et définissez les informations manquantes à ce stade.

- La RDC pays dont le territoire est couvert 67% de forets
- Environ 94 000 000 d'habitants dont plus de 70% dans les zones rurales et forestière avec une croissance démographique exponentielle et pourrait atteindre plus de 120 000 000 d'ici 2050
- Près de 80% de al population vie sous le seuil de pauvraté

Problématique : Décrivez quel est le problème sous-jacent avec une perspective d'adaptation au changement climatique ? Quels sont les facteurs non climatiques et quels sont les facteurs de changement climatique ? Décrivez les raisons principales et les principaux obstacles (sociaux, sexospécifiques, fiscaux, réglementaires, technologiques, financiers, écologiques, institutionnels, etc.) qui doivent etre addressés

Avec une forte démographie et une population en majorité pauvre, mais aussi un faible taux de desserte en électricité, les populations riveraines (CL et PA) exercent une forte pressions sur les

écosystèmes forestiers et aquatiques ce qui entraine une perte de la biodiversité exacerbé par les phénomènes climatiques extrêmes (hausse de la température, sècheresse, …) causant ainsi une vulnérabilité des communautés locales et peuples autochtones qui dépendent énormément de ces ressources naturelles du point de vue économique et social

Objectifs du projet : Indiquez brièvement le but général du projet, quel est le ou les objectifs d'adaptation à poursuivre pour atteindre ce but, et décrivez les activités qui seront utilisées pour soutenir les objectifs. Ces éléments devront être ajustés pour s'aligner sur la politique du Fonds auquel vous postulez.

- Instaurer des plantations énergétiques cycliques et l'agroforestier
- Développer des systèmes d'électrification solaire en milieu rural
- Accélérer le processus d'octroi de concessions forestières des communautés locales
- Introduire des pratiques d'agricultures durable et résiliente afin de sédentariser les exploitation agricoles
- Développer la pisciculture familiale pour répondre au besoin de ressources halieutiques
- Aménager des points de desserte en eau potable

Parties prenantes : dressez la liste des parties prenantes qui auront un rôle à jouer dans le projet et qui sont susceptibles d'être affectées positivement et/ou négativement par le projet. Réalisez une carte pressentant les pouvoirs et les intérêts des parties prenantes.

Partie prenante	Type d'institution	Role / Responsabilité dans le projet	Susceptibles d'être impactés positivement ou négativement par le projet
Ministère de l'Environnement et Développement Durable	Gouvernement	Promoteur et suivi de la mise en oeuvre du projet	
GCF	Organe de financement		
PNUD	Agence d'éxecussion	Chargé de mise oeuvre	
Provinces	Gouvernement décentralisé	Suivi du projet au niveau local	
ONG local	Facilitateur	Facilitation de la mise en oeuvre du projet	
CL et PA	Bénéficiaires directes	Mise en partique des activités du projet	

3. PROCHAINES ÉTAPES

Identifiez et décrivez brièvement les prochaines étapes que vous entreprendrez pour développer davantage cette note conceptuelle, notamment le calendrier. Il peut s'agir de: collecter des données et entreprendre une analyse pour combler les lacunes en matière information; identifier et organiser une ou plusieurs réunions avec l'entité accréditée proposée afin d'obtenir son engagement;

organiser des réunions avec les principales parties prenantes ; élaborer une carte des intérêts/pouvoirs des parties prenantes ; élaborer une théorie du changement ; planifier une étude de préfaisabilité, etc.

- Développer une note conceptuelle du projet et contacter le GCF
- Elaborer un chronogramme sur la démarches à suivre pour la soumission du projet
- Collecter les données et élaborer une cartographie des parties prenantes

Djibouti: Increasing resilience to the health risks of climate change

NAP write workshop template - UNEP
Project concept note

1. GENERAL INFORMATION

Project title:

Increasing resilience to the health risks of climate change

Project site and scale:

National

Proponent/Executing Entity:

Ministry of Environment and Sustainable Development

Accredited entity:

UNDP Djibouti

Project partners:

Ministry of Environment, National Meteorological Agency, Ministry of Health, and Ministry of Agriculture and Food Security, UNDP, FAO

2. PROJECT DESCRIPTION

Context and Baseline: 2 paragraphs explaining the broad context of the project and the problem intended to be solved. Describe the context of the target community/ beneficiaries (livelihood, ethnicity, gender, geography, ecosystems, political context etc). Describe the climate risk that this project seeks to address.

List the available climate scenarios/ data available to back up the project proposal and define what information is missing at this stage.

Problem statement: What is the underlying problem from a climate change adaptation perspective? What are the non-climate drivers and what are the climate change drivers?

Describe the main root causes and barriers (social, gender, fiscal, regulatory, technological, financial, ecological, institutional, etc.) that need to be addressed.

The environment is clearly announced as a transversal theme of the world, it concerns as well the human/environment relations as the natural risks, the climatic changes or the planning of the territories. Unfortunately, this relationship is disrupted by the action of human activities, the unconsciousness of people and by the bad understanding of the environment.
As climate change creates more severe weather events in Djibouti, it will exacerbate risks to already burdened human health, in particular through increasing the exposure of humans to vector-, water- and food-borne diseases. It is possible to witness heat waves characterized by daily maximum temperatures of up to 45°C. Such an increase in heat waves clearly has an impact on human health.
At the level of health and social protections, the observation is that of a positive evolution in time and space. The system has made real progress over the last decade (2000-2010). A reform of the health sector has been undertaken, with a framework law on health policy, a strategic framework for 2001-2011 and a national health development plan for 2002-2006.
In terms of health, the population finds that the health infrastructure is barely operational, handicapped by the lack of equipment, ambulances, a poor supply of water and electricity, and difficult access for rural populations to urban centers due to the lack of rural roads. The supply of medicines is insufficient, the community pharmacy stock is not regularly renewed, and private pharmacies are not present in the regions.
Solid waste and the lack of sanitation in the main towns of the region are deteriorating the health of the population.
The issue of water, as it relates to food security, is also fundamentally a question of stability. Water in its relation to food security is also an issue in terms of nutrition and health through access for all to drinking water, basic sanitation and hygiene.
Finally, despite the progress made, Djibouti's health profile is still comparable to that of developing countries, as evidenced by the human development index, which in 2010 was 0.403 with a ranking of 147th, and the national health system remains fraught with difficulties both in terms of strategic orientations and financing.

Objectives of the project: Briefly state the overall project goal, what is the adaptation objective(s) to be pursued to achieve that goal, and describe the activities to be used to support the objectives. This will have to be adjusted to be aligned with the Fund policy you are applying to.

Strengthen the resilience of health services with the ultimate goal of reducing mortality and morbidity as a health consequence of climate change
The project will build on the National Climate Change and Health Strategies to transition from the current, highly vulnerable situation to a more climate-resilient and responsive health system through:

1) Integrated policies and strategies;
2) Improved human and systemic capacities;
3) Increased national and state interdisciplinary and holistic collaboration;
4) Harmonized climate and health information systems; and
5) On-the-ground adaptation interventions in priority vulnerable communities.

Stakeholders: list the stakeholders that will have a role to play in the project and are likely to be positively and negatively impacted by the project. Draft a power/interest map.

Stakeholder	Type of institution	Role / Responsibility in the project	Likely to be positively or negatively impacted by the project
Ministry of Environment and Sustainable Development	Gov	Execution Entity	Positively
Ministry of Health	Gov	Technical assistance and Implanting partner	Positively
Ministry of Agriculture	Gov	Technical assistance and Implanting partner	Positively
Ministry of Women and Family	Gov	Technical assistance and Implanting partner	Positively
National Agency of Meteorology	Gov	Technical assistance and Implanting partner	Positively
Ministry of Social Affairs	Gov	Technical assistance and Implanting partner	Positively
Regional Councils and Prefectures	Gov	Technical assistance and Implanting partner	Positively
WHO	PTF	Technical assistance and Implanting partner	Positively
FAO	PTF	Technical assistance and Implanting partner	Positively
UNDP	PTF	AE and Implementing agency	Positively

3. NEXT STEPS

Identify and briefly describe next steps that you will undertake to further develop this concept note, including timelines. These can include: collect data and undertake analysis to fill information gaps; identify and organize meeting(s) with proposed accredited entity to secure their engagement; organize meetings with key stakeholders; elaborate a stakeholder interest/power spider map; elaborate a theory of change; plan a pre-feasibility study, etc.

A) Pre-feasibility study
Drawing from the technical study on the climate rationale and the gap analysis of epidemiology efforts, disease control and WASH, the pre-feasibility study will describe, amongst others:

i. Baseline assessment and situation analysis, analysis of climate change risks, past and projected impacts, vulnerability analysis and gap analysis.

ii. Description of the extent of digitized medical and mosquito surveillance records, specifying what will be included in the national disease information system (including other sectoral and spatial data).

iii. Cost-benefit analysis of intervention options, synthesized in the pre-feasibility study and annexed in Excel spreadsheet format.

iv. Based on the gap analysis and cost-benefit analysis, a refinement of project interventions. Detailed description of the project design and implementation including proposed interventions, targeted beneficiaries, criteria to select high-risk communities, operations and maintenance, implementation arrangements, etc.

v. Analysis of past programs and lessons learned to be incorporated into the project.

vi. Theory of change diagram, including explanations with a substantiated logical framework.

vii. Timetable of intervention.

viii. Map of the areas where the project will operate and with districts or communities clearly identified.

ix. Assessment of the project's alignment with GCF investment criteria.

B) Stakeholder consultation report and engagement plan (SEP) and grievance redress mechanism

C) Risk Assessment and mitigation plan

D) Budget plan and co-financing

E) Procurement Plan and associated document

Eritrea: Ecosystem-based adaptation for climate resilient livelihoods in Ghaleb, Anseba Region

NAP write workshop template – UNEP
Project Concept Note

1. GENERAL INFORMATION:

Project title:

Ecosystem based adaptation for climate resilient livelihoods in Gheleb, Anseba Region

Project site and scale:

sub-region Gheleb

Proponent/Executing Entity:

Ministry of Land, Water and Environment

Accredited entity:

UNDP

Project partners:

Ministry of Agriculture, Ministry of Local Government, Forestry and Wild life Authority, Ministry of Finance and National development, Ministry of Energy and Mines

2. PROJECT DESCRIPTION

Climate variability and change are creating poverty traps for many rural households, constantly thwarting efforts to build up assets and increase income.

The location of the proposed project in Gheleb sub-regions of the Anseba Region, discussed falls largely within the arid lowlands, with parts falling within the arid highlands zone. The summer rains are brought by south-westerly monsoon winds and are concentrated mainly in the months of July and August. They affect the central highland and the western lowland areas. More than 70% of the rainfall occurs in July and August. High rainfall intensity coupled with little vegetation cover results in high runoff, high evaporation and little recharge of underground aquifers. A main feature of rainfall patterns in Eritrea is the extreme variability within and between years, and spatial variation over very short distances.

Context and Baseline: 2 paragraphs explaining the broad context of the project and the problem intended to be solved. Describe the context of the target community/ beneficiaries (livelihood, ethnicity, gender, geography, ecosystems, political context etc). Describe the climate risk that this project seeks to address. List the available climate scenarios/ data available to back up the project proposal and define what information is missing at this stage.

Sub-zoba Gheleb is in the northern part of Keren, has a total population estimated at 20,000 people with a significant number of females headed households.
The targeted sub-zoba are characterized by hot and arid highland climate.
The two predominant livelihood systems of the project area are semi-sedentary livestock based agro-pastoralism, and rainfed subsistence agriculture.
Rain fed crop production is practiced from June to September. People falling within this livelihood system earn income from the sale of livestock and livestock products (cattle, goats, sheep and camels), supplemented by crops such as pearl millet and sorghum. Additional livelihood activities include selling wood and non-timber forest products (NTFPs) such as bark and leaves of certain trees, as well as wild fruits that are available during the dry season. Furthermore, the communities predominantly depend on biomass as a source of energy and income generation through sales of wood and charcoal.
In addition, vegetable and fruit crops are grown in small-scale irrigated fields (e.g. tomato, onion,). The populations live in villages with some movement between the upland and the lowland rives of Barka, Anseba, and Gash rivers.

Problem statement: What is the underlying problem from a climate change adaptation perspective? What are the non-climate drivers and what are the climate change drivers? Describe the main root causes and barriers (social, gender, fiscal, regulatory, technological, financial, ecological, institutional, etc.) that need to be addressed.

- Precipitation in Eritrea will drop by 20% in the midcentury and the mean annual temperature will increase by 4 to 5% which will lead to soil moisture decrease by 25% exacerbating the already aridity in the area. Most climate models agree on the amount of soil moisture decrease in the area.
- Climate sensitive livelihood activities depending heavily on the rainfed agriculture in line with a very limited income generation alternative.
- There is high deforestation due to wood sales and charcoal making for household use as 95% of the population depend on biomass as an energy source.
- The land degradation trend is critical due overstocking and overgrazing.

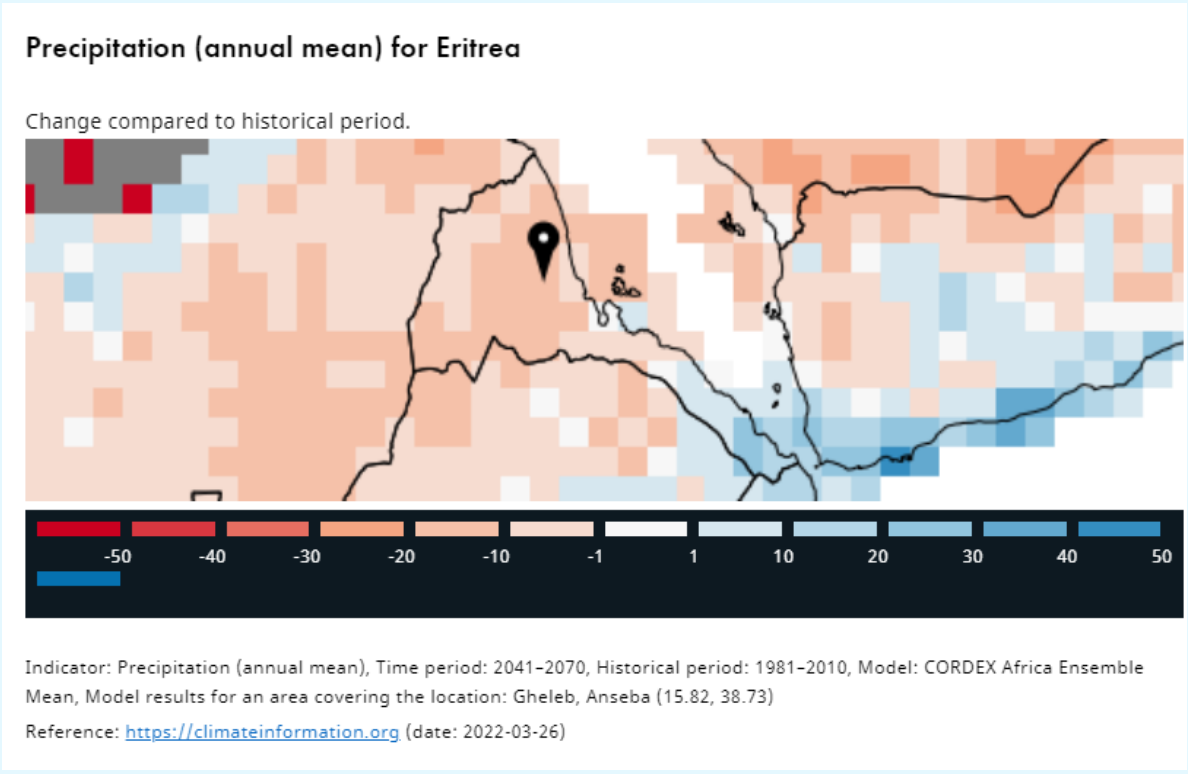
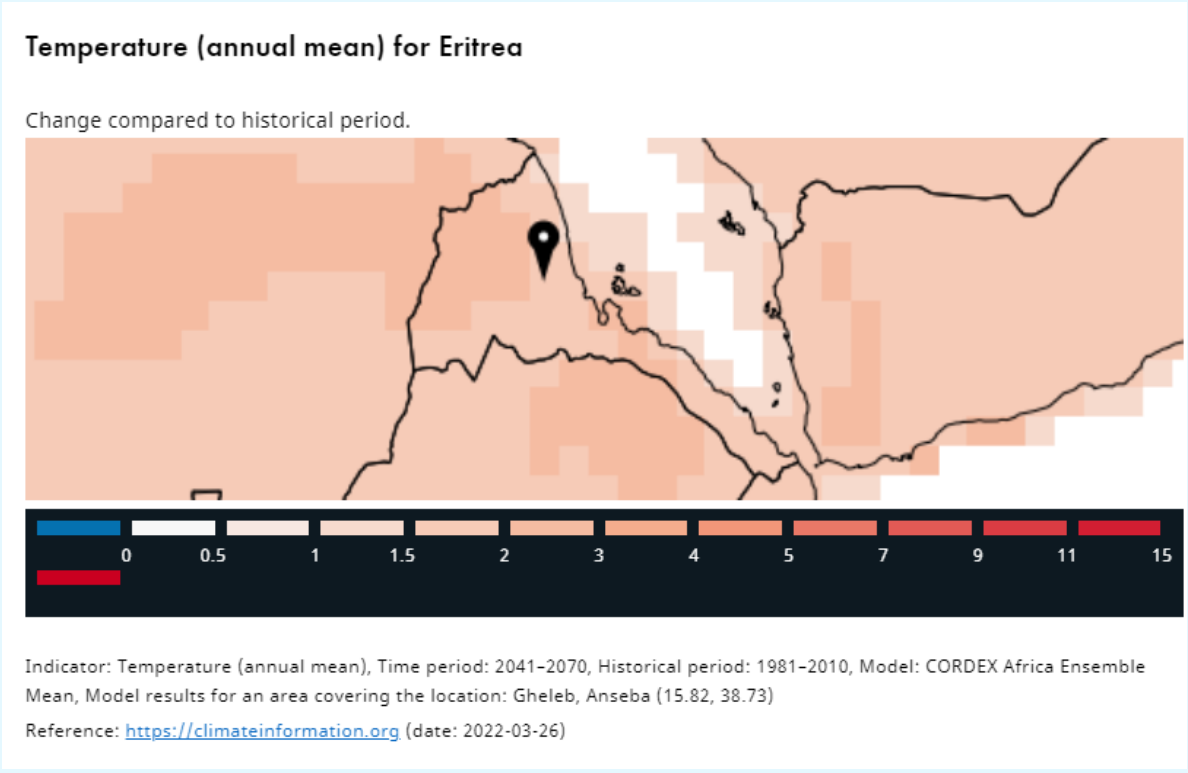
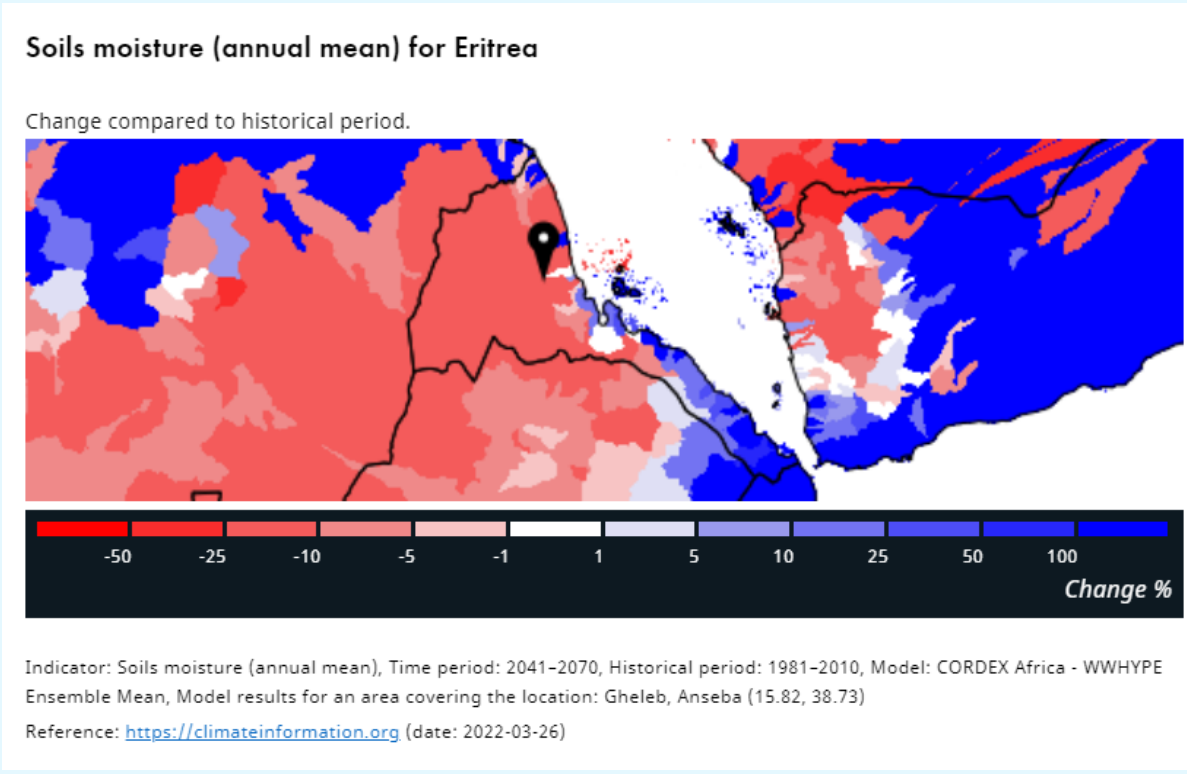


Figure 1: Precipitation drop across Eritrea and in the project area with climate change



Mean Annual temperature increase over Eritrea with climate change by 4-5 degrees.



Soil moisture decrease by 25% across Eritrea with climate change

Objectives of the project: Briefly state the overall project goal, what is the adaptation objective(s) to be pursued to achieve that goal, and describe the activities to be used to support the objectives. This will have to be adjusted to be aligned with the Fund policy you are applying to.

Goal: to increase community resilience and adaptive capacity to climate change through an integrated water management and agricultural development approach.

- Objective 1: to improve soil and water conservation

Introduction of water conservation structure such as micro-dams and check dams while enhancing afforestation activities that will lead a decreased erosion and ground water recharge.

- Objective 2: to introduce of climate-smart agricultural practice

Introduction of micro-irrigation schemes, climate resilient crop and livestock varieties.

- Objective 3: improve climate risk information generation and capacity development.

Develop a community-based early warning system to reduce climate risks, and an action research approach linking traditional and scientific knowledge through the use of seasonal forecasts to improve generation and dissemination of climate information.

- Objective 4: improve knowledge management system and understanding of climate change impacts

Establish a knowledge management system, conduct tours in country and in the region for sharing experience.

Develop a mechanism to upscale positive interventions.

Stakeholders: list the stakeholders that will have a role to play in the project and are likely to be positively and negatively impacted by the project. Draft a power/interest map.

Stakeholder	Type of institution	Role / Responsibility in the project	Likely to be positively or negatively impacted by the project
Ministry of Land, Water and Environment	government	Executing	positive
Ministry of Agriculture	government	Implementing entity	positive
Forestry and Wild life Authority	government	Implementing entity	positive
Ministry of Local Government	government	Implementation coordination	positive
Ministry of Energy and Mines	Government	Introduction of energy source alternatives	Positive
National Union of Eritrean Women	CBOs	Gender issue mainstreaming and sensitisation	Positive
National union of Eritrean youth and students	CBOs	Youth engagement in afforestation and sensitisation	Positive

3. NEXT STEPS

Identify and briefly describe next steps that you will undertake to further develop this concept note, including timelines. These can include: collect data and undertake analysis to fill information gaps; identify and organize meeting(s) with proposed accredited entity to secure their engagement; organize meetings with key stakeholders; elaborate a stakeholder interest/power spider map; elaborate a theory of change; plan a pre-feasibility study, etc.

- Stakeholder engagement (national and international) process first three months
- Collect data on project area three months
- Develop the theory of change
- Secure engagement with accredited entity (three months)
- Finalize proposal

Ethiopia: Ecosystem-based Integrated Climate Smart Agricultural Development

Project Concept Note

Project/Programme Title: Ecosystem based Integrated Climate Smart Agricultural Development

Country(ies): Ethiopia

National Designated Authority(ies) (NDA): Environmental Protection Authority (EPA)

Accredited Entity(ies) (AE): Ministry of Finance (MOF)

Date of first submission/ version number: [YYYY-MM-DD] [V.0]

Date of current submission/ version number [YYYY-MM-DD] [V.0]

<table>
<tr><th colspan="4">E. Project/Programme Summary (max. 1 page)</th></tr>
<tr><td>A.1. Project or programme</td><td>☐ Project
☒ Programme</td><td>A.2. Public or private sector</td><td>☒ Public sector
☐ Private sector</td></tr>
<tr><td>A.3. Is the CN submitted in Response to an RFP?</td><td>Yes ☐ No ☒
If yes, specify the RFP: _____</td><td>A.4. Confidentiality[3]</td><td>☐ Confidential
☒ Not confidential</td></tr>
<tr><td>A.5. Indicate the result areas for the project/programme</td><td colspan="3"><u>Mitigation:</u> Reduced emissions from:
☐ Energy access and power generation
☐ Low emission transport
☐ Buildings, cities and industries and appliances
☒ Forestry and land use
<u>Adaptation:</u> Increased resilience of:</td></tr>
</table>

[3] Concept notes (or sections of) not marked as confidential may be published in accordance with the Information Disclosure Policy (Decision B.12/35) and the Review of the Initial Proposal Approval Process (Decision B.17/18).

	☒ Most vulnerable people and communities ☐ Health and well-being, and food and water security ☐ Infrastructure and built environment ☒ Ecosystem and ecosystem services		
A.6. Estimated mitigation impact (tCO2eq over lifespan)		**A.7. Estimated adaptation impact (number of direct beneficiaries and % of population)**	405,000 and 1.65 %
A.8. Indicative total project cost (GCF + co-finance)	Amount: USD	**A.9. Indicative GCF funding requested**	Amount:
A.10. Mark the type of financial instrument requested for the GCF funding	Grant ☐ Reimbursable grant ☐ Guarantees ☐ Equity ☐ Subordinated loan ☐ Senior Loan ☐ Other: specify_____		
A.11. Estimated duration of project/ programme:	a) disbursement period: b) repayment period, if applicable:	**A.12. Estimated project/ Programme lifespan**	**7 years**
A.13. Is funding from the Project Preparation Facility requested?[4]	Yes ☐ No Other support received ☐ If so, by who:	**A.14. ESS category[5]**	☐ A or I-1 ☒ B or I-2 ☐ C or I-3

[4] See here for access to project preparation support request template and guidelines
[5] Refer to the Fund's environmental and social safeguards (Decision B.07/02)

A.15. Is the CN aligned with your accreditation standard?	Yes ☒ No ☐	**A.16. Has the CN been shared with the NDA?**	Yes ☒ No ☐
A.17. AMA signed (if submitted by AE)	Yes ☐ No ☐ If no, specify the status of AMA negotiations and expected date of signing:	**A.18. Is the CN included in the Entity Work Programme?**	Yes ☒ No ☐
A.19. Project/Programme rationale, objectives and approach of programme/project (max 100 words)	**problem statement** In Ethiopia, subsistence and traditional agriculture contributes a lot to national GDP. According to 10 years plan of the country, in the past years, the sector registered average yearly growth of 4.1 %. This is not satisfactory when compared with the set target of 8 %. Climate change impacts contributed a lot to the less achievement of the sector. Moreover, the high proportion of rain-fed crop production shown yearly average growth of 5.3 % and this low achievement is attained due to the sector's sensitivity characteristics to rainfall variability and highly vulnerable to the impacts of climate change beside use of non-smart unimproved cultural practises which led to low production and productivity. Even though, large livestock population is also exceedingly pertinent for the GDP of the country and important source of exports, similar to the crop sector, it registered low average yearly growth rate which is 3.5 %. Many reasons such as climate change impacts, use of backward technologies and practices have been identified as the cause for the low attainment of the target. Among them impacts which triggered by climate change took lion share for the occurrence of the problem. In addition, degradation of natural resources which commonly occurring in the country as a result of climate change momentously triggering the decrement of production and productivity and harming the sustainability of both crop and livestock sectors. Generally, the contribution of agriculture sector for the economy of the country was 43 % in 2012 and diminished to 33 % in 2019. The reason for the decrement is similar to the above-described points. Hence, adoption and practical implementation of integrated climate smart agricultural development embracing key interventions which sustainably increase		

	production and productivity of crop, livestock and natural resource is cornerstone. **Regarding climate change**, its impacts are highly affecting the three indicated sectors (crop, livestock and natural resource) resulting low production and productivity. Mostly, these are heavily impacted by frequent drought, floods and soil erosion. Also, climate variability and extreme events have major effect in our country. **The main objective** of the program is **increasing production and productivity of rural community through implementation of ecosystem based integrated climate smart agricultural interventions which enhance resilience capacity to adverse impacts of climate change**. The engagement will follow community-based watershed implementing **approach** and will be executed by **Ministry of Agriculture** (MoA) with active engagement of **partners** such as regional bureaus and woreda agricultural offices through the overall guidance and oversight of the CRGE Facility Management Committee, co-chaired by State Ministers of MoF (the accredited entity) and EPA (the NDA).

F. Project/Programme Information (max. 8 pages)

B.1. Context and baseline (max. 2 pages)

Ethiopia is **vulnerable** to the impacts of climate change and the unpredictability of climate variability. The country's adaptive capacity is constrained by limited livelihood options for the majority of the population, inadequate ability to withstand or absorb disasters and the prevailing biophysical shocks it faces. Analysis undertaken in Ethiopia's climate resilient strategy for agriculture (Agriculture Sector CR Strategy) demonstrates that all political regions are vulnerable to one or more of climate hazard. According to a World Bank study (2010), climate change will likely increase the frequency of both flooding and droughts in Ethiopia, posing a significant challenge to agriculture, infrastructure, and hydropower generation.

Drought is a critical climate related hazard in Ethiopia, frequently occurring in many parts of the country. The economic costs of the largest droughts have been estimated to be up to 4% of GDP. Soil erosion, flood and extreme events are also commonly occurring climate related hazards which highly impacted production and productivity of the community. Frequent drought or erratic rainfall results in crop damage, loss of livestock and pastures, water shortage (for humans and livestock), malnutrition (due to lack of food), and migration of households and wild animals. Deforestation, poor environmental conservation practices and overgrazing are the major factors aggravating the impacts of drought. Crop pests and animal diseases which caused by climate change also exacerbated by poor farm management and lack of pest-resistant seeds and improved livestock varieties. The impacts may decrease national gross domestic product (GDP)

by 8–10% by 2050, but adaptation action in agriculture could cut climate shock-related losses by half (Aweke, 2017).

Regarding emission profile, to combat the impacts of climate change following the COP 21 Paris Agreement in 2015, Ethiopia has developed its Nationally Determined Contributions (NDC) to limit its GHG emissions in 2030 at 145 Mt CO_2e or less, compared to the projected 400 Mt CO_2e to be emitted under the business-as-usual national development plan, as stipulated in the Climate Resilient Green Economy Strategy (FDRE, 2011). Later this value was revised in the country's revised NDC report (FDRE, July 2021), which indicates "the update base year emissions in 2010 are estimated at 247 million metric tons of carbon dioxide equivalents (Mt CO_2eq) which are projected to increase to a level of 403.5 Mt CO_2eq under the business-as-usual development scenario". Following the country's updated NDC is, both in the case of unconditional and conditional (with proposed policy interventions) scenarios, emissions by 2030 will be 347.3 Mt CO_2eq and 125. 8 Mt CO_2eq respectively. Hence, the combined unconditional and conditional reductions will be 68.8% of the BAU pathways.

The intervention addresses **mitigation and adaptation needs** contributing to the achievement of the CRGE strategy, NAP and NDC. In particular, the proposed program directly contributes to the adaptation aspects of the CRGE strategy enhancing the existing low adaptive capacity of the rural community and augmenting mitigation benefits through adoption and implementation of integrated climate smart agricultural development interventions.

Adaptation and mitigation engagements are **priority areas** of CRGE strategy (2011) of the country. Also, NAP (National Adaptation Plan) and NDC (nationally determined contribution) which recently developed greatly focuses on augmentation of resilience capacity. Thus, the intervention fits with the indicated priority areas, actively involving on mitigation and adaptation interventions that sustainably enhance resilience capacity of the rural community. As a result, the proposed project is aimed to address the indicated priority areas of the strategy, determined contribution and plan.

Barriers or constraints in place that should be addressed by the proposed programs are briefly located as follows.

To current adaptation and mitigation, there are many barriers which make harder to plan and implement and led to the high vulnerability in Ethiopia. These include a range of economic, social and institutional factors, including market failures, limited human and institutional capacity and behavioural barriers. These factors momentously affect decision making and taking action.

Addressing these barriers is critical for successful implementation of mitigation and adaptation actions. Communities in the proposed target Woredas are characterized by small and degraded farm size, low income and limited income diversification, lack of modern agricultural inputs and technologies including drought-tolerant seeds and conventional practise that result emission, limited access to irrigation facilities and natural resource utilization efficiency, shortage of improved breed of livestock, limited access to weather information, lack of access to value chains,

limited access to credit facilities, low overall literacy rate or educational attainment, fragile ecosystems and weak institutions at the Woreda level to prepare and act on climate-responsive actions. Moreover, increased land degradation due to improper and limited conservation practices and erosion which aggravated by climate change, reduced carbon sequestration capacity due to land use change especially, in low land, sustainability problem of productive lands due to poor integrated NRM are also challenging factors. Overall, Low production and productivity of crops, livestock and natural resources due to conventional practices, impacts of climate change and other factors are prominent constraints which greatly affected the livelihood of the rural communities of program intervention areas.

In addition, there are also important gender inequalities in the current agricultural system, which need to be taken into account to ensure the important role of women in agriculture. Women are more vulnerable to climate change impacts because they have less financial resources, less access to climate information, lack alternative income opportunities and they depend more directly on primary natural resources. Recognizing and addressing these gender issues is a key area for tackling broader vulnerability, and for building the resilience of the communities. Most interventions ignore ecosystem balance which greatly affects the sustainability of the desired development.

Understanding these barriers provides key information on how to enhance the uptake of adaptation and implementation of mitigation and thereby augment success of this proposed project or intervention.

B.2. Project/Programme description (max. 3 pages)

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*The proposed program will have **three (3)** expected sets of components/outputs to address the indicated barriers. All of them are interlinked and properly address the targeted objectives through the following interventions.*

1. ***Enhanced Community based watershed management and rehabilitated degraded lands***

2. Improved crop and livestock production practices contributing to climate resilience and mitigation

3. Enabling environment, knowledge management, monitoring and evaluation

Component/Output 1: Enhanced Community based watershed management and rehabilitated degraded lands

Different sub-components and multiple activities will be conducted to achieve the output. The sub-components which will be actively accomplished are: -

1.1 Enhanced Community based watershed management

Here, to ensure participatory watershed management, restoration of land following watershed logic will be ensured. Watershed users' association will be established and institutionalization which ensure sustainability will be performed. Pre and post tree planting

tasks also efficiently considered here. In this intervention the linkage between upstream and downstream parts of the watershed will be considered as the main task.

1.2 Rehabilitated degraded lands

To conduct rehabilitation work, identification of degraded areas using different methodologies (e.g. GIS) and prioritization based on the severity of degradation will be executed and different ***context specific*** *physical and biological soil and water conservation practises will be promoted, water harvesting structures that are utilized for rehabilitation of degraded lands constructed, opted degraded areas closed and managed to enhance natural regeneration and multipurpose tree planting will be promoted in order to halt degraded areas and improve livelihoods of the community.*

1.3 Afforestation and re-afforestation with special focus on Indigenous species

To enhance carbon sequestration capacity, multipurpose tree seedlings focusing on ***indigenous tree species*** *will be raised and produced establishing/upgrading nursery sites. Produced seedlings will be planted at homestead, on communal and degraded land and managed properly and sustainably with participatory approach.*

Ethiopia launched Green Legacy initiatives to enhance carbon sink capacity using regular government engagements. To sustainably and effectively support the initiative, this sub-component will contribute a lot for the initiation on sustainable manner.

Component/Output2: Improved crop and livestock production practices contributing to climate resilience and mitigation

1. ***Improved Crop production***

   In this sub-component ***cluster based improved low and highland wheat production through small scale irrigation and rain fed*** *will be given due attention than other crops. Considering the cluster,* ***package of climate smart practices which help to sustainably keep ecosystem balance*** *will be implemented to enhance the production and productivity of the crops. Improved drought and disease tolerant varieties will be promoted. Though massive focus will be delivered for Cluster based wheat production, other crops will also be promoted based on the contextual reality.*

Soil fertility management

Activities that enhance soil health, fertility, increase the production and productivity in a sustainable manner will be introduced, promoted and implemented. These activities will have significant impact in GHG emission reduction as well as resilience building. Vermi-compost, green manuring and composting (pit and heap) will be emphasized based on the context of the area.

Promoted improved Crop Varieties and agricultural management practise

Improved crop varieties and management practises that augment productivity will be applied on communities' farm ensuring mitigation and resilience capacity. Intercropping, crop rotation, conservation tillage, row planting, promotion of drought and disease tolerant varieties, integrated pest management and other activities will be conducted.

Promote use of SSI and enhance water use efficiency

In this sub-topic, implementation of more efficient on-farm irrigation water management practices using more ***appropriate irrigation methods*** *including use of efficient drip irrigation systems and increasing of efficiency of surface irrigation methods will be applied.*

Small scale irrigation infrastructures development, promotion of green irrigation technologies and water harvesting structures will be implemented. Moreover, use of life-saving irrigation at critical stages of crop growth in case of inadequate water supply will be ensured.

Livelihood Diversification

In order to ensure the sustainable use of natural resources in selected watersheds, promotion of improved and drought tolerant varieties of horticultural crops will be given key emphasis to enhance the livelihood of program beneficiaries.

2. Promoted resilient livestock production

2.1 Implementation of integrated livestock development

Integrated livestock development which enhances desired productivity will be ensured reducing GHG emission from the action. This sub-component is focusing on activities which can enhance productivity of per-head of animals such as promote breed improvement, promote improved pasture and forage development, improve existing range land management and control invasive species, promote lower emitting sources of protein, ensure veterinary services, poultry development and other related tasks will be accomplished in the selected intervention areas to sustainably augment production and productivity of the rural communities of program intervention areas. Stall feeding (cut and carry) and other efficient mechanisms which avoid and halt free grazing will be highly promoted to protect ecosystem balance of the intervention areas. Moreover, the sub-component aims to increase the income of vulnerable rural communities (nomads, small livestock holders, rural women and unemployed youths) whose livelihoods are dependent on livestock activities in climate impact prone areas through income diversification works.

In this key intervention, ***livelihood diversification*** *intervention will be highly given momentous attention to augment the production and productivity of intervention areas. Here, lower emitting sources of protein such as small ruminants (shoats) and poultry will be given emphasis. Moreover, milk products which produced from improved and selected animal breed will be used as means of income earning mechanism for beneficiaries with the support of the program.*

3.Enabling environment, monitoring and evaluation

3.1 Enabling Environment

Here, capacity development tasks emphasizing on rural women on INRM, Crop and livestock production in climate smart manner will be conducted. Also, ***institutional framework development*** *which links the rural community with research and higher institution will be executed and local management instruments will be strengthened. Moreover, mainstreaming of mitigation and adaptation options will be considered to ensure smartness of local planning.*

3.2 Knowledge Management, Monitoring and Evaluation

Project results will be monitored and evaluated and lessons will also be captured and communicated to concerned stakeholders in this sub-component. Monitoring and evaluation of Environment and social safeguard will be performed to ensure sustainability of the program.

***Knowledge management** regarding project results also will be executed actively to ensure the achievement of desired results of the program.* Information, lessons learnt from program interventions and knowledge on Climate change adaptation and resilient livelihoods are captured, stored and widely disseminated among stakeholders at all levels. *Moreover, data base which sustainably stores program results will be established centrally to ensure the availability of required data for needy stakeholders.*

***In theory of change**, given the multi-faceted effects of climate change-induced hazards on rural livelihoods and environment, a holistic and coordinated approach is required to build community capacity that will enhance: (i) absorptive capacity (e.g. coping strategies, risk management and savings); (ii) adaptive capacity (e.g. use of assets, attitudes/motivation, livelihood diversification and human capital); and (iii) transformative capacity (e.g. governance mechanisms, policies/regulations, infrastructure, community networks and formal safety nets). In light of this, the project has been proposed in the context of climate-smart and landscape-based framework combining improved crop and livestock production avoiding conventional practises and resource rehabilitation and management with livelihood diversification to enable the most vulnerable communities to adapt to frequent drought and anticipated increases in variability from climate change and reduce GHG emission from their daily practises. The project addresses this with a holistic and coordinated approach with set of integrated activities, which aim at achieving adaptation as well as mitigation impacts, and are fully embedded in Ethiopia's national climate change strategy as well as the medium-term development plan (10 years country plan). The Theory of Change portrays how a combination of interventions will yield maximum benefits in terms of transforming the target communities through a low-carbon and/or climate-resilient development pathways. Hence, the combination and inter-linkage of proposed components will yield maximum benefits augmenting production and productivity of crops and livestock sustainably and simultaneously restoring or rehabilitating degraded lands and implementing afforestation/re-afforestation through enhancement of participatory watershed management system so that the resilience capacity of community enhanced and GHG emission reduction ensured. Strong linkage and integrity of the activities to ensure sustainability so as to deliver adaptation and mitigation benefits witness that the proposed intervention will meet GCF goals and objectives.*

*The Constitution of Ethiopia provides the guiding principles for **environmental conservation** and management which greatly support conservation actions proposed in the project. Also proclamations which emanated from the constitution such as Environmental Policy (1997), Environmental Impact Assessment Proclamation No. 299/2002, National conservation Strategy, Volume II, 1994,.. etc. are basis for protection, conservation and promotion of the environment which is the aim of the proposed program. Furthermore, CRGE strategy of Ethiopia, NAP and NDC have objectives such as Ensuring economic growth, Reduce vulnerability to climate change impacts and Contribute for the reduction of greenhouse gas emission. As a result, the project is*

proposed in line with the objectives of the strategy and the plan focusing on mitigation and adaptation of vulnerable rural communities.

Ministry of Finance** is accredited Entity which engage within the Cabinet of the Federal Democratic Republic of Ethiopia that is responsible to drive the economic policy of Ethiopia and to provide oversight on national financial management, national development planning, and development programs implementation. The Ministry executes these responsibilities in all government sectors. In accordance with the law, MoF is also mandated to enter into contracts and sign international agreements on behalf of the Government of Ethiopia. In line with this mandate, it established in 2012 a Climate Resilient Green Economy (CRGE) Facility, to mobilize international climate finance resources for the implementation and realization of Ethiopia's climate resilience building and low carbon development agenda. Hence, the entity is **well placed to undertake the planned activities.

*In implementation arrangement, at the Federal level, Ministry of Finance, the accredited entity (AE), will assume full financial and programmatic management accountability for the funds disbursed from the GCF. In its role as the Accredited Entity has overall responsibility and oversight for the project including project preparation, project implementation and supervision, financial management, and reporting. The CRGE Facility, a climate finance delivery entity which will be responsible for the day-today management of funds released to the Executing Entity in our case Ministry of Agriculture. **Ministry of Agriculture (MoA)**, will execute the project directly under the overall guidance and oversight of the CRGE Facility Management Committee, co-chaired by State Ministers of MoF (the accredited entity) and EPA (the NDA). Also at regional, woreda and kebele level, structures of agricultural offices will execute the proposed project under the supervision and financial management of government financial institution (Bureau/offices of Finance). All implementing partners at regional, woreda and kebele level will take part in the implementation of the intervention.*

Financial risks such as inadequacy in necessary improvements to financial rules and regulations at lower level and insufficient availability of necessary financial resources identified at this stage and will be mitigated capacitating the implementers on rules and regulations and enforcing the application. As the risk level is low, the gap can be filled with indicated mitigation measures. Moreover, regarding insufficiency, collaborative planning process will be adopted, so that relevant stakeholders will build commitment to mobilize resources in support of the proposed project. One of the operational risk identified at this stage is that resistance communities to successfully adopt new technologies and this will be mitigated using different extension methods such as result demonstration, practical training and field day through relevant extension approaches.

B.3. Expected project results aligned with the GCF investment criteria (max. 3 pages)

The expected impacts are aligned with GCF investment criteria: ***Impact potential****: the project will benefit* ***405,000*** *people directly (****40% of Female Headed Households****) and* ***1.5 million people indirectly*** *of the most vulnerable populations of Ethiopia by benefiting them with increased production and productivity of crops and livestock and natural resource empowering women, improving health and wellbeing, improving resilience of ecosystem through participatory community based watershed management and promoting improved and climate-smart interventions and increasing income of the community so that the resilience capacity is enhanced. Furthermore, in mitigation of GHG much emissions will be reduced from business as usual approach of engagement and climate smart agricultural practises will be ensured and so that play significant role in reversing and halting the predicted growth of GHG emission from* ***247 Mt CO2e to 403.5 Mt CO2e in 2030*** *(updated NDC,2019).*

Paradigm shift*: the rural economy is affected by various factors including climate change induced drought which is the dominant shock that frequently affects rural livelihoods. Several barriers have been identified through proposed project early identification (indicated above).The combined effect of these barriers leads to increased vulnerability of rural households to the adverse impacts of climate change and increased GHG emission due to conventional practise. The project intends to address these barriers through three interrelated climate smart agriculture-focused interventions. The results of the project will be communicated to the nearby woredas and kebeles and as a result will have great impact on the dwellers. Due to the scalability behaviour of the proposed interventions, best practises of the interventions will be scaled up through Extension services which exist in current government structure.*

The holistic and coordinated approach and inter-linkages between project components enable the resilience building and mitigation enhancement process and enable farmers to increase investments, translating into higher yields, assets and incomes, and therefore improved food security and livelihoods.

Sustainable development*: Environmental, social and economic co-benefits, including gender-sensitive developments will be ensured during the engagement of the intervention. The proposed program will contribute a lot for sustainable development goal. About 7 goals of the sustainable development such as Goal 1, Goal 2, Goal 3, Goal 5, Goal 8, Goal 13 and Goal 15 will be addressed by the proposed intervention.*

Needs of the recipient: *Climate change which is evident through increasing temperatures, changing rainfall patterns, and higher frequency and intensity of extreme weather events which represents an additional and major risk to the goals established by country 10 years plan and beyond. This has been factor which* ***hold back*** *the development and worsen the indicated barriers to the population. Hence, to reverse the challenge the intervention is* ***needed by the recipient****.*

Country ownership: *accredited entities, executing entities and other partners deliver the proposed project successfully registering fruitful result with full of ownership. Climate Resilient Green Economy strategy exists since 2011 and the proposed program is also thought in line with the objectives of the strategy. The interventions are coherent with existing plans and policies (environmental policies and proclamation), including NDC and NAPs.*

Efficiency and effectiveness: *the proposed program is efficient and cost-effective. The costs of the activities identified will be determined in a way to cover the minimum cost possible to achieve project objectives. Efficient utilization of available resources will be ensured effectively following the path that lead to the achievement of the objective.*

B.4. Engagement among the NDA, AE, and/or other relevant stakeholders in the country (max ½ page)

Ministry of Agriculture will conduct the program directly under the overall guidance and oversight of the CRGE Facility Management Committee, co-chaired by State Ministers of Ministry of Finance (the accredited entity) and Environmental Protection Authority (the NDA).

Ministry of Finance, the accredited entity (AE), will assume full financial and programmatic management accountability for the funds disbursed from the GCF. The CRGE Facility, a climate finance delivery entity within the Ministry of Finance, will be responsible for the day-today management of funds released to the Executing Entity, ***in our case****, Ministry of Agriculture.*

The indicated institutions have platform to monitor and evaluate CRGE related projects including physical monitoring of practically implemented tasks in intervention areas of the program.

Regional bureau of Agriculture will be responsible in monitoring, assisting and evaluation of the program intervention. Similarly, woreda agricultural offices will implement the program tasks together with development agents recruited at kebele level practically on the ground.

G. Indicative Financing/Cost Information (max. 3 pages)

C.1. Financing by components (max ½ page)

Please provide an estimate of the total cost per component/output and disaggregate by source of financing.

Component/Output	Indicative cost (USD)	GCF financing		Co-financing		
		Amount (USD)	Financial Instrument	Amount (USD)	Financial Instrument	Name of Institutions
Enhanced Community based watershed management and rehabilitated degraded lands						
Improved crop and livestock production practices contributing to climate resilience and mitigation						

Enabling environment, monitoring and evaluation						
Indicative total cost (USD)						

For private sector proposal, provide an overview (diagram) of the proposed financing structure.

C.2. Justification of GCF funding request (max. 1 page)

Budget inadequacy for execution of programs and projects is great problem in Ethiopia. It suffers from budget deficits, which are remedied by borrowing internationally and locally. There is, however, a limit to the extent to which the country can borrow without resulting in major macroeconomic shocks.

Traditional development partners already make significant contributions, many of which are complementary to/would benefit from the proposed project. Almost all of them cannot afford requested amount of budget due to their focus to their own engagement on limited thematic scope.

Regarding the government institutions, most of the existing ongoing initiatives are aimed at governments' priority development activities with the limited available resource and climate issues cannot be addressed with such small amount of budget sharing with many priority initiatives. As a result, to meet the country's adaptation and mitigation needs and realize the CRGE vision, Ethiopia requires additional fund from funding agencies like GCF to cover costs related to enhancing climate resilience and mitigation action.

Due to indicated reasons, this funding should be mobilized from bilateral and multilateral sources such as the Green Climate Fund. Without contributions from such sources, it will be very difficult for Ethiopia to realize its vision and NDC commitment.

The proposed project actions represent a major element of the CRGE strategy in agriculture and the GCF contribution will help management of degraded landscapes that will enable adaptation to climate change, and reduce vulnerability beside the reduction of GHG emission. As the project has a strong mitigation and adaptation to climate change focus, it is fully aligned with the GCF result areas on increasing resilience of most vulnerable people and communities; health and well-being, and food and water security and ecosystems and ecosystem services. Hence, Funding request of GCF is Crucial and cornerstone rather than private /publics sector.

C.3. Sustainability and replicability of the project (exit strategy) (max. 1 page)

Institutional Sustainability: The proposed project actions are based on 10 years plan (National agricultural plan, 2012), NAP, NDC and CRGE strategy targets. It will be executed in line with

government regular plan mostly using existing government structures from federal to kebele level. This will ensure direct institutional linkage and coordination with relevant national and regional programmes. This clear alignment with the country's strategies and plans, coupled with capacity building, will ensure that by project completion, the targeted Woredas will sustain efforts in the intervention Kebeles. The tasks also will sustain and continue with the existing government structures since the proposed project is conducted together with regular government development plan.

Financial Sustainability: As the program is in line with 10 years plan (National agricultural plan, 2012) and CRGE strategy, and embedded within the existing government system and structure, the line ministries and the regional government will continue to cover staff salary and other operational expenses after program implementation completion (termination). As usual, the beneficiaries also contribute free labour for activities that demand finance to ensure the sustainability of the work. After completion of the proposed project some systems and infrastructure will be handed over to local administration or community-based organizations as appropriate to ensure the sustainability of financial issues for works that require budget on regular basis like maintenance.

Technical Sustainability: To ensure technical sustainability, after the completion of the proposed program, capacity building which ensure the sustainability will be actively conducted for stakeholders targeting long-term achievement (after project termination). The proposed project will enable integrated development planning and delivery capacity at the local level throughout the execution period so that it will continue in that manner after completion of the project. Gender responsive technical support will also strengthened in intervention areas and as a result, will continue to be provided by the Government at federal, regional and local level even after the project period. From the vulnerable communities, capacity of selected model farmers will be enhanced in order to contribute for the sustainability of the program filling the gap which may be exhibited after program termination. Lessons, which captured from previous successful programs in their sustainability after completion, will be adopted and practised in all program intervention areas.

H. Supporting documents submitted (OPTIONAL)

- ☐ Map indicating the location of the project/programme
- ☐ Diagram of the theory of change
- ☐ Economic and financial model with key assumptions and potential stressed scenarios
- ☐ Pre-feasibility study
- ☐ Evaluation report of previous project
- ☐ Results of environmental and social risk screening

Self-awareness check boxes

Are you aware that the full Funding Proposal and Annexes will require these documents? Yes ☒ No ☐ • Feasibility Study • Environmental and social impact assessment or environmental and social management framework • Stakeholder consultations at national and project level implementation including with indigenous people if relevant • Gender assessment and action plan • Operations and maintenance plan if relevant • Loan or grant operation manual as appropriate • Co-financing commitment letters
Are you aware that a funding proposal from an accredited entity without a signed AMA will be reviewed but not sent to the Board for consideration? Yes ☐ No ☐

Ethiopia: Enhance Climate Resilience of Rangelands and Pastoral and Agropastoral communities settles in semi-arid areas of Ethiopia

Project Concept Note

Project/Programme Title: Enhance Climate Resilience of Rangelands and Pastoral and Agropastoral communities settled in semi-arid areas of Ethiopia

Country(ies): Ethiopia

National Designated Authority(ies) (NDA): Ethiopia Environment Protection Authority

Accredited Entity(ies) (AE): Ethiopia Environment Protection Authority

Date of first submission/ version number: [YYYY-MM-DD] [V.0]

Date of current submission/ version number [YYYY-MM-DD] [V.0]

<table>
<tr><th colspan="4">I. Project/Programme Summary (max. 1 page)</th></tr>
<tr><td>A.1. Project or programme</td><td>☐ Project
☐ Programme</td><td>A.2. Public or private sector</td><td>☒ Public sector
☒ Private sector</td></tr>
<tr><td>A.3. Is the CN submitted in response to an RFP?</td><td>Yes ☐ No ☐
If yes, specify the RFP: _____</td><td>A.4. Confidentiality[6]</td><td>☐ Confidential
☐ Not confidential</td></tr>
<tr><td>A.5. Indicate the result areas for the project/programme</td><td colspan="3"><u>Mitigation:</u> Reduced emissions from:
☐ Energy access and power generation
☐ Low emission transport
☐ Buildings, cities and industries and appliances</td></tr>
</table>

[6] Concept notes (or sections of) not marked as confidential may be published in accordance with the Information Disclosure Policy (Decision B.12/35) and the Review of the Initial Proposal Approval Process (Decision B.17/18).

	☒ Forestry and land use Adaptation: Increased resilience of: ☒ Most vulnerable people and communities ☒ Health and well-being, and food and water security ☐ Infrastructure and built environment ☒ Ecosystem and ecosystem services		
A.6. Estimated mitigation impact (tCO2eq over lifespan)		A.7. Estimated adaptation impact (number of direct beneficiaries and % of population)	
A.8. Indicative total project cost (GCF + co-finance)	Amount: USD _____	A.9. Indicative GCF funding requested	Amount: USD _____
A.10. Mark the type of financial instrument requested for the GCF funding	☐ Grant ☐ Reimbursable grant ☐ Guarantees ☐ Equity ☐ Subordinated loan ☐ Senior Loan ☐ Other: specify_____		
A.11. Estimated duration of project/ programme:	a) disbursement period: b) repayment period, if applicable:	A.12. Estimated project/ Programme lifespan	4 years
A.13. Is funding from the Project Preparation Facility requested?[7]	Yes ☐ No ☐	A.14. ESS category[8]	☐ A or I-1

[7] See here for access to project preparation support request template and guidelines
[8] Refer to the Fund's environmental and social safeguards (Decision B.07/02)

	Other support received ☐ If so, by who:		☐ B or I-2 ☐ C or I-3
A.15. Is the CN aligned with your accreditation standard?	Yes ☒ No ☐	A.16. Has the CN been shared with the NDA?	Yes ☐ No ☐
A.17. AMA signed (if submitted by AE)	Yes ☐ No ☐ If no, specify the status of AMA negotiations and expected date of signing:	A.18. Is the CN included in the Entity Work Programme?	Yes ☒ No ☐
A.19. Project/Programme rationale, objectives, and approach of programme/project (max 100 words)	Ethiopian lowland lives particularly livestock keepers in the pastoralist areas of Borena, Somali and Afar regions are dependent on ecosystem services from rangelands (in Afar and Somali rangelands cover 90% of the total landmass) face tremendous risk from climate change including draught, rainfall shortage and erratic rains and floods leading to depletion of rangelands. The depletion of rangelands reflected on economic, environmental, and social-cultural values of the pastoralist society. Reduction in livestock productivity and loss of livestock due to shortage for forage and water is aggravating food insecurity and poverty. Poverty and scarcity of natural resources such as water is recorded the root causes of bloody conflicts in the area. Empirical studies show that in all forms women and children are 14 times more likely to die than men during climate change-induced disasters and conflicts (Araujo et al. 2007). As a result, saving the lives of pastoralist should be the concern of all. This project is designed to enhance the adaptive capacities of both ecosystem and livelihood of the community through sustainable range land management and utilization. This will in turn contribute to reduced CO2 emissions and increased productivity leading to the improved resilience of the livelihoods of local populations. This will be achieved by introducing soil and water conservation, land and forest restoration and alternative livelihood and capacity building.		

	Implementation will be led by Ministry of Finance, Ministry of Agriculture and Ministry of Irrigation and Lowlands. From the Private sector Nyala Insurance of Ethiopia will support the implementation of insurance related activities.

J. Project/Programme Information (max. 8 pages)

B.1. Context and baseline (max. 2 pages)

Ethiopia is a land-locked country with a total area of ~1.1 million km2. It harbours diverse agro-ecological zones associated with a complex topography comprising of high central plateau with an elevation from 1,290 to 3,000 m above sea level, which slopes gradually to the lowlands in the west and plains to the south-east. Ethiopia's population is 109.22 million, an average population density of 109.2 and annual population growth of 2.6%.

Ethiopia has a predominantly rural economy where the agricultural sector is 31% of the GDP. Agriculture provides employment for about 85% of the population and accounts for about 90% of its exports. As its major sector, agriculture is under pressure to meet the needs of the rapidly growing population and support the country's economic productivity.

The climate of Ethiopia varies according to elevation, with a temperate climate on the plateau and hot in the lowlands. The weather is categorized as hot and dry, except for the short (Belg) rains that occur from February to May and the big (Kiremt) rains from mid-June to mid-September. The National Meteorological Authority defines three seasons in Ethiopia based on temperature and rainfall activity as Bega (Oct-Jan), Belg (Feb-May) and Kiremt, the main rainy season (Jun-Sep).

Ethiopia is one of the most vulnerable countries to climate variability and climate change due to its high dependence on rain-fed agriculture and natural resources, and relatively low adaptive capacity to deal with these expected changes. It has frequently experienced extreme events like droughts and floods, in addition to rainfall variability and increasing temperature which contribute to adverse impacts to livelihoods.

A thirty-year trend in mean annual rainfall shows a decrease in rainfall in eastern parts of Ethiopia, particularly in Somali, Dire Dawa and Oromia but also in parts of Tigray, Afar, Harari, Amhara and Benshangul-gumuz regions. During the period 1981–2000, there was a decrease in annual rainfall during the Belg season with slight increases during the Kiremt and Bega seasons. A decrease in mean annual rainfall from 1971–2010 of 3.6 mm per year was reported from the Southern lowlands. The mean annual temperature across Ethiopia has increased by 1.3°C between 1960 and 2006 at a rate of 0.28°C per decade. Future climate change is expected to include an increase in mean annual temperature of 1.1-3.1°C by the 2060s, and 1.5-5.1°C by the 2090s.

This implies higher rates of evapotranspiration and soil moisture loss with negative impacts on productivity. Projections from climate models suggest an increased variability in mean annual rainfall, largely attributed to an increase in rainfall during Belg in Southern Ethiopia. The impacts of past droughts and climatic changes have been particularly detrimental to Ethiopia's agricultural sector. For example, seven major droughts have occurred over the past 25 years, five of which have resulted in famine. Furthermore, Ethiopia has experienced six major floods since 1988. The number of flooding events and associated damages increased between 1996 and 2006. Ethiopia experienced one of the most severe droughts of the last 30 years brought on by El Niño events in 2015. The drought impacted on the livelihoods

of ~10 million people and resulting food insecurity led the population to become reliant on humanitarian support through food aid. This has left 2.7 million people with malnutrition and 2.1 million without access to safe drinking water.

In addition, the drought is causing losses to livestock and decreased agricultural production owing to crop failure. Declines in rainfall during Belg are reducing the extent and productivity of agricultural land, while increased frequency of droughts is resulting in reduced food security following poor rainy seasons.

The predicted decline in Belg rains in south-central and eastern Ethiopia are expected to reduce harvests and result in the reduced productivity of rangelands during the summer and early autumn.

Peri urban communities in Ethiopia face a unique set of climate vulnerabilities. Annual rates of urban population growth are about 5% and nearly a quarter of all Ethiopians live in urban areas. More importantly, three quarters of all urban Ethiopians live in informal and unplanned urban settlements. These exposes areas of high population densities to urban flooding during the wet season and heat islands in the warm season, contributing to numerous climate change related health risks. Their livelihood strategies involve farming in small plots and homesteads with income from un-organized labor, small businesses as well as jobs in the organized sector, all of which are highly vulnerable to climate extremes.

A number of serious environmental challenges in Ethiopia are due to unsustainable use of forests and land, which further exacerbate the impact of climate change. Forest loss in Ethiopia is estimated to be about 85,000 ha a year, driven largely by small scale farm expansion, fuel-wood and charcoal demand. According to the CRGE Strategy, at current rates of exploitation of forests, between the period of 2010 and 2030, an area of 9 million ha might be deforested, and annual fuel wood consumption will rise by 65%, leading to forest degradation of more than 22 million tonnes of woody biomass.

Soil erosion and land degradation are among the largest challenges faced in terms of maintaining soil fertility and productivity of agricultural and range lands. The annual cost of land degradation in Ethiopia is estimated to be 2 to 3 % of agricultural GDP. It is also estimate that by the mid-1980s, some 27 million ha (about 50% of the Ethiopian highlands and 45% of the total land area) was significantly eroded, 14 million ha seriously eroded and over 2 million ha beyond reclamation.

About 30,000 ha (1.5 billion tons of soil) is thought to be lost annually due to soil erosion and other land degradation processes. Large scale environmental degradation across large parts of Ethiopia is disrupting ecosystem processes and services. This process of degradation will be accelerated by climate change. Communities often rely on landscape level ecosystem services to cope with climate change thus creating a downward spiral of unsustainable and destructive use of resources and loss of resilience that natural systems provide.

The key problem the proposed project will address is that livelihoods of pastoral communities that are highly vulnerable to the impacts of increasing climate variability and climate change. Livelihoods of most

of the population are sensitive to climate-related shocks, especially droughts and floods because of the reliance on rain-fed agriculture and natural resources.

Climate change is likely to exacerbate the impacts of degradation of the environmental resources, including arable land, water, pasture, and forest, all of which are connected food and water security. Consequently, Ethiopian communities in both rural and urban settings will be impacted. About 8.13 million people in Ethiopia were considered food insecure and in need of urgent assistance by OCHA in 2018, with climate shocks, namely erratic rainfall in some areas and droughts in others considered the primary drivers. This figure is presently (May 2020) revised to 7 million. The impacts of weather variability and climate change differ across the diverse agro-ecological zones of Ethiopia owing to its varying topography, rainfall patterns and temperatures. These influence the livelihood patterns of communities and the level of exposure to climate related risk, both of which are highly variable even at small, local scales and within cities.

Changes in the weather patterns marked by greater variability are imposing additional risks to human development in Ethiopia. These risks are most heavily borne by farmers engaging in subsistence or rain-fed agriculture, including pastoral communities and landless households whose income largely derives from on-farm wage labour. Ethiopia is grouped among countries which are the most sensitive and exposed to impacts of urban climate change yet have the lowest adaptation and coping capacities.

Alignments with national climate change strategies and programs

The proposed project is aligned and contributing to key national strategies and programs including the Climate Resilient Green Economy Strategy (CRGE), the Ten Years National Development Plan (10YPDP), the National Adaptation Plan (NAP-ETH) and the updated Nationally Determined Contribution (NDC), and sector plans. The most common ones are discussed hereunder.

Climate change

It is projected that rangelands will be more negatively affected by climate change, with implications such as change in water resources, change in rangeland productivity, change in land use systems and rangeland-based livelihoods (Hoffman and Vogel, 2008). Dry lands of Ethiopia are exposed to climatic change and its variability.

Government policies

Government policies that were identified as causes of degradation include: settlement and resettlement program (unsystematic), investment policy, the crop focused rural development strategies, and bans on use of fire (Beriso, 1995; Beriso, 2002).

Over-grazing

In pastoral areas of Ethiopia, the animal populations are growing at an increasing rate to meet the need of increasing human populations, while the pasture resource on which they depend is limited or diminishing both in terms of grazing area and range productivity (Coppock 1994)

Decline of traditional resource management practice

The loss of traditional indigenous knowledge and decline in the participation of elders in the rangeland management are an important cause of rangeland degradation.

Population pressure

Demographic factors related to human population growth resulting from an increase in the number of communities themselves, settlements, immigrants from outside the pastoral area and from other pastoral areas are the underlying causes of rangeland degradation

Encroachment of cultivation lands

The expansion of large-scale commercial farms without due consideration to the benefits of the local pastoralist is considered a threat to the livestock production system

Frequent Drought

The frequent drought in many parts of the world's lowlands and notably in Africa is a prominent factor which has contributed to range degradation

Bush Encroachment

The rapid expansion of encroachment and invasion of plant species in Ethiopia has been widely reported as a common form of rangeland degradation (Ayana and Oba, 2008; Solomon et al., 2007; Gemedo et al., 2006; Abule et al., 2005b)

There are number of major barriers that need to be overcome for communities in Ethiopia to address the impacts of climate change and to reverse the cycle of environmental degradation, declining productivity and increasing vulnerabilities. This includes:

1. Lack of capacity and awareness to mainstream climate change in the regional and local development plan
2. Lack of gender responsive solutions for addressing adaptation needs of women and vulnerable groups to impacts of climate change.
3. Gender responsive climate change adaptation is not mainstreamed into key policies and programs at the local level.
4. Technical capacities and limited access to modern technologies and methods, especially in rural areas is a barrier to planning and implementation of integrated landscape restoration initiatives.

5. Limited access of communities and local institutions to training opportunities on climate change adaptation practices.
6. Limited access of farmers and agro-pastoralists to climate resilient crops and livestock and to climate smart agricultural technologies.
7. Farmers, pastorals, and agricultural extension services have limited capacities to access available climate information and forecasts and to use them for decision making or integrating them with extension support.
8. Underdeveloped markets and value chains for agriculture and livestock produce in both rural and peri-urban areas constrain farmers and pastoral communities from marketing, storage, or value addition of products.
9. Limited access of communities to technical and financial support and services for agriculture and income diversification.
10. Ineffective institutional architecture and management instruments at the local level.

B.2. Project/Programme description (max. 3 pages)

Describe the expected set of components/outputs and subcomponents/activities to address the above barriers identified that will lead to the expected outcomes.

Objective of the project: Enhancing climate resilience of rangelands and agro-pastoral and pastoral communities settled in semi-arid areas of Ethiopia

Outcome 1: Strengthened enabling environment for improving climate resilience of rangelands and the communities

This outcome aims to support for strengthening and establishment of conducive policy environment, regulatory and legal framework, institutional and coordination mechanisms in so doing enhance the restoration and rehabilitation of degraded range land and community resilience.

Output 1.1. Support the establishment and strengthening of enabling environment

Activity 1.5.1 Assess policy environment and indicates gaps on rangeland management

Activity 1.5.2 Established and strengthened institutional and coordination mechanisms and multi stakeholders' platforms,

Activity 1.5.3 Build capacities of DAs, community associations, teachers, environment club leaders, religious leaders etc to educate how to address rangeland degradation.

Activity 1.5.4 Provide advisory services to target sector for the planning, development, and operationalisation of National Frameworks for Climate Services.

Activity 1.5.1 *Assist land use right certification processes for communal land*

Activity 1.5.2 Train policy and decision-makers on approaches and techniques for mainstreaming climate information into national policies and strategies.

Policy- and decision-makers at the national and regional levels of target sector will be trained on how to integrate climate information into sectoral development plans and strategies, focussing on the pastoral sector and targeting policies and/or strategies linked particularly to smallholder farmers and pastoralists. This will be done through annual engagement forums hosted by EMI, targeting key decision-makers in the target sector. These forums will include roundtable discussions facilitated by EMI, climate policy specialists, NGOs to present scenarios that will guide decision-makers on how to mainstream CIS into relevant national policies and strategies. This will also create awareness among decision-makers of the importance of mainstreaming CIS into sectoral policies and strategies.

Activity 1.5.3 Provide advisory services for the drafting of national level policies/strategies/plans for the integration of CIS in the pasture sector. Building on the NFCS supported through Activity 1.1.5 and the mainstreaming activities supported through Activity 1.1.6 will advise policy makers on the drafting of policy briefs for the pastoral sector. This will include facilitating inter-ministerial dialogues to ensure that policy revisions are fully aligned with relevant national priorities and account for cross sectoral synergies.

Activity 1.5.4 Improve the flow and coordination of climate data and information between EMI and institutions. This will be consolidated and improved through mutual data-sharing agreements to enable informed decision-making.

Output 1.2. Strengthened customary and traditional institutions

Activity 1.2.1 Train community dialogues facilitators/animators

Activity 1.2.2 TOT on community dialogue for project and local government staff (to support the creation and implementation of a joint action plan to address rangeland degradation issues)

Activity 1.2.3 Developed community by-law for managing rangelands,

Activity 1.2.4 Enhance and strength existing information sharing system including 'dagu',

Output 1.3. Early warning system strengthening and climate information dissemination

Activity 1.3.1 Train Woreda experts and community members on Early Warning and assessment & climate information,

Activity 1.3.2 Support crop and livestock seasonal assessment,

Activity 1.3.3 Strengthened early action measures through provision of hand-held tools,

Activity 1.3.4 Train pastoralists and Woreda experts on veterinary management during EW (including livestock destocking),

Activity 1.3.5 Provide training to district level DRM Committee member on risk identification, monitoring and issuing warning,

Activity 1.3.6 Provide climate information & climate services training DRM Committee member to the community,

Activity 1.3.7 Assess communication gap & develop communication strategy for EW (MILLS).

Output 1.5. Design and development of suitable agricultural micro-insurance products (Index and Indemnity) to increase resilience of pastoral and agro-pastoral community

Activity 1.5.1	Assess the micro insurance needs of the pastoral and agro-pastoral community
Activity 1.5.2	Collect weather and agricultural data to be used as inputs for product design
Activity 1.5.3	Formulate innovative public-private partnership with relevant stakeholders & Promote Federal or regional states to partially finance premium,
Activity 1.5.4	Conduct financial literacy campaign-Providing financial education for beneficiaries
Activity 1.5.5	Provide technical training for staffs of insurance company on product design and pricing
Activity 1.5.6	Arrangement smart-premium subsidy mechanism,
Activity 1.5.7	Promote use of both satellite and ground weather data to reduce problem of basis risk,
Activity 1.5.8	Undertake pilot test program,
Activity 1.5.9	Providing insurance training for distribution channel in project intervention areas,

Outcome 2: Rehabilitated Degraded Rangeland and enhance community resilience

This outcome focuses on rehabilitation of degraded landscape and restoration of degraded range land forest resource surrounding the water resources. The intended activities under this component will improve water retention capacity of the soil, reducing run-offs, etc. and contribute to the sustainable utilization of both ground and surface water. The results of this component are the reduction of risks from rainfall variability and soil erosion, the increase of soil organic matter and soil fertility, the increase of agricultural productivity, the increased groundwater recharge, and the reduced greenhouse gas emissions.

Output 2.1 Managed degraded range lands

The output directly linked to the rehabilitation of degraded range land, forest, farm, and communal lands. The support includes, among others, establishing seedling nursery centres; procurement of seeds; seedling production and planting trees on 12,000 ha as part of rehabilitation of 8,500 ha degraded range land through physical and biological landscape restoration conservation and management measures.

Activity 2.1.1	Conduct stakeholder consultation meeting on natural resource management
Activity 2.1.2	Train community and stakeholders on Community Action for Development approach
Activity 2.1.3	Identify site for restoration, mobilize community & rehabilitate degraded lands through area closure
Activity 2.1.4	Undertake soil and water conservation measures (landscape contouring, digging trenches and furrows for soil, rainwater harvesting and building artificial ponds/lakes,
Activity 2.1.5	Nursery site establishment/or provide seedlings, planting seedlings,
Activity 2.1.6	Establish monitoring and following system for rangelands under restoration.

Output 2.2. Provide alternative energy source for firewood

Activity 2.2.1 Organize and support women groups on energy saving stove
Activity 2.2.2 Train stakeholders on efficient technology utilization
Activity 2.2.3 Provide skill training on cook stove maintenance
Activity 2.2.4 Support targeted HHs with improved energy efficient cook stoves

Output 2.3. Managed livestock rangelands(grazing)

Activity 2.3.1 Proper stocking
Proper stocking involves obtaining the proper ratio between animal numbers and grazing forage, such that the animals can meet their intake requirements and the plants can meet their requirements for growth and reproduction.

Activity 2.3.2 Proper season of grazing ,*The activity described as some ranges are suitable for grazing during all seasons while others are accessible during certain seasons. Continuous grazing for consecutive years without resting the pasture results in deterioration of the range vegetation. Therefore, it is important to determine the seasonal suitability of the grazing land prior to developing the grazing management plan*

Activity 2.3.3 Proper distribution of grazing Livestock mobility and duration of grazing in a particular area is a key factor for proper utilization of available forage.

Output 2.4. Enhance community resilience by improving Livestock and crop productivity/production of agropastoral areas

Activity 2.4.1 Mapping + design + treated, construction of water bank for livestock – (tested activity)
Activity 2.4.2 Irrigation based forage production (tested)
Activity 2.4.3 Improved/fortified forage, established fodder bank, fortification of fodder (there are 7 strategies for animal forage development strategies) ------- UNRRP there are projects (fodder fortification, animal supplements, zero grazing)-tested activity
Activity 2.4.4 Improve animal health, cross- breading, animal post, animal drug supply, vet
Activity 2.4.5 Introduction of high bread verities with access to finance (Insurance) --- (Awash 7 – tested – very successful)
Activity 2.4.6 Extension services for livestock & crop
Activity 2.4.7 Livestock identification system (technology introduced) ***- for insurance***
Activity 2.4.8 Small scale irrigation and canal construction and establish water harvesting systems using technologies such as solar PV (energy and water efficient technologies)
Activity 2.4.9 Provide improved agricultural input (fruit and vegi)
Activity 2.4.10 Disaster risk financing through introduce multiple crop insurance (multiplier effect, disaster times+ reduce asset depletion + automation, training, climate forecast (may be stations) + covering premium for farmers+ check the 4 Rs + enhance PPP + prevention focused + asset substitution

Activity 2.4.11	Access to finance – through using insurance (arrangement of insurance) (credit guarantee for banks)
Activity 2.4.12	Capacity building for pastoralist on proper feeding and watering livestock

A total of …….. deep water wells will be developed, and pump and electro-mechanical fixtures will be installed for irrigation and drinking water

Outcome 3: Adapted and diversified income and employment opportunities created for women and youth, with a focus on climate-smart agriculture and rehabilitating degraded rangeland (alternative livelihood)

Output 3.1: Promote alternative livelihoods through climate-smart diversification targeting women and youth

Proposed activities: - Define a at least 4 climate-resilient income generating activities to be supported (honey production, vegetable shoat production, petty trade, fattening and milk processing); - establish saving groups, deliver start-up packages and provide training and mentoring to beneficiaries to ensure success; - Build capacities of beneficiaries to engage in climate resilient livelihood streams, including training on marketing, financial literacy etc

Activity 3.1.1	Pastoral area saving and credit groups are organized and functional (focus on women, youth, and marginalized groups)
Activity 3.1.2	Community members and saving groups capacitated and equipped with income generating skills and knowledge
Activity 3.1.3	Identify IGAs, facilitate linkages to savings groups and its members to IGA
Activity 3.1.4	Support IGA/ Economic development activities for adolescents (age above 15) by skills development, provide start-up kits
Activity 3.1.5	Economic support to families through IGA and family agriculture (including skills development and start-up inputs).
Activity 3.1.6	Close monitoring and follow up of IGAs
Activity 3.1.7	Promote IGA on tourism (tourism – handicrafts, traditional cloth, shoes, modification based on market need- marketing access for women

Output 3.2: Promoted products/commodities linkage with market through value chain development

Activity 3.2.1	Identify and study a sub-sector for value chain intervention
Activity 3.2.2	Train producer's on identified gaps during the value chain analysis
Activity 3.2.3	Strengthen established cooperatives,
Activity 3.2.4	

in terms of rationale, please describe the theory of change and provide information on how it serves to shift the development pathway toward a more low-emissions and/or climate resilient direction, in line with the Fund's goals and objectives.

Describe how activities in the proposal are consistent with national regulatory and legal framework, if applicable.

Describe in what way the Accredited Entity(ies) is well placed to undertake the planned activities and what will be the implementation arrangements with the executing entity(ies) and implementing partners.

Please provide a brief overview of the key financial and operational risks and any mitigation measures identified at this stage.

B.3. Expected project results aligned with the GCF investment criteria (max. 3 pages)

Impact potential: The project will benefit the most vulnerable pastoralist and Agro pastoralist community's particularly unemployed youth and women group by introducing modern livestock production system, rangeland management, green ecosystem services, by providing early warning and climate information and improving the resilience of this most vulnerable community group through increasing their income.

The project will be implemented in four Regional States, 14 Woredas. The total population living in the intervention Woredas are estimated to be 1,900,000. The total number of direct beneficiaries through the various project interventions will be 330000 with women representing 50% of the total.

The project is assumed to be implemented in 3 kebeles per Woreda (about 4000 individual's lives in a kebele on average) and a total of 42 kebeles will be involved. A total of an estimated 990000 people will be indirectly benefited from project assuming that in one or another way four more adjacent kebeles benefiting from the project interventions. Therefore, the project will benefit the 1,320.000.00 most vulnerable people.

The total beneficiaries of the project intervention will comprise 60% of the total population of the 14 intervention Woredas. The fundamental criteria that employed for the selection of the intervention Woredas, kebeles and individuals is vulnerability to climate change with a special focus on poorest group of the community particularly unemployed youth and women. The project will significantly improve the natural resource / range land management, green ecosystem service and strengthens resilience of the community by improving their livelihood. It will also increase the number of households that have access to potable water and irrigation.

Paradigm shift potential: The project will bring about paradigm shift and fuels transformational change that mitigate the risks of vulnerable women and children.

The project will contribute to each of the GCF's assessment factors from the Investment Framework as follows:

Overall contribution to climate-resilient pathways consistent with a country's climate change adaptation strategies and plans.

The implementation of integrated range land management, modern livestock production system, providing early warning and climate information, will build the resilience of targeted vulnerable pastoral community most particularly unemployed youth and women through implementing activities that increase agricultural productivity and diversified livelihoods that contributes to improve the adaptive capacity of the communities.

Crop and livestock productivity will be enhanced by creating access to irrigation and introducing climate smart crop and livestock technologies and community-based landscape rehabilitation interventions such as participatory forest management and integrated soil and water conservation measures.

Resilient livelihoods that allow generating sustainable income are envisaged to be ensured through context specific women and youth based small-scale businesses including integrated commercial tree plantation, and skill development trainings on entrepreneurship.

The intervention of resilient livelihoods will be backed by continuous institutional capacity building supports that create the enabling conditions by addressing the skills, technical, technological, and regulatory and information gaps. The results of these interventions, seeks to strengthen the resilience of unemployed youth and women group through implementing an intervention that improve their income and livelihood.

The project supports Ethiopia's NAP-Eth, 2019 and the revised NDC and notably the Federal Government of Ethiopia's Ten Years National Development Plan (10YPDP, 2021-2030). In close alignment with these flagship climate policies, the project interventions include context specific natural resource management and range land management climate smart agriculture interventions that enhance agricultural productivity.

The 10YPDP also targets to ensure gender equality & empowerment by improving the opportunity to participate and benefit from the intervention. The proposed project interventions are centred at building the capacities required to improve the livelihood of the pastoral and Agro-pastoral community. The strong alignment of the project with the priorities and goals of the 10YPDP ensures its replicability and scalability within and beyond the Regional States. The project provides lessons that prompt the need to mainstreaming the issues of integrating sustainable range land management in the national climate change policy discourses. The project influences policy processes and sensitizes attitude change in decision makers and experts, which confirms its sustained contributions to the national climate-resilient pathways that extends beyond the closure of the project

Contribution to the creation of an enabling environment

This project seeks to create an enabling environment by addressing systematic barriers that increase vulnerability to climate risks through climate resilient solutions. Development changes of the pastoralist and Agro-pastoralist community aggravated by climate related risks such as rainfall variability and extreme weather events. The project intends to address four key barriers to bring a shift towards addressing the problem of pastoralist and Agro-pastoralist community in the project area. The barriers to be tackled through the proposed project are (I) Inadequate access to climate smart crop and livestock production technologies and limited capacities to undertake community-based landscape rehabilitation, ensure environmental sustainability. Further, it contributes to sustainable livelihood/income and improved health conditions of the community beyond completion of the project. (II) Limited technical and financial capacities to establish climate resilient and sustainable livelihoods to improve the role of women in household decision-making. The project also supports diversification of livelihood options and facilitates identification of market-based solutions for the community resilience building particularly for women and youth through green jobs creation and enhancing entrepreneurship skills. (III) lack of access to early warning and climate information for decision making and (IV) weak climate service and institutional coordination, lack of knowledge management platforms for learning and share best practices including weak alignment of modern and indigenous climate information sharing knowledge, technical and resource mobilization capacities to support resilience initiatives. These barriers have increased vulnerability of pastoral and Agro-pastoral community. The project intends to address these barriers through four transformative and interlinked components (1) Enhanced agricultural productivity (2) Enhanced ecosystem services, (3) Increased income, and (4) Improved climate services.

Potential for knowledge and sharing lessons learned

Lessons learned over the course of the project implementation will be documented and compiled through an integrative knowledge management platform and monitoring, evaluation, and learning (MEL) system that will be established. The lessons will be shared to inform other similar projects and build local capacities to accelerate the scaling up of the outcomes within in the intervention Woredas and Regional States or beyond. Government and nongovernment organizations that work in the intervention areas can build on the lessons drawn from the implementation of this project and scale up the outcomes to other areas suffering from similar problems. MOF also integrates the lessons and best practices with existing programs to strengthen its efforts of improving livelihood of pastoral and Agro-pastoral community affected by the climate variability and changes. Livelihood diversification that leverages on the sustainable range land management and utilization of forest resources is a core component of the proposed project.

The income generated through the alternative livelihood options augments the economies of poor households that is solely dependent on a rain-fed agriculture that is vulnerable to climate related risks such as rainfall variabilities. This creates economic incentives that derive the project outcomes beyond the implementation of the project offering opportunities for learning and scaling up that foster paradigm shift. The project further contributes to paradigm shift through lessons learned that may inform policy

formulation/revision processes in the areas of promoting CSA technologies, resilient livelihoods for addressing gender inequality, effective institutional coordination for technical support, supply and usage of climate information, market solutions, etc,

Sustainable Development Potential

Climate change exacerbates rainfall variability and extreme weather conditions result in adversely affecting the livelihood of pastoralism and Agro pastoralism that are highly sensitive to climate variability and climate change because of their close links to the natural environment.

The project intends to improve the livelihood of the most vulnerable pastoral and Agro pastoral community by addressing the problems and challenges identified related to water scarcity, degradation of range land, low crop and livestock productivity and resilient livelihoods in the project Woredas of the four Regional States.

The project interventions provide important environmental, social, and economic co-benefits.

1. **Environmental benefits:** The project has a co benefit in carbon emission reduction with an overall emission reduction potential from 12 000 ha land of sustainably managed range land, forests, and agroforestry practises, introducing high breed livestock. The productivity of range land will be enhanced through conservation measures implemented on 6,000 ha of degraded land. The sustainable management of range land and forest resources will contribute to biodiversity conservation and improving catchment hydraulic cycle. The proposed project will introduce integrated ranged land management, afforestation, land rehabilitation and best soil and water conservation practices. This will provide ecosystem service benefits and will also contribute to the sectoral (forest and agricultural) GHG emission reduction and sequestration of carbon target indicated in the country 10 years development plan and updated NDC. The introduction of Solar powered pumps will also reduce and avoid GHG emission created due to the use of diesel pumps

2. **Social benefits:** The increase access to potable water supply improves health and well-being of the community as well as ensuring food and water security. Beside this will also improve access of education mainly for girls who have been side-lined due to their socially designated task of fetching water. The implementation of the project will reduce social inequality by improving the wealth and income of the most vulnerable, mostly poor women. This will also increase the opportunities for women to participate in planning, implementation, monitoring, and evaluation of the project with clearly identified gender sensitive indicators, building the resilience of female-headed households and women in male headed households. In addition, it will reduce conflict that happens due to pasture and water among communities and reduce vulnerability of the pastoralist.

3. **Economic Benefit:** The introduction of the Solar powered pumps will reduce the expense incurred for power the generators which is born by the community and save foreign currency. The project will create job opportunity for different group of people and enterprises including the targeted

community (beneficiaries of the project). The small-scale irrigation scheme will enhance crop and livelihood productivity and incomes of the targeted community and will reduce the expenditure (foreign currency) on importing food for relief and other purposes.

B.4. Engagement among the NDA, AE, and/or other relevant stakeholders in the country (max ½ page)

MOF the Accredited Entity directly engaged the NDA through meetings and consultations on the project idea which is developed into this concept note. The consultations and workshops undertaken with the NDA have helped in aligning the initial project idea with the evolving priorities of the government.

The NDA has provided its consent to go-ahead in the development of the project idea into a concept note. Similarly, the concept note preparation is conducted with very close consultation and guidance of the NDA particularly to ensure synergy and avoid duplications with other similar programs and projects. Further, bi-lateral consultations have been conducted with most relevant line ministries (Ministry of Agriculture as well as the Ministry of Water and Energy) and the Environment Protection Authority, which is the lead agency for the coordination of Ethiopia's response to climate change and is the national focal point to GCF. Accordingly, discussions were made to reach a consensus on the sectoral priorities and ensure alignment with objectives of the proposed project. Further, ide. A comprehensive stakeholder engagement plan as per the GCF policies and framework will be developed during the full project proposal. The stakeholder engagement plan will map and analyse all concerned government and nongovernment organizations, CBOs, academic and research institutions, and the private sector. Stakeholder engagement will be guided by the importance and influence of the potential actors. Among others, an active and true engagement of key stakeholders will be used to understand the interests and hear the voices of the most vulnerable social groups including women, children, elderly people, disable and unemployed youth in the pastoral community. The stakeholder engagement plan will be informed by years of rich experiences of MOF that has evolved and crafted by cumulated lessons of working relationships with diverse actors that are operating at all levels.

K. Indicative Financing/Cost Information (max. 3 pages)

C.1. Financing by components (max ½ page)

Please provide an estimate of the total cost per component/output and disaggregate by source of financing.

Component/Output	Indicative cost (USD)	GCF financing		Co-financing	
		Amount (USD)	Financial Instrument	Amount (USD)	Finar Instr
Outcome 1					
Outcome 2					
Outcome 3					

Indicative total cost (USD)				

For private sector proposal, provide an overview (diagram) of the proposed financing structure.

C.2. Justification of GCF funding request (max. 1 page)

Ethiopia is among least developing countries most vulnerable to climate change and variability due to its high dependence on rain-fed agriculture and natural resources, and relatively low adaptive capacity to deal with these expected changes. It has experienced frequent and severe extreme events like droughts and floods, in addition to rainfall variability and increasing temperature which contribute to adverse impacts to livelihoods. Some of these adverse impacts if left unmanaged timely could result in irreversible and permanent damages to the environment and biodiversity, which would ultimately aggravate the existing social and economic challenges

The concurrences of the pandemic, invasion of parts of the country by locust army, internal war in the past and recently inflation in food and fuel commodities greatly demanded the allocation of meager resources being diverted from other sectors of the economy. This clearly depicts the need to have a multi-layered response, not least because of the compounded vulnerability faced by communities in Ethiopia. Even though the government has developed relevant climate policies and strategies and has been implementing these over a decade, the existing capacity is not proportional to the vast needs on the ground. This clearly indicates the existence of huge and significant financing gaps suggesting that Ethiopia cannot finance such climate change intervention projects without the support and involvement of GCF.

A resource required in response to addressing the climate objectives is beyond the government capacity and needs a global partnership to build the resilience of the nation particularly the poor and most vulnerable including women and children. Further, the project has minimal potential to attract international and domestic financial institutions as well as the private sector investors, because it is designed to strengthen the resilience of the most vulnerable members of the communities living in areas with limited infrastructure. It is also noted that, as an LDC country, Ethiopia remains with high risk of external debt distress and, it cannot be favourably appraised by international capital markets. The country's debt burden limits its access even to concessional loans provided by international and regional development banks. In response to such issues, over recent years, the Government of Ethiopia has improved its effectiveness in mobilizing revenue through tax reforms and other measures. The revenue is however targeted to covering development priority investments and hence not sufficient to cover resilience building demands across all parts of the country. The private sector in Ethiopia has hardly developed to engage in such investments. The currently proposed project is fully consistent with and complements the broader domestic and international climate objectives including the GCF financed programme in the country and more others financed through bilateral and multilateral development partners as discussed under different sections in this concept note.

C.3. Sustainability and replicability of the project (exit strategy) (max. 1 page)

Please explain how the project/programme sustainability will be ensured in the long run and how this will be monitored, after the project/programme is implemented with support from the GCF and other sources.

Sustainability: The project has been designed to bring about sustainable transformation by improving resilience of vulnerable pastoral communities to rainfall variability and drought.

The following are key approaches considered in the project design to ensure the sustainability of the project impacts.

Alignment to national strategies and programs: Climate change related problems that are selected for this project intervention are priorities of major government strategies and programs such as the CRGE, 10YPDP, NAP-Eth and updated NDC. Furthermore, the project is attached to the agricultural sector priority of addressing range land management in the pastoral area. This strong alignment guarantees the sustainability of the impacts through national and international investments that will be triggered by the lessons learned and the initial investments covered by this project. Moreover, the strong alignment ensures financial sustainability through government allocated budget to cover staff salary and other operational expenses.

Direct institutional linkage: The project implementation arrangement is designed in such a way that the project is implemented through direct engagement of the appropriate government structure operating at Federal, Regional and Woreda levels. This ensures the continuation of the project intervention through the regular support of the respective government institutions. The institutional capacity building elements of the project are also designed to reinforce this approach of ensuring sustainability.

The project interventions are identified and prioritized in close consultation with responsible government institutions such as MoA, EPA and the CRGE facility to ensure alignment and a smooth handing over and continuation of project activities after project termination. Further, selection of the intervention Woredas as led by these government stakeholders both at Federal and regional level with defined and agreed selection criteria.

Further consultations during the full project development process will clarify and develop more specific strategies for a stepwise handing over of project interventions and continuation of project outcomes and impacts. Mainstreaming adaptation into development planning: There is only a thin line between adaptation and development interventions and possibility of mainstreaming is high. Efforts will target towards influencing planners and implementers to consider context-specific adaptation interventions during regional and local development planning.

Participation and ownership of the beneficiaries: The project puts the beneficiaries at the centre of the project implementation. Identification of range land management, CSA technologies, selection of livelihood options will be entirely undertaken with the active involvement and concern of the beneficiaries with 50% consisting of women. The beneficiaries will be an integral part of all the decisions undertaken along the course of the project execution.

This will bring sense of ownership and will increase the likelihood that project results and impacts will sustain beyond the life of the project.

Robust Monitoring, Evaluation and Learning (MEAL): The project establishes robust Monitoring, evaluation and learning mechanism that will be embedded in the regular government structure. The MEAL serves as an important platform by engaging all concerned stakeholders to foster learning for the implementation of the interventions after project exit. Strong knowledge management and communication techniques will be integrated with MEAL to ensure proper archive and retrieval of knowledge and lessons for future use. The MEAL will be gender sensitive and intends to document successful processes and practices that have empowered women in decision making. The MEAL with proper documentation and compilation of the lessons ensures monitoring and evaluation of outcomes and impacts after project exit. A full monitoring, evaluation, and learning (MEAL) framework will be developed during the full project design phase based on the GCF Investment Criteria and the Adaptation Performance Measurement Framework.

For non-grant instruments, explain how the capital invested will be repaid and over what duration of time.

L. Supporting documents submitted (OPTIONAL)

☒ Map indicating the location of the project/programme

☒ Diagram of the theory of change

☐ Economic and financial model with key assumptions and potential stressed scenarios

☐ Pre-feasibility study

☐ Evaluation report of previous project

☐ Results of environmental and social risk screening

Self-awareness check boxes
Are you aware that the full Funding Proposal and Annexes will require these documents? Yes ☐ No ☐ • Feasibility Study • Environmental and social impact assessment or environmental and social management framework • Stakeholder consultations at national and project level implementation including with indigenous people if relevant • Gender assessment and action plan • Operations and maintenance plan if relevant • Loan or grant operation manual as appropriate • Co-financing commitment letter
Are you aware that a funding proposal from an accredited entity without a signed AMA will be reviewed but not sent to the Board for consideration? Yes ☐ No ☐

Gambia: Developing integrated approaches to build rural and peri-urban climate resilience in the Gambia

NAP write workshop template - UNEP
Project concept note

1. GENERAL INFORMATION

Project title:

Developing integrated approaches to build rural and Peri-urban climate resilience in The Gambia

Project site and scale:

National

Proponent/Executing Entity:

Ministry of Environment, Climate Change and Natural Resources

Accredited entity:

TBD

Project partners:

Ministry of Agriculture, Department of Forestry, Department of Parks and Wildlife Management, National Environment Agency, MOFEA, DCD, TAC

2. PROJECT DESCRIPTION

Context and Baseline: 2 paragraphs explaining the broad context of the project and the problem intended to be solved. Describe the context of the target community/ beneficiaries (livelihood, ethnicity, gender, geography, ecosystems, political context etc). Describe the climate risk that this project seeks to address.

List the available climate scenarios/ data available to back up the project proposal and define what information is missing at this stage.

Problem statement: What is the underlying problem from a climate change adaptation perspective? What are the non-climate drivers and what are the climate change drivers?

Describe the main root causes and barriers (social, gender, fiscal, regulatory, technological, financial, ecological, institutional, etc.) that need to be addressed.

There has been an increase in the frequency of extreme rainfall events, which invariably lead to numerous flooding events and widespread run-off-induced erosion phenomena, particularly in

uneven and bare grounds. Sea level rise and rainfall reduction have led to increased salinization of River Gambia further upstream, spreading into rice farming fields in the riverine locations. The net result of these climatic variations for rural farming communities is the ever-increasing episodes of dry years, erratic distribution of rainfall, and droughts alternating with intense rainfall events, both of which cause great damage to crop production and farming sustainability.
Local authorities are increasingly seen as key in the promotion of climate change adaptation and in building resilience to climate change at the local level. They are in a unique position to identify the climate change adaptation responses that best meet local needs and typically are mandated to undertake the small- to medium-sized adaptation and infrastructure investments needed for building climate resilience – e.g. land use and agriculture, water management, irrigation, and drainage, environmental and natural resources management, and disaster risk management. Plus, they have the legitimacy and convening power to coordinate, co-finance and interact with stakeholders, including national-level institutions, civil society bodies, the private sector, and various local government departments. Yet, they frequently lack the technical capacity and resources to fulfill this mandate – especially in a way that is aligned with established decision-making processes and public planning and budgeting cycles.

- Forestry and livestock: degradation of vegetation cover is taking place through freely moving cattle (transhumance) and small ruminants. Rapid population growth and urbanization have placed increased demand on forests for new settlements and/or expansion of existing ones, agricultural production, fuelwood, timber for construction, and other forest produce.

- Agriculture and small-scale family farming: Drivers of rural vulnerability for the small-scale and family-based farming that predominates in The Gambia include the absence of capacity to overcome the impacts of climate change, particularly the increasingly shortening of the growing period with late-onset and early cessation of rains; the growing migration flux of young people, the main workforce, towards the urban centers and abroad, enlarging the number of women-headed households; and the deficient technical support to adopt adaptive options that would enhance resilience to the shortening of the growing period.

- Forestry and land management: forests are under severe attack with the widespread cutting of trees both for commercial purposes and charcoal or other household fuel purposes. There is regular encroachment into forests and virgin lands when the fertility of farming grounds is exhausted.

Objectives of the project: Briefly state the overall project goal, what is the adaptation objective(s) to be pursued to achieve that goal, and describe the activities to be used to support the objectives. This will have to be adjusted to be aligned with the Fund policy you are applying to.

The project objective is to develop systems and integrated approaches to promote climate-resilient communities and local economies in the rural and peri-urban areas of The Gambia, through scaling up of the performance base climate-resilient grant mechanism focusing on small-scale climate-smart agriculture and livestock, community-based approaches to forest and natural resource management

Stakeholders: list the stakeholders that will have a role to play in the project and are likely to be positively and negatively impacted by the project. Draft a power/interest map.

Stakeholder	Type of institution	Role / Responsibility in the project	Likely to be positively or negatively impacted by the project
Department of Forestry	Gov't	Sub-implementing partner	Positive
Ministry of Agriculture	Gov't	Sub-implementing partner	Positive
Department of Parks and Wildlife	Gov't	Sub-implementing partner	Positive
National Environment Agency	Agency	Sub-implementing partner	Positive
MOFEA	Gov't	Sub-implementing partner	positive
Department of Community Development	Gov't	Sub-implementing partner	positive
TAC members	Gov't	key stakeholders	positive
MDFTs	Gov't	key stakeholders	positive
WDC	Local communities	key stakeholders	positive
Communities	Local communities	key stakeholders	positive

3. NEXT STEPS

Identify and briefly describe next steps that you will undertake to further develop this concept note, including timelines. These can include: collect data and undertake analysis to fill information gaps; identify and organize meeting(s) with proposed accredited entity to secure their engagement; organize meetings with key stakeholders; elaborate a stakeholder interest/power spider map; elaborate a theory of change; plan a pre-feasibility study, etc.

- Stakeholder consultation
- Conduct gap analysis
- Identify an accredited entity
- Work with the NDA and UNCDF to develop the concept note into full project proposal
- Use available data on climate risk assessment for sub-national adaptation

Guinea: Programme d'aménagement intégré des écosystèmes bas-fond/versants pour une résilience accrue aux changement climatiques

NAP write workshop template - UNEP
Project concept note

1. INFORMATIONS GÉNÉRALES

Titre du projet : Programme d'aménagement intégré des écosystèmes bas-fonds / versants pour une résilience accrue aux changements climatiques

Site et échelle du projet : Préfectures de Mali et Koubia Haute Guinée : Préfectures de Kouroussa et Dabola

Promoteur/Entité d'exécution : Ministère de l'Environnement et du Développement Durable

Entité accréditée : ANAFIC

Partenaires du projet : Ministère de l'environnement/DNE Ministère de l'agriculture/DNGR/IRAG Ministère de l'énergie et l'hydraulique/DNH Ministère de la décentralisation/DNDL Ministère de la pêche/DNP, Ministère des transport (Direction Nationale de la Météo

2. DESCRIPTIF DU PROJET

Contexte et base de référence : 2 paragraphes expliquant le contexte général du projet et le problème que l'on veut résoudre. Décrire le contexte de la communauté cible/ des bénéficiaires (moyens de subsistance, ethnicité, genre, géographie, écosystèmes, contexte politique etc). Décrivez le risque climatique que ce projet cherche à traiter.

Dressez la liste des scénarios climatiques disponibles/des données disponibles pour étayer la proposition de projet et définissez les informations manquantes à ce stade.

- En Guinée, les bas-fonds sont un des écosystèmes où des accroissements significatifs de la production agricole (végétale et aquacole) sont possibles.
- la tendance des populations locales à délaisser les cultures de bas-fonds en raison des difficultés à maîtriser les cycles de l'eau
- La baisse drastique du rendement des cultures,
- le stress hydrique à répétition
- la reconversion des cultivateurs vers d'autres activités plus menaçantes pour l'environnement

Considérée comme le château d'eau de l'Afrique de l'Ouest, le pays abrite la source de plusieurs fleuves de la sous-région et se trouve doté d'un réseau hydrographique très dense, avec 1165 cours d'eau prenant leurs sources dans les massifs montagneux du Fouta Djallon et du Daro. Les potentialités hydriques nationales sont estimées à 13 milliards de m3 d'eau souterraine et 226

km3/an d'eau renouvelable (FAO, 2005). La Guinée dispose de 23 bassins versants fluviaux dont 14 internationaux. Ces complexes ont bénéficié par le passé de certains types d'aménagements selon les régions et selon les vocations des projets. Sur le plan régional, la Guinée est membre notamment de la CEDEAO, de l'OMVG, de l'OMVS, et de l'Union Africaine.

La Guinée a connu lors des deux dernières décennies une baisse sensible des précipitations qui s'est traduite par une grande variabilité saisonnière du débit des rivières, des fleuves et une recrudescence des événements hydrométéorologiques extrêmes. La variabilité du débit des cours d'eau est aussi une conséquence de la dégradation des versants due à diverses causes dont entre autres les pratiques agro pastorales inadaptées accentuant les phénomènes d'érosions hydrique et éolienne et une modification du régime hydrologique des cours d'eau. Les déficits pluviométriques ont largement influencé les écoulements au point que les paramètres hydrologiques (notamment l'ampleur des crues) ne sont plus en phase avec la variation pluviométrique annuelle. De plus, les faibles réserves en eau souterraine contribuent à la baisse des apports des bassins versants. D'une manière générale, le débit des cours d'eau a eu tendance à diminuer au cours de la dernière décennie. Par ailleurs, les principaux cours d'eau du bassin du Niger subissent de nos jours des phénomènes liés d'une part à la perte du couvert végétal et de l'humidité du sol et d'autre part à l'accroissement de l'érosion et la destruction des forêts galeries. Les potentialités hydriques de la Guinée reposent sur une origine pluviale. Certains de ces cours d'eau au régime autrefois permanents tarissent de nos jours pendant la saison sèche.

La situation agricole actuelle

L'agriculture représente un secteur vital pour l'économie de la Guinée. En effet, elle contribue à hauteur de 24,9 % à la formation du PIB en 2004. Près de 70 % de la population vit en milieu rural et principalement de l'agriculture (Atlas de pauvreté 2008). Les agriculteurs représentent 61% de la population, mais constituent 80 % des pauvres. Bien que les ressources en terres agricoles du pays soient de 6,2 millions d'ha de superficies valorisables, seulement 1,37 millions d'ha sont actuellement mis en culture. Le potentiel de terres irrigables s'élève à 362 000 ha dont 30 200 ha seulement sont aménagés. Le système de culture dominant pratiqué sur les divers sols du pays est de type traditionnel. Il est basé sur le brûlis après défrichement et fait appel à une jachère naturelle plus ou moins longue selon les régions. Par manque de mécanisation, 64 % des exploitations ont moins de 2 ha et uniquement 4 % s'étendent sur plus de 7 ha. L'agriculture est dominée par les cultures vivrières : céréales et tubercules principalement. La proportion de femmes qui travaillent dans le secteur agricole est supérieure à celle des hommes, 78,2 % contre 49,3 %. (PNDA/2007).

La faible productivité du secteur agro-sylvo-pastoral est à l'origine de difficultés alimentaires récurrentes. La productivité du riz qui constitue la base de l'alimentation en Guinée ne suffit pas à couvrir les besoins réels du pays dont la population augmente au rythme de 3 % par an. C'est ainsi qu'au cours des cinq dernières années, le pays a procédé à des importations annuelles d'environ 330 000 tonnes de riz. On observe également un déficit en protéines animales dont la couverture est assurée à hauteur de 63 % par le poisson (FAO).

- **Les efforts d'aménagements hydro-agricoles en Guinée**

La superficie totale des bas-fonds et plaines est évaluée à 362 000 ha. L'évaluation des aménagements hydro-agricoles fait apparaître que les projets instruits pendant la période de la Lettre de Développement de Politique Agricole (1998 – 2005), ont permis l'aménagement de près de 17 000 ha, soit 8 500 ha de bas-fonds, 3 000 ha de plaines et 5 000 ha de mangrove. Les travaux d'aménagement de bas-fonds et de plaines ont porté sur toutes les régions naturelles. Les aménagements hydro- agricoles réalisés en Guinée sont restés très en-dessous du potentiel aménageable. De plus, les aménagements réalisés n'ont pas produit les impacts positifs attendus sur les communautés et n'ont pas duré dans le temps. Plusieurs insuffisances ont été relevées, notamment des lacunes en terme i) de conception et de réalisation des travaux d'aménagement, ii) de gestion, d'entretien et maintenance dans les périmètres aménagés ; iii) de ressources humaines et de structures capables d'assurer la gestion de ces infrastructures et iv) de connaissance sur la mise en valeur durable des bas-fonds et la gestion des associations d'usagers de l'eau.

- **L'état de dégradation des coteaux**

Le manque d'aménagement et la non maîtrise de l'eau dans les bas-fonds ont conduit les agriculteurs à exploiter massivement les versants. Une grande partie des activités agricoles a lieu actuellement sur les coteaux. Pour cela, le cultivateur prépare le terrain en menant des travaux de défrichement, d'abattage des arbres, de brûlage et de dessouchage. Cette préparation a pour conséquence l'exposition continue des terrains aux rayonnements solaires, le ravinement des sols par les eaux de ruissellement, l'envasement des lits des cours d'eau.

1.2 Description des zones d'intervention

- **En Moyenne Guinée**

La Moyenne Guinée dispose de 14 % du potentiel national en bas-fonds et de 18 % en plaines. Au Fouta Djallon, les activités agricoles se concentrent sur l'élevage dans les piémonts, et sur les productions végétales dans les bas-fonds. La contribution de la Moyenne Guinée à la production nationale est importante pour certains produits comme la pomme de terre, l'oignon, le maïs, le fonio et l'arboriculture fruitière. L'élevage constitue une activité importante dans la région et occupe plus de 70% de sa population rurale. Les sols sont en grande partie très dégradés (bowé et sols Ndantari en pular). Les principales cultures sont le fonio, le maïs, le manioc, puis l'arachides, le riz et l'horticultures. Le nord-ouest de cette zone (plaines de Gaoual-Koundara) présente les plus grands effectifs de bovins grâce aux pâturages humides de moyennes vallées. Le déséquilibre de plus en plus marqué entre la disponibilité en pâturage en saison sèche et l'effectif croissante du cheptel a provoqué une migration des activités pastorales vers la Guinée Maritime.

- **En Haute Guinée**

La Haute Guinée a une vocation essentiellement agricole. Sa contribution dans la production nationale de plusieurs espèces vivrières et de rente est très significative, (coton, mangue, orange, anacarde, igname, manioc, fonio, arachide, mais). Son cheptel bovin représente 34 % du cheptel national, celui des ovins 25 % et celui des caprins 17 %. La Haute Guinée dispose d'un important potentiel en eaux de surface et eaux souterraines. Les cultures principales comme le riz de

coteau, le manioc, les arachides, et récemment le coton, se font sous conditions pluviales. La culture du riz de plaine se fait grâce aux crues incontrôlées des rivières et des fleuves. Cette région a un très fort potentiel agricole avec des terres cultivables estimées à plus de 2,7 millions ha (100 000 ha de plaines alluviales), dont 400 000 ha seraient cultivés chaque année. L'apparition de tensions sociales lors de l'aménagement de périmètres hydro-agricoles fait partie des principaux problèmes fonciers rencontrés dans la région.

Problématique : Décrivez quel est le problème sous-jacent avec une perspective d'adaptation au changement climatique ? Quels sont les facteurs non climatiques et quels sont les facteurs de changement climatique ? Décrivez les raisons principales et les principaux obstacles (sociaux, sexospécifiques, fiscaux, réglementaires, technologiques, financiers, écologiques, institutionnels, etc.) qui doivent etre addressés

- La Guinée a connu lors des deux dernières décennies une baisse sensible des précipitations qui s'est traduite par une grande variabilité saisonnière du débit des rivières, des fleuves et une recrudescence des événements hydrométéorologiques extrêmes ;
- Les pratiques agro pastorales inadaptées accentuant les phénomènes d'érosions hydrique et une modification du régime hydrologique des cours d'eau.
- Les potentialités hydriques de la Guinée reposent sur une origine pluviale.

Les projections climatiques réalisées pour la Guinée laissent entendre que le phénomène va se poursuivre. D'après le PANA (2007), les cours d'eau subiront une réduction de débit dépassant les 50 % de la moyenne actuelle par endroits à l'horizon 2100. Ce phénomène de réduction sera commun à toutes les régions du pays et très marqué pour celles situées au Nord du 10è parallèle. De 2050 à 2100, le débit du Niger diminuera de 16 % à 28 % à la sensibilité 2,5°C et de 23 % à 54 % à la sensibilité 4.5°C.

Objectifs du projet : Indiquez brièvement le but général du projet, quel est le ou les objectifs d'adaptation à poursuivre pour atteindre ce but, et décrivez les activités qui seront utilisées pour soutenir les objectifs. Ces éléments devront être ajustés pour s'aligner sur la politique du Fonds auquel vous postulez.

Objectif global: Améliorer la résilience des agriculteurs et plus largement des communautés rurales au changement climatique en Haute et Moyenne Guinée.

Objectifs spécifiques :

OS1 - Améliorer la maîtrise de la gestion de l'eau à travers la construction d'infrastructures hydrauliques adaptées aux types de bas-fonds, aux besoins et aux capacités des bénéficiaires ;

OS2 – Améliorer durablement la productivité des bas-fonds par le développement de bonnes pratiques, la diversification des cultures et la valorisation des produits ;

OS3 – Préserver les bassins versants au travers de système agro-forestiers écologiquement, socialement et économiquement performants.

Parties prenantes : dressez la liste des parties prenantes qui auront un rôle à jouer dans le projet et qui sont susceptibles d'être affectées positivement et/ou négativement par le projet. Réalisez une carte pressentant les pouvoirs et les intérêts des parties prenantes.

Partie prenante	Type d'institution	Role / Responsabilité dans le projet	Susceptibles d'être impactés positivement ou négativement par le projet
Ministère de l'Environnement et de Développement Durable	Public	Agent de mise en oeuvre	impactés positivement
ANAFIC	Public	Agence d'exécution	
Guinée Ecologie	ONG	Identification, création et restauration de corridors écologiques, de têtes de sources et de berges de cours d'eau.	
Ministère de l'Agriculture (IRAG) et de l'Elevage	Public	Renforcement des capacités des producteurs par la formation sur les bonnes pratiques de production et Identification et vulgarisation de techniques pastorales liées à l'adaptation.	
Les Communautés locales		Bénéficiaires et acteurs	
Autorités Préfectorales	Public	Appui aux niveaux locales	
Geo-synaps Guinée	Privé	cartographie des sites	
Ministère du Budget	public	prise en compte au BND	
Direction Nationale du Développement local (MATD)	Public	Implication des communauté locales	
LEG, groupe de travail technique sur les PAN	Conseil / assistance technique	Mobiliser l'engagement des organisations pertinentes pour soutenir le développement et la mise en œuvre du projet. Fournir des contributions/commentaires dans la conception du projet - note conceptuelle, proposition complète et rapports d'examen.	

3. PROCHAINES ÉTAPES

Identifiez et décrivez brièvement les prochaines étapes que vous entreprendrez pour développer davantage cette note conceptuelle, notamment le calendrier. Il peut s'agir de: collecter des données et entreprendre une analyse pour combler les lacunes en matière information; identifier et organiser une ou plusieurs réunions avec l'entité accréditée proposée afin d'obtenir son engagement; organiser des réunions avec les principales parties prenantes ; élaborer une carte des intérêts/pouvoirs des parties prenantes ; élaborer une théorie du changement ; planifier une étude de préfaisabilité, etc.

- Recherche de Partenaire Technique et financier pour l'appui à la réalisation du projet
- Recherche de financement auprès du FCV
- Mettre le projet sous format Fonds Vert pour le Climat
- Faire la cartographie des sites
- Faire la consultation publique pour la mise œuvre du projet

A ce jour, rien n'a pour le moment été entamé concernant les questions ci-dessus. Nous attendions aussi le retour du LEG pour nous accompagner d'un point de vue orientation et conseil technique afin de pouvoir avancer.

Nous aurons besoin de d'appui de votre part pour nous aider à recadrer la note conceptuelle qui est presque prête dans le format du FVC en vue de sa soumission.

Pour le choix de l'Agence accréditée : comme indiqué dans nos échanges du 19 mai passé, l'ANAFIC est dans le processus de finaliser son accréditation. Pour nous permettre d'avancer, nous vous demandons de nous proposer un éventail d'autres agences pouvant nous servir auprès du FVC.

Haiti: Système d'alerte précoce d'inondations

NAP write workshop template - UNEP
Project concept note

1. INFORMATIONS GENERALES

Titre du projet : Système d'alerte précoce d'inondations

Site et échelle du projet : Niveau national

Promoteur/Entité d'exécution : Ministère de l'Environnement

Entité accréditée : PNUD

Partenaires du projet : Unité Hydro Météorologique (UHM), Direction Générale de la Protection Civile (DGPC)

2. DESCRIPTIF DU PROJET

Contexte et base de référence : 2 paragraphes expliquant le contexte général du projet et le problème que l'on veut résoudre. Décrire le contexte de la communauté cible/ des bénéficiaires (moyens de subsistance, ethnicité, genre, géographie, écosystèmes, contexte politique etc). Décrivez le risque climatique que ce projet cherche à traiter.

Dressez la liste des scénarios climatiques disponibles/des données disponibles pour étayer la proposition de projet et définissez les informations manquantes à ce stade.

Les pluies torrentielles ainsi que les marées de tempête accompagnant ces systèmes météorologiques extrêmes provoquent généralement des inondations, notamment dans les zones situées en aval des bassins hydrographiques dégradés du pays affectant les habitats humains et les moyens de subsistance (agriculture, pêche)

Avec la dégradation de l'environnement biophysique haïtien, des épisodes de pluie normaux provoquent des inondations de plus en plus fréquentes dans les grands centres urbains du pays, notamment Port-au-Prince, Cap-Haïtien, Cayes et Gonaïves. À L'intérieur de ces villes, la fréquence des inondations est encore plus prononcée dans les zones marginales, particulièrement les bidonvilles où les infrastructures de drainage sont tout simplement inexistantes.

Bénéficiaires : Pêcheurs, agriculteurs, populations vulnérables des zones urbaines.

Figure : Inondations enregistrées en Haïti de 1980 – 2020 (World Bank, 2019)

Problématique : Décrivez quel est le problème sous-jacent avec une perspective d'adaptation au changement climatique ? Quels sont les facteurs non climatiques et quels sont les facteurs de

changement climatique ? Décrivez les raisons principales et les principaux obstacles (sociaux, sexospécifiques, fiscaux, réglementaires, technologiques, financiers, écologiques, institutionnels, etc.) qui doivent etre addressés

Les 2/3 du territoire du pays sont des montagnes. Les mauvaises pratiques culturales entrainent une dégradation accélérée des bassins versants. Sur les 33 grands bassins versants du pays, plus de 25 se trouvent dans un état de dégradation alarmant (Swartley et Toussaint, 2006 ; MARNDR, 2016). De plus, en absence d'un plan d'aménagement du territoire combiné aux manques de ressources économiques, des gens construisent de manière anarchique dans les flancs des montagnes. Par conséquent, à chaque événement météorologique extrême (dépressions, tempêtes, cyclones et cyclones majeurs), on enregistre des inondations qui provoquent l'érosion des sols et affectent l'agriculture, les infrastructures et les habitats humains, notamment dans les zones situées en aval des bassins hydrographiques dégradés du pays.

Avec la dégradation de l'environnement biophysique haïtien, des épisodes de pluie normaux provoquent des inondations de plus en plus fréquentes dans les grands centres urbains du pays, notamment Port-au-Prince, Cap-Haïtien, Cayes et Gonaïves. À L'intérieur de ces villes, la fréquence des inondations est encore plus prononcée dans les zones marginales, particulièrement les bidonvilles où les infrastructures de drainage sont tout simplement inexistantes. La fréquence des épisodes d'inondation tend `être plus prononcée depuis l'année 2000.

Objectifs du projet : Indiquez brièvement le but général du projet, quel est le ou les objectifs d'adaptation à poursuivre pour atteindre ce but, et décrivez les activités qui seront utilisées pour soutenir les objectifs. Ces éléments devront être ajustés pour s'aligner sur la politique du Fonds auquel vous postulez.

But general:

Assurer efficacement la préparation, la réponse et le relèvement rapide post-désastre à travers le renforcement des capacités techniques, matérielles et financières des institutions nationales, départementales, communales et locales en charge de la gestion des désastres

Objectifs :

• Développer et utiliser des mécanismes financiers durables et innovants afin d'accroître la résilience des communautés et des institutions et réduire les facteurs de risques de catastrophe.
• Intégrer les indicateurs GRD dans le système de suivi des investissements publics
• Définir et mettre en place un système national inclusif d'assurance et de réassurance des risques de désastre
• Développer des d'outils pour la prise en compte de la GRD dans les processus de planification et d'aménagement urbains
• Restaurer les bassins versants dégradés

Parties prenantes : dressez la liste des parties prenantes qui auront un rôle à jouer dans le projet et qui sont susceptibles d'être affectées positivement et/ou négativement par le projet. Réalisez une carte pressentant les pouvoirs et les intérêts des parties prenantes.

Partie prenante	Type d'institution	Role / Responsabilité dans le projet	Susceptibles d'être impactés positivement ou négativement par le projet
Les agriculteurs	Bénéficiaires	Facilitation des mesures de gestion des risques	Négativement
Les pêcheurs	Bénéficiaires	Facilitation des mesures de gestion des risques	Positivement
Les populations vulnérables des villes	Bénéficiaires	Facilitation des mesures de gestion des risques	Négativement (à cause des éventuels déplacements des population)
Direction Générale de la Protection Civile	Public / National	Gestion du système de gestion des risques et désastres	Positivement
Ministère de l'Environnement	Public/National	Gestion des bassins versants (cadre règlementaire, restauration)	Positivement
UHM	Public /National	Collecte et partage d'information	Positivement
Les collectivités territoriales	Public/Infranational	Aménagement du territoire et définition de plan de contingence	Positivement
Les Banques et assurances	Privé	Mise en place de mécanismes de transfert de risques	Positivement

3. PROCHAINES ÉTAPES

Identifiez et décrivez brièvement les prochaines étapes que vous entreprendrez pour développer davantage cette note conceptuelle, notamment le calendrier. Il peut s'agir de: collecter des données et entreprendre une analyse pour combler les lacunes en matière information; identifier et organiser une ou plusieurs réunions avec l'entité accréditée proposée afin d'obtenir son engagement; organiser des réunions avec les principales parties prenantes ; élaborer une carte des intérêts/pouvoirs des parties prenantes ; élaborer une théorie du changement ; planifier une étude de préfaisabilité, etc.

- Création d'un groupe de travail composé des différents partenaires du projet
- Conduire une évaluation des pertes économiques liées à l'inondation dans les différents secteurs (agriculture, infrastructures)
- Conduire des consultations au niveau national pour impliquer les parties prenantes

Lao People's Democratic Republic: Building the resilience of agriculture sector in Norther of Lao P.D.R

National adaptation plan (NAP) writing workshops 2022–2023
Project idea workout
Version of 12 July 2022

1. PROBLEM STATEMENT AND ITS NATIONAL CONTEXT

What is the specific climate-related problem to be addressed? What are specific risks and vulnerabilities and what are main climate impact drivers? Be as specific as possible.

Most of Lao people rely on agriculture and more than 80% of Lao people are depending their livelihood on agriculture, especially crops and livestock. However, the flood has been negatively affecting agricultural production decreasing production and its loss.
Moreover, flooding can also damage agricultural infrastructure, loss of life and impacts on local livelihoods and food security.

2. CLIMATE CHANGE CONTEXT (TO THE EXTENT KNOWN)

Provide details on the following:

- Systems at risk and the climate change problem (i.e., the hazard) affecting them;
- How climate change has led to the specific impacts for which the proposed adaptation action is considered necessary, or how future projections of climate change will lead to those impacts;
- Linkage between climate change problem to risk – to a particular system, or section of the population – by examining the vulnerability of that system or group to the specific climate hazard;
- If a plausible future scenario (under climate change and related social economic drivers) exists, include information about how the risks and vulnerabilities are likely to change in the medium and long-term.

In the start of rainy season, farmers also have growing concerns against the shift in precipitation. Past, current and future rainfall increase in Laos has been resulting in heavy flood in most of the country. It impacted to the agriculture production and widespread damage of agriculture infrastructure.
Along with flood, there are also landslide and soil erosion which also consequently affected to the agricultural activities

3. ADAPTATION GOAL (S) OF THE PROJECT

State a goal for adaptation given the problem described above for the project. A goal would be a medium- to long-term outcome that is desired for the issue captured in the problem statement.

Reducing the impacts of flood on agricultural sector by enhancing adaptation planning and vulnerability assessment and increasing the capacity to communities as well as restoring riverbanks.

4. OBJECTIVES AND ACTIVITIES TO MEET THE GOAL (S)

What are project objectives to be pursued to contribute to achieving the goal, and describe the activities to be carried out to achieve each objective. This will have to be refined later and aligned with the project approach of the delivery partner and the Fund policy you would apply to.

Objective:

- *Increasing flood resilience in the most flood risks areas by construction drainage system, river bank construction, reforestation.*
- *Study the possible impact of climate change-related flooding impact in affected areas.*
- *Ecosystem service assessment to reduce the risk of flooding exposure.*
- *Identify the EbA approach to reduce impact of flood on agriculture in order to increase food security.*

Activity:

- *Conduct the vulnerability analysis in the areas/villages that have high and low vulnerability.*
- *Identified the current ecosystem service in the affected areas.*
- *Build capacity to relevant stakeholders on the climate change adaptation.*
- *Identify the adaptation measures and plans, for instance planting trees along the flood areas to increase infiltration of rainwater*

5. PROJECT DETAILS

Project title:

Building the resilience of agriculture sector in Norther of Lao P.D.R

Project site and scale (national/ sub-regional/ district level):

Oudomxay province, Lao P.D.R

Potential Proponent/Executing Entity (name of organization):

Department of climate change

Potential Accredited entity:

UN-Habitat and FAO

Project partners (other additional partner organizations to be engaged in implementation):

6. MAIN ACTORS (IN THE COUNTRY/PROJECT AREA)

List the main actors that will have a role to play in the project development and implementation.

Actor (institution, agency, etc.)	Type of institution	Role or Responsibility in the project
Ministry of Natural Resources and Environment	Department of Climate Change	Project Management
Ministry of Agriculture and Forestry	National Agriculture and Forestry Research Institute	Coordination, Responsible for crops and preform support activity
Provincial office of Natural Resources and Environment	UNDP and/or FAO	Help developing concept note Support the implementation

7. NEXT STEPS

Identify and briefly describe next steps that you will undertake to further develop this into a concept note, including processing through the GCF NDA (or relevant national focal point for the LDCF or AF if that is the target), identification of an accredited delivery partner, including timelines. These can also include: synthesize available information to provide broader context for the project description; identify and organize meeting(s) with proposed accredited entity to secure their engagement; organize meetings with key stakeholders; , etc.

- Consult with NDA about the potential financial support that NDA can get support from GCF, GEF, AF, etc.
- Pre-feasibility study on the proposed ideas
- Identify and consult with the implementing partners (UN or/and FAO) to develop the Concept Note
- Report and consult with the NDA about the progress and the next step to propose funding support
- Stakeholders' engagement to prepare the proposal.

8. TECHNICAL ASSISTANCE NEEDS

Briefly describe what technical support will be needed immediately to advance the work and possible ways to mobilize the support. Also include specific support that the LEG and GCF (if idea is targeting the LDCF or AF, then include reference to them) can provide.

- WMO (can support data and information)
- UNDRR (with the support of disaster data and approach for risk reduction)
- GCF (through NDA)
- WB, ADB

• LEG (can provide assistance to discuss and deal with GCF (or others) in terms of preparing and performing the project. Also, capacity building, VA, and Technical support can be provided. Anyway, the best way for Laos to have LEG's support is to contact to LEG directly).

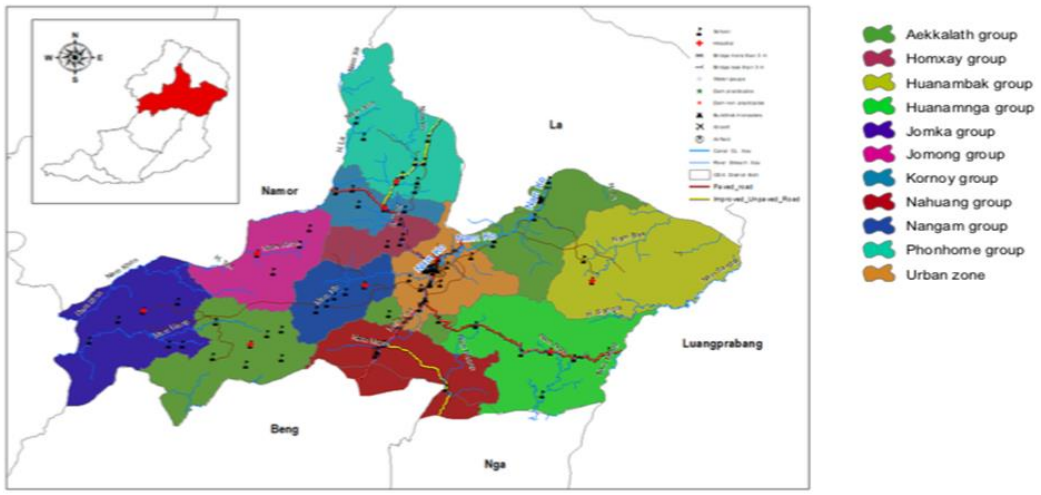
Lao People's Democratic Republic: Improving urban communities livelihood and urban green environment

National adaptation plan (NAP) writing workshops 2022–2023
Project idea workout
Version of 12 July 2022

1. PROBLEM STATEMENT AND ITS NATIONAL CONTEXT

What is the specific climate-related problem to be addressed? What are specific risks and vulnerabilities and what are main climate impact drivers? Be as specific as possible.

Increasing of rainfall patterns and climate variability resulting in heavy urban flooding caused by unproper planning and un-resilient infrastructures, resulting unsustainability of urban community livelihood in Oudomxay province, Lao PDR



a) Flood

(b) Erosion of river bank

2. CLIMATE CHANGE CONTEXT (TO THE EXTENT KNOWN)

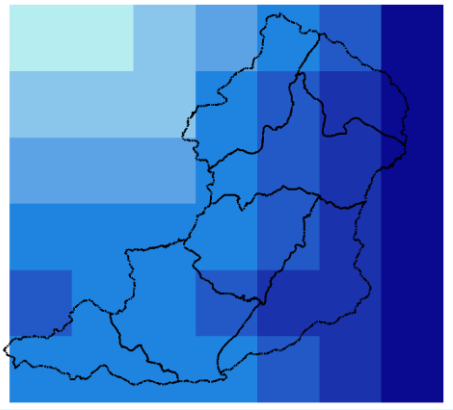
Provide details on the following:

- Systems at risk and the climate change problem (i.e., the hazard) affecting them;
- How climate change has led to the specific impacts for which the proposed adaptation action is considered necessary, or how future projections of climate change will lead to those impacts;
- Linkage between climate change problem to risk – to a particular system, or section of the population – by examining the vulnerability of that system or group to the specific climate hazard;
- If a plausible future scenario (under climate change and related social economic drivers) exists, include information about how the risks and vulnerabilities are likely to change in the medium and long-term.

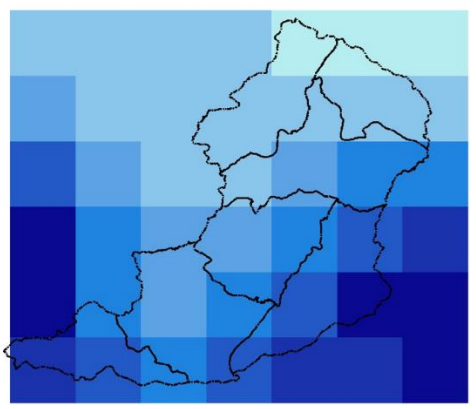
In the last decades, in rainy season, increasing of annual rainfall in Xay district has been impacted by a number of large flood.

Events, most recently in 2017, which have caused widespread damage to infrastructure, loss of life and impacted on local livelihoods. Xay district usually affected by flash floods, because it situated in mountainous area and that Nam Ko River and its tributaries, including the Nam Mao, Nam Hin and Nam Sin Rivers, also pass through the district.

Sudden heavy downpours usually bring flash floods, that caused river bank erosion. These also cause pluvial floods due to the inability to drain storm water of the drainage system, which paralyzed the commute and transportation.



Scenario RCP4.5



Scenario RCP8.5

3. ADAPTATION GOAL (S) OF THE PROJECT

State a goal for adaptation given the problem described above for the project. A goal would be a medium- to long-term outcome that is desired for the issue captured in the problem statement.

Improving urban communities livelihood and Urban green environment by enhancing regulatory frameworks, including policies, plans and programmes, and physical infrastructure for resilient building

4. OBJECTIVES AND ACTIVITIES TO MEET THE GOAL (S)

What are project objectives to be pursued to contribute to achieving the goal, and describe the activities to be carried out to achieve each objective. This will have to be refined later and aligned with the project approach of the delivery partner and the Fund policy you would apply to.

Objectives:

2. Build livelihoods resilience for the urban community in the flood prone area.
3. Provide on the job training for city planners and sector experts to enhance capacity in green city development and planning.
4. Put in place proper human skill to modify policy and plan on the city management in dealing with climate change impact.

Activities

1. Establishing and revising policies, plans and programmes of the city development framework with regard to greener city;
2. Improving urban drainage systems to ensure resilience towards flooding and increasing urban communies livelihood;
3. Create an enabling environment so that city planners are able to develop and implement a green city plan for Xay district, Oudomxay province
4. Develop a concept for a resilient and green city for Xay district, Oudomxay province
5. Implementation of the Oudomxay green city development plan

5. PROJECT DETAILS

Project title:

Improving urban communities livelihood and Urban green environment

Project site and scale (national/ sub-regional/ district level):

Provincial level

Potential Proponent/Executing Entity (name of organization):

Department of Climate Change, MONRE

Potential Accredited entity:

UN-Habitat and UNDP

Project partners (other additional partner organizations to be engaged in implementation):

Provincial authority and relevant ministries

6. MAIN ACTORS (IN THE COUNTRY/PROJECT AREA)

List the main actors that will have a role to play in the project development and implementation.

Actor (institution, agency, etc.)	Type of institution	Role or Responsibility in the project
Ministry of Natural Resources and Environment	Department of Climate Change	Project Management
Ministry of Planning and Investment	Department of Planning	Project committee
Ministry of Public works and Transport	Department of housing and urban planning Institute of PWT	Coordination, Responsible for activities on the ground/areas
UN-Habitat UNDP		Help developing concept note Support the implementation
Provincial authority/sectors	Provincial of Natural Resources and Environment Xay district administrative office	To implement as partners

7. NEXT STEPS

Identify and briefly describe next steps that you will undertake to further develop this into a concept note, including processing through the GCF NDA (or relevant national focal point for the LDCF or AF if that is the target), identification of an accredited delivery partner, including timelines. These can also include: synthesize available information to provide broader context for the project description; identify and organize meeting(s) with proposed accredited entity to secure their engagement; organize meetings with key stakeholders; , etc.

- Consult with NDA about the potential financial support that NDA and Developing partners that can get support from funding sources
- Pre-feasibility study on the proposed ideas
- Stakeholders' consultation to prepare the proposal
- Identify and consult with the implementing partners to develop the Concept Note
- Report and consult with the NDA, MPI and relevant ministries about the progress and the next step to propose funding support

8. TECHNICAL ASSISTANCE NEEDS

Briefly describe what technical support will be needed immediately to advance the work and possible ways to mobilize the support. Also include specific support that the LEG and GCF (if idea is targeting the LDCF or AF, then include reference to them) can provide.

- UNDP (can support the project implementation)
- GCF (through NDA) or other funding sources
- LEG (can provide assistance in terms of preparing and performing the project. Also, capacity building, VA, and Technical support can be provided).
- WMO(support the data and other organisation, UNDRR, etc…)

Lesotho: Improving infrastructure to enhance flash floods resilience

NAP writing workshop template – UNEP
Project concept note

1. GENERAL INFORMATION

Project title: Improving Infrastructure to enhance Flash Floods Resilience

Project site and scale: District level (Leribe and Maseru)

Proponent/Executing Entity: Ministry of Public Works

Accredited entity: Not yet decided

Project partners: Ministry of Local Government and Chieftainship, Maseru City council, Ministry of Energy and Meteorology, Disaster Management Authority, Ministry of Water, Ministry of Science and Technology, Land Administration Authority

9. PROJECT DESCRIPTION

Context and Baseline: 2 paragraphs explaining the broad context of the project and the problem intended to be solved. Describe the context of the target community/ beneficiaries (livelihood, ethnicity, gender, geography, ecosystems, political context etc). Describe the climate risk that this project seeks to address.

List the available climate scenarios/ data available to back up the project proposal and define what information is missing at this stage.

Flash flooding has increased over the last decade linked to changing rainfall patterns and increasing intensity of individual rain events. This is intensified by the country's terrain and unmanaged blocked drainage infrastructure. This results in damaged infrastructure (bridges and access roads), Crops, soil erosion, loss of lives of people and animals.

Between December 2010 and February 2011, Lesotho experienced river floods, run-off from hill slopes, and rockslides due to severe and prolonged rainfall. Additionally, strong winds and localized hail storms caused severe damages. The heavy rain significantly impacted the agricultural sector. The Lesotho Vulnerability Assessment Committee estimated that some 250,000 people (around 13.6 % of the total population) were affected by the events. Among those affected, over 3360 people were displaced. In March 2018, Lesotho experienced heavy rains, hailstorms and flash floods which severely affected many areas of Quthing, Mafeteng, Mohale's Hoek and Thaba-Tseka districts. At least 1,418 people (314 households) impacted, including 12 people killed and many children injured A total damage of LSL 4.07 million (around US$ 346,000) estimated to livelihoods and public infrastructures.

Heavy rain was experienced from the 26th to 27th January 2021, and this led to hazardous weather where most stations recorded daily rainfall exceeding 50mm. The two days cumulative heavy rainfall resulted in an intense flash flooding thus leading to negative impacts which were witnessed on personal and business property destruction. In other places, machinery was washed away. Some houses belonging to the communities were also washed including personal property such as furniture and clothes in those houses and Crops destroyed by river overflow. Flash floods, including personal property such as furniture and clothes in those houses. Roads were also damaged by the heavy rains

Future projection (2011-2040) under RCP4.5 projects 5% increase in annual precipitation, 10% increase in both annual run-off and annual water discharge. This poses exacerbated flooding risks thus need to build resilient potential flash flooding by improving infrastructure (drainage system, flood pas), rehabilitation of rangelands and improvement of land cover to cab intense runoff, develop and implement building codes for flooding resistant infrastructure

The targeted groups which are most vulnerable to the risks are: residential areas located on the flood prone areas and downstream, farmers, students, water companies, roads directorate, and transport companies, local government, women, elderly.

Problem statement: What is the underlying problem from a climate change adaptation perspective? What are the non-climate drivers and what are the climate change drivers?

Describe the main root causes and barriers (social, gender, fiscal, regulatory, technological, financial, ecological, institutional, etc.) that need to be addressed.

Climate change drivers:
• Heavy rainfall
• Hailstorms

Non-climatic drivers:
• Poorly structured drainage systems
• Climate change not integrated in the existing building codes
• Poor waste and land management

Objectives of the project: Briefly state the overall project goal, what is the adaptation objective(s) to be pursued to achieve that goal, and describe the activities to be used to support the objectives. This will have to be adjusted to be aligned with the Fund policy you are applying to.

Project goal:

Improving economic infrastructure to enhance Flash Floods Resilience on flood prone areas across the country

Adaptation Objectives:

- Improved flood resilient drainage system
- Building codes enhancing climate change

- Sustainable waste and land management
- Capacity building on flood resilience

Activities to be used to support the objectives:

- Redesign and rehabilitate drainage system network
- Revise and integrate climate change into functional building codes
- Rehabilitation of rangelands to improve land cover
- Stakeholder training on flood management

Stakeholders: list the stakeholders that will have a role to play in the project and are likely to be positively and negatively impacted by the project. Draft a power/interest map.

Stakeholder	Type of institution	Role / Responsibility in the project	Likely to be positively or negatively impacted by the project
Ministry of Local Government and Chieftainship	Government	Coordination, beneficiaries, enforcement	Positive • Protected infrastructure and safe lives
Maseru City council	Government	Coordination, enforcement	Positive • Clean waste free environment • Improved climate smart building codes
Ministry of Energy and Meteorology	Government	Coordination, beneficiaries, information sharing	Positive
Disaster Management Authority	Government	Coordination and implementation of disaster-risk reduction and responses	Positive • Less expenditure on response activities
Ministry of Water	Government	Information sharing	positive
Ministry of Science and Technology	Government	beneficiaries	Positive • Protected infrastructure
Land Administration Authority	Parastatal	Enforcement	Positive • Improved climate proof building codes
MFRSC	Government	Implementers, coordination	Positive • Rehabilitated rangelands • Less land degradation
Ministry Of Education	Government	beneficiaries	Positive • Undisrupted access to education facilities
Ministry of Transport	Government	beneficiaries	Positive • Protected Infrastructure
Private Sector	Private sector	beneficiaries	Positive

			• Sustainable supply chain
Ministry of Public Works	Government	Implementers, enforcement, coordination	Positive • Improved climate smart building codes • Sustainable climate proof Infrastructure

10. NEXT STEPS

Identify and briefly describe next steps that you will undertake to further develop this concept note, including timelines. These can include: collect data and undertake analysis to fill information gaps; identify and organize meeting(s) with proposed accredited entities to secure their engagement; organize meetings with key stakeholders; elaborate a stakeholder interest/power spider map; elaborate a theory of change; plan a pre-feasibility study, etc.

• Engage key stakeholders in consultation on the project activities and their roles and responsibilities
• Collect high resolution Baseline, Technical, Vulnerability, Projections, and others social economic data relevant for the project analysis and reporting
• Identify suitable Accredited Entity and engage NDA

Liberia: Develop an integrated Coastal Zone Management policy and plan for Liberia to Adapt to the Impacts of Climate Change

NAP writing workshop template – UNEP
Project concept note

1. GENERAL INFORMATION

Project title: Develop an Integrated Coastal Zone Management policy and plan for Liberia to Adapt to the Impacts of Climate Change.

Project site and scale: National, Sinoe County, Greenville City and the Famous Hotel Africa in the Western part of Monrovia-Virginia

Proponent/Executing Entity: Environmental Protection Agency

Accredited entity: UNDP

Project partners: World Bank and African Development Bank.

2. PROJECT DESCRIPTION

Context and Baseline: 2 paragraphs explaining the broad context of the project and the problem intended to be solved. Describe the context of the target community/ beneficiaries (livelihood, ethnicity, gender, geography, ecosystems, political context etc). Describe the climate risk that this project seeks to address.

List the available climate scenarios/ data available to back up the project proposal and define what information is missing at this stage.

Climate change is causing coastal erosion and flooding, and marine/saline intrusion in key coastal areas in Liberia. This project will address this problem through the development of an Integrated Coastal Zone Management (ICZM) policy framework/ plan for Liberia's coastal zone.
Liberia has one of the longest coastline in West African. However, the coastal area of Liberia is faced with the following climate change impacts: coastal erosion, coastal flooding and marine/ saline intrusion into fresh drinking waters. And these impacts have become a national concern as they are disrupting livelihood activities and destroying properties, coastal ecosystems, socio-economic activities in majority of Liberia´s coastal areas. To therefore address these climate change impacts, the ICZM was prioritized as a cross-cutting (adaptation & mitigation) technology to be adopted, transferred and diffused nationally. In so doing, the lack of legal and regulatory policy framework/ plan was one of the main barriers for its implementation.

Problem statement: What is the underlying problem from a climate change adaptation perspective? What are the non-climate drivers and what are the climate change drivers?

Describe the main root causes and barriers (social, gender, fiscal, regulatory, technological, financial, ecological, institutional, etc.) that need to be addressed.

Liberia has about 580-km long coastline. However, due to climate change, around 95 km^2 of land along the coast of Liberia would be inundated if sea level rises 1 m (DAI, 2008), and the country has no integrated coastal zone management plan. Under a scenario of a 1-m rise in sea level, about 50% (48 km^2) of the total land will be lost due to inundation. This will result into loss of land, including parts of the capital city of Monrovia, West Point, New Kru-Town, River Cess, Buchanan, Greenville, and RobertSport. About $250 million worth of land and Infrastructure will also be lost.

Objectives of the project: Briefly state the overall project goal, what is the adaptation objective(s) to be pursued to achieve that goal, and describe the activities to be used to support the objectives. This will have to be adjusted to be aligned with the Fund policy you are applying to.

This project aims to develop and implement an Integrated Coastal Zone Management (ICZM) policy and plan for the sustainable management of Liberia's coastal zones.
Specifically, it will:

1. Formulate, together with key stakeholders and vulnerable groups, an ICZM policy and plan
2. Install Flood early Warning System (FWS) within the Bushrod Island area, near Monrovia
3. Construct Rocks' Revetment along the coast of Mississippi Street in Sinoe County to protect the highly vulnerable lives and properties therein from the impacts of Climate Change coastal erosion and flooding

Stakeholders: list the stakeholders that will have a role to play in the project and are likely to be positively and negatively impacted by the project. Draft a power/interest map.

Stakeholder	Type of institution	Role / Responsibility in the project	Likely to be positively or negatively impacted by the project
Ministry of Mines & Energy (MME)	Government	MME in collaboration with the EPA will implement the project jointly.	Positively impacted
National Fisheries and Aquaculture Authority	Government	Work with fishing communities along the coastline to ensure smooth coordination of the project.	Positively impacted
Maritime Authority	Government	Responsible to identify shipping routes	Positively impacted
Ministry of Internal Affairs	Government	Work with the local government structure to ensure smooth stakeholder engagement process.	Positively impacted
Forestry Development Authority	Government	Will ensure the protection of	Positively impacted

		mangroves along the coast	
Ministry of National Defense	Government	Responsible security and protection of the marine environment	Positively impacted
National Port Authority	Government	Responsible for port management	Positively impacted
Conservation International	INGO	Work with government to establish a marine protected areas.	
Liberia Land Authority	Government	Ensure security of land tenure.	Likely to be positively impacted.
Ministry of Finance Development Planning	Government	Work with the Ministry of Agriculture to leverage GoL in-kind or direct support through budget preparation.	Likely to be positively Impacted

3. NEXT STEPS

Identify and briefly describe next steps that you will undertake to further develop this concept note, including timelines. These can include: collect data and undertake analysis to fill information gaps; identify and organize meeting(s) with proposed accredited entities to secure their engagement; organize meetings with key stakeholders; elaborate a stakeholder interest/power spider map; elaborate a theory of change; plan a pre-feasibility study, etc.

The EPA of Liberia will engage FAO and other partners such as, UNDP and GIZ to develop a full GCF proposals based on this concept note. Additionally consult with national stakeholders and carryout community engagement for a general consensus.

Liberia: Building Liberian Rural Farmers Resilient and Food production Capability through the Introduction of Climate Smart Technology

NAP writing workshop template - UNEP
Project concept note

1. GENERAL INFORMATION

Project title:

Building Liberian Rural Farmers Resilient and Food production Capability through the Introduction of Climate Smart Technology

Project site and scale: national/ sub-regional/ district level-

National and will include the 15 counties.

Proponent/Executing Entity: name of organization.

Environmental Protection Agency

Accredited entity: name of the organization that will execute the project with the Executing Entity

FAO

Project partners: other additional partner organizations engaged in implementation.

UNDP, GIZ

2. PROJECT DESCRIPTION

Context and Baseline: 2 paragraphs explaining the broad context of the project and the problem intended to be solved. Describe the context of the target community/ beneficiaries (livelihood, ethnicity, gender, geography, ecosystems, political context etc). Describe the climate risk that this project seeks to address.

List the available climate scenarios/ data available to back up the project proposal and define what information is missing at this stage.

- Current farming practices are affected by unpredictable weather patterns and lack of innovative and climate-smart agricultural approaches.
- In addition, climate projection says there will be an increase in annual mean precipitation by 8% and an annual mean temperature increase by 1^{o}C based on RCP 8.5 model from 2011 – 2040.

- Agricultural productivity remains low due this unforeseen rainfall patterns especially since traditional and domestic production of Liberia's main staple foods (Rice, Cassava, plantain, Potatoes, eddoes) still depend on low input/low output, shifting cultivation and mixed crop system.
- Although agricultural production has increased in recent years, yields are still well below the regional average and the post-harvest loss rate very high.
- This project targets 15,000 rural farmers from the 15 counties of Liberia to increased income levels and other beneficiaries along the value chain.
- The project will encourage 50% participation of both male and female farmers and others along the value chain

Problem statement: What is the underlying problem from a climate change adaptation perspective? What are the non-climate drivers and what are the climate change drivers?

Describe the main root causes and barriers (social, gender, fiscal, regulatory, technological, financial, ecological, institutional, etc.) that need to be addressed.

- Current traditional agricultural practices are no longer sustainable given the changing and unpredictable weather patterns, coupled with lack of adequate policy and high capital cost for installation, operation, and maintenance of the climate-smart technology. These are all making communities, especially women, disadvantaged youth and elderly in the 15 counties more vulnerable to climate variability and change.
- unemployment especially in rural communities.
- Insufficient data sharing and collaboration among relevant institutions.

Objectives of the project: Briefly state the overall project goal, what is the adaptation objective(s) to be pursued to achieve that goal, and describe the activities to be used to support the objectives. This will have to be adjusted to be aligned with the Fund policy you are applying to.

1. The overall objective of this project is to increase agriculture production and improve farming household's income level.
Specifically, this project will

- Introduce and establish climate-smart agricultural technologies, including the following:
    - 3 major facilities for the value addition of agricultural products (rice, cassava, vegetables, and fruits)
    - 3 Improved Storage technology for drying and freezing for seeds, grains, and vegetables in 3 agro-ecological zones of Liberia
    - At least 3 Integrated Soil Fertility Management facilities in 3 agro-ecological zones of Liberia
- Develop policy guidelines to enable the use of climate-smart agricultural technology

Empower vulnerable communities through the creation of new employment opportunities

Stakeholders: list the stakeholders that will have a role to play in the project and are likely to be positively and negatively impacted by the project. Draft a power/interest map.

Stakeholder	Type of institution	Role / Responsibility in the project	Likely to be positively or negatively impacted by the project
Ministry of Agriculture (MOA)	Government	Will play leading role along with the Environmental Protection Agency (EPA) to implement the project.	Likely to be positively impacted by the project since the project is in relation to their mandate.
Ministry of Commerce (MOC)	Government	Enforce product quality checks and conduct training for the technology users.	Likely to be positively impacted by the project
Conservation International (CI)	INGO	Help to create education and awareness for these technologies and fund raising.	Likely to be positively impacted by the project
Ministry of Gender, Children and Social Protection (MGCSP)	Government	Ensure gender is mainstream in the project implementation.	Likely to be positively impacted by the project
Ministry of Internal Affairs (MIA)	Government	Work with the local government structure to ensure the smooth transfer of these technologies in rural communities.	Likely to be positively impacted by the project
Department of Meteorological	Government	Responsible for data collection and sharing	Likely to be positively impacted.
Liberia Land Authority	Government	Ensure security of land tenure.	Likely to be positively impacted.
Ministry of Finance Development Planning	Government	Work with the Ministry of Agriculture to leverage GoL in-kind or direct support through budget preparation.	Likely to be positively Impacted
University of Liberia	Government	Document the knowledge and experiences from the use of this technology and conduct research surround the technology use.	Likely to be positively Impacted.

3. NEXT STEPS

Identify and briefly describe next steps that you will undertake to further develop this concept note, including timelines. These can include: collect data and undertake analysis to fill information gaps;

identify and organize meeting(s) with proposed accredited entity to secure their engagement; organize meetings with key stakeholders; elaborate a stakeholder interest/power spider map; elaborate a theory of change; plan a pre-feasibility study, etc.

The EPA of Liberia will engage FAO and other partners such as, UNDP and GIZ to develop a full GCF proposals based on this concept note. Additionally consult with national stakeholders and carryout community engagement for a general consensus.

Madagascar: Promouvoir des systèmes agricoles résilients par la mise à l'échelle du Modèle Intégré de Riziculture Résiliente

Ateliers de rédaction de plans d'adaptation nationaux (PAN) 2022-2023
Version du 12 juillet 2022

1. GENERAL INFORMATION

Quel est le problème spécifique lié au climat à traiter ? Quels sont les risques et vulnérabilités spécifiques et quels sont les principaux facteurs d'impact climatique ? Soyez aussi précis que possible.

Madagascar connaît des situations climatiques variables dues à l'insuffisance ou l'irrégularité des pluies (insufficient or irregular rainfall), et est fréquemment soumis à des événements climatiques extrêmes (extreme weather events : cyclones, drought, floods,…) (cyclones, sécheresses, inondations, etc.) provoquant des dommages importants. Entre 1961 et 2017, les cyclones ont provoqué le décès de 1 193 personnes, détruit 0,6 million de maisons et touché directement et indirectement 4 millions de personnes. Autre catastrophe climatique, les inondations ont touché plus de 300 000 personnes au cours de cette période.

L'analyse des tendances historiques et de l'évolution des paramètres climatiques montre une élévation significative des températures sur l'ensemble du territoire sur la période 1961-2017 (The analysis of historical trends and the evolution of climatic parameters shows a significant rise in temperatures throughout the territory over the period 1961-2017). Les températures minimales et maximales ont augmenté respectivement de 0,04 et 0,05°C/ an (DGM, 2019).[1] En parallèle, les indicateurs de température montrent une évolution à la hausse des événements extrêmes. Par ailleurs, une diminution des précipitations hivernales et printanières a été détectée dans la plupart des régions. Enfin, le niveau de la mer s'élève progressivement, à une vitesse de 1,57 mm/an entre 1993 et 2017, et la température de la mer dans l'océan Indien occidental a augmenté de 0,60° C entre 1950 et 2009.

Secteur	Augmentation de la température Increase in temperature leads to	Diminution des précipitations Decrease in precipitation causes	Cyclones tropicaux plus intenses More intense tropical cyclones contributes to	Elévation du niveau de la mer Sea level rise accentuates

Agriculture	*Risque direct de l'augmentation des températures sur le rendement des cultures actuelles. *Risque accru lors de hausses nocturnes de la température. *Risque d'élévation du taux d'évapotranspiration, réduisant l'humidité du sol et augmentant sa dégradation. *Direct risk of increased temperatures on the yield of current crops. *Increased risk of nighttime temperature *Risk of increased evapotranspiration rate, reducing soil moisture and increasing soil degradation.	*Risque d'un besoin accru d'irrigation surtout pour la riziculture *Risque de diminution du rendement agricole *Risk of an increased need for irrigation, especially for rice production *Risk of a decrease in agricultural yields	*Risque de dommages causés aux cultures (en particulier les plantations sensibles à de tels évènements comme la banane) et aux chaînes d'approvisionnement. Risk of damage to crops (especially plantations sensitive to such events such as bananas) and supply chains.	*Risque d'intrusion marine et de salinisation de l'eau dans les zones agricoles côtières de basses altitudes avec des impacts négatifs sur les rendements agricoles. *Risk of marine intrusion and water salinization in low-lying coastal agricultural areas with negative impacts on agricultural yields.

2. CONTEXTE DU CHANGEMENT CLIMATIQUE (DANS LA MESURE OU IL EST CONNU)

Fournir des détails sur les points suivants :

Les systèmes à risque et le problème de changement climatique (c'est-à-dire le danger) qui les affecte; Comment le changement climatique a conduit aux impacts spécifiques pour lesquels la mesure d'adaptation proposée est considérée comme nécessaire, ou comment les projections futures du changement climatique conduiront à ces impacts ; Lien entre le problème du changement climatique et le risque - pour un système particulier, ou une partie de la population - en examinant la vulnérabilité de ce système ou de ce groupe au danger climatique spécifique ;

Si un scénario futur plausible (sous l'effet du changement climatique et des facteurs socio-économiques connexes) existe, inclure des informations sur la manière dont les risques et les vulnérabilités sont susceptibles d'évoluer à moyen et long terme.

Principale culture vivrière renommée à Madagascar, le riz occupe une place importante dans le secteur agricole. La filière riz constitue la première activité économique en milieu rural en termes de volume. La riziculture est en effet pratiquée par environ 68,6% de ménages des exploitants agricoles (source : INSTAT-RGPH3, 2018).

Le riz représente l'aliment de base pour la grande majorité de la population Malagasy. La consommation moyenne est évaluée à 138 kg/hab/an en milieu rural est 118 kg/hab/an en milieu urbain. (Source : Diagnostic et perspectives de développement de la filière riz à Madagascar – UPDR/FAO 1999-2000).

Du fait que la production actuelle ne couvre pas encore entièrement les besoins de la population locale, besoins accrus par une forte autoconsommation, le pays a été amené à importer du riz (environ 180.000 tonnes en 2008) (source : Service des Douanes).

Cependant, du fait de ses fortes potentialités avec une quinzaine de grands bassins de production, Madagascar devrait, non seulement pouvoir satisfaire la demande intérieure, mais aussi parvenir à constituer le « Grenier à riz de l'Océan Indien » voire exporter dans la région de l'Afrique Subsaharienne.

Selon les statistiques émanant de l'Observatoire du riz, la superficie rizicole de la grande île était estimée à 1 620 615ha en 2008, pour une production totale de 4 914 450 tonnes (soit 3,03 tonnes/ha de rendement moyen). Sept régions agroécologiques parmi les vingt ont un rendement supérieur à la médiane nationale de 2 tonnes à l'hectare dont la région Alaotra Mangoro et celle de Basse Betsiboka où se trouve le périmètre irrigué de Marovoay.

Le secteur agricole représente 80% de la population active, et fait face à de multiples enjeux, accrus sous perspective de changement climatique. Les régions Est, Centre, Nord-est et Nord-ouest devraient subir des cyclones plus intenses et plus fréquents au cours de la saison humide et seront soumises à des inondations plus fréquentes. D'autre part au cours de la saison sèche, ces mêmes régions seront susceptibles de rencontrer des périodes de déficits hydriques accrus. L'accentuation de tels événements extrêmes pourrait fortement impacter l'agriculture, et notamment la riziculture, principale source d'activité dans ces régions. Aussi, les sécheresses affectant les régions Sud de Madagascar devraient s'accentuer, perturbant alors les rendements, les niveaux de production, les pratiques agricoles et d'élevage et la résilience du secteur.

Un projet d'adaptation « Promouvoir la résilience climatique de la riziculture à travers des investissements pilotes dans la Région Alaotra-Mangoro » a été lancé depuis 2012 dans la région Alaotra Mangoro. Appuyé financièrement par le Fond d'Adaptation au Changement Climatique et géré par le Programme des Nations Unies pour l'Environnement (PNUE) pour sa mise en œuvre au niveau de la région Alaotra Mangoro, ce projet répond aux impacts du changement climatique en termes de précipitations, de la variabilité du début des pluies, du retard de la saison des pluies, et également la perturbation de la quantité des pluies durant la saison de production du riz.

Le projet initial est un projet pilote qui nécessite une extension au niveau de la région Alaotra Mangoro elle-même mais également une duplication dans les zones de grenier à riz de

Madagascar comme les grands périmètres irrigués (GPI), d'une superficie supérieure à 3000 hectares dont les principales infrastructures ont été créées par l'Etat, représentant actuellement 78 000 hectares équipés répartis entre la Basse Betsiboka (Marovoay), le Bas Mangoky, Dabara, les plaines d'Andapa et d'Antananarivo

La région d'Alaotra Mangoro s'étend sur une superficie de 33 054km² pour une population de 1 112 550. La région est divisée en cinq districts, dont :

- District d'Ambatondrazaka
- District d'Amparafaravola
- District d'Andilamena
- District d'Anosibe An'ala
- District de Moramanga

Seuls les trois premiers districts ont pu bénéficier du projet sur la résilience climatique du secteur riz malgré la demande nationale qui est de 2,2 millions de tonnes par an ; la production nationale n'excédant pas les 2 millions de tonnes. La région Alaotra Mangoro est le premier grenier à riz de Madagascar subissant de plein fouet la dégradation de l'environnement dont l'ensablement des rizières, la déviation des cours d'eau, la formation des lavaka, l'érosion des bassins versants, la déforestation, ect…,

L'érosion constitue la première manifestation de cette dégradation, conduisant à l'envasement généralisé des rizières et des infrastructures d'irrigation qui limite encore la qualité des eaux et des sols. Les sécheresses et les inondations sont fréquentes dans les districts producteurs de riz. Les cyclones y sont également connus pour détruire les cultures, les biens et les infrastructures. Chez les petits producteurs, le niveau de connaissances techniques est assez faible leurs incitant à s'en tenir uniquement à la riziculture traditionnelle malgré l'efficacité des technologies disponibles, comme le Système de Riziculture Amélioré (SRA) et Système de Riziculture Intensive (SRI) qui sont connus pour produire des rendements nettement plus élevés.

Pour le périmètre agricole du Basse Betsiboka, ayant une superficie de 30.025 km², la sècheresse constitue la principale cause climatique de la chute de rendement dans la région de Marovoay. Durant la période de 1990 à 2013, six épisodes de grande sècheresse ont été enregistrés qui ont touché plus de 3,5 millions de personnes. La zone de production rizicole de Marovoay a subi de sévères pertes de récolte en 2013 en raison des conditions de sècheresse.

3. OBJECTIF(S) D'ADAPTATION DU PROJET

Indiquez un objectif d'adaptation compte tenu du problème décrit ci-dessus pour le projet. Il s'agit d'un résultat à moyen ou long terme qui est souhaité pour la question décrite dans l'énoncé du problème.

L'objectif de ce projet est donc d'étendre les activités déjà entamées dans les trois sites d'intervention sur la totalité des districts de la région Alaotra Mangoro et de la région du Basse Betsiboka, d'agrandir la surface d'intervention lors du projet initial entre autres : parcelles de démonstration, terrains reboisés, zones destinées pour la réhabilitation et/ou construction d'une nouvelle infrastructure, et également d'assurer la pérennisation des activités de l'après projet.

4. OBJECTIFS ET ACTIVITES POUR ATTEINDRE LE(S) BUT(S)

Quels sont les objectifs du projet à poursuivre pour contribuer à la réalisation du but, et décrivez les activités à mener pour atteindre chaque objectif. Ces éléments devront être affinés ultérieurement et alignés sur l'approche du projet du partenaire de mise en œuvre et sur la politique du Fonds à laquelle vous postulez.

- Renforcer les capacités scientifiques et techniques des agriculteurs sur le Modèle Intégré de Riziculture Résiliente pour ramener la production agricole de 1,5t/ha à 4t/ha ;
- Analyser et gérer les risques climatiques pour le sous-secteur du riz,
- Modélisation hydrologique et cartographie des zones rizicoles vulnérables ;
- Développement des nouveaux calendriers culturaux en fonction des prévisions climatiques ;
- Amélioration de l'accès aux prévisions climatiques locales ;
- Amélioration de la gestion des risques de sècheresse et d'inondations ;
- Développement de variété agricoles résilientes au changement climatique et aux ravageurs ;
- Mettre en œuvre et diffuser une série de changements concrets dans les pratiques de production du riz, de la gestion des intrants à la récolte, y compris des mesures destinées à restaurer et à maintenir les services écologiques autour des écosystèmes rizicoles ;
- Identifier et traiter les principaux obstacles politiques, les lacunes ou les mal adaptations afin de créer les conditions pour l'adaptation à grande échelle dans le sous-secteur du riz

5. DÉTAILS DU PROJET

Titre du projet :

<Promouvoir des systèmes agricoles résilients par la mise à l'échelle du Modèle Intégré de Riziculture Résiliente >

Site et échelle du projet (niveau national/sous-régional/district) :

Régional/Alaotra-Mangoro (district Anosibe An'Ala, Moramanga)/Betsiboka (Marovoay, le Bas Mangoky, Dabara, les plaines d'Andapa) et les plaines d'Antananarivo

Entité promotrice/exécutrice potentielle (nom de l'organisation) :

Ministère de l'Environnement et Développement Durable

Entité accréditée potentielle :

UN ENVIRONNEMENT

Partenaires du projet (autres organisations partenaires supplémentaires devant participer à la mise en œuvre) :

Ministère de l'Agriculture et Elevage, Ministère de l'Eau, Ministère de l'Enseignement Supérieur et de la Recherche Scientifique

6. PRINCIPAUX ACTEURS (DANS LE PAYS/LA ZONE DU PROJET)

Listez les principaux acteurs qui auront un rôle à jouer dans le développement et la mise en œuvre du projet.

Acteur (institution, agence, etc.)	Type d'institution	Rôle ou responsabilité dans le projet
Ministère de l'Environnement et Développement Durable/BNCCREDD+	Public	*Facilitating the day-to-day functioning of the project staff *Managing human and financial resources in consultation with the PSC to achieve results in line with the outputs and activities outlined in the project document *Leading the preparation and implementation of annual results-based work plans and logical frameworks as endorsed by the management *Coordinating project activities with related and parallel activities *Monitoring project activities, including financial matters, and preparing monthly and quarterly progress reports, and organising monthly and quarterly progress reviews *Supporting the PSC in organizing PSC meetings *Coordinating the distribution of responsibilities amongst team members and organising the monitoring and tracking systems *Reporting and providing feedback on project strategies, activities, progress, and barriers to UNEP, PSC and project partners *Managing relationships with project stakeholders including donors, NGOs, government agencies, and others as required.
Ministère de l'Agriculture et Elevage	Public	Through Memorandum of Understanding ratified between Ministries of Agriculture

FOFIFA	Centre de recherche sur l'agriculture	and Environment during project preparation, the Ministry of Agriculture (MinAgri) will be entrusted with the technical 57 coordination of the project and deployment of on-the-ground activities. Specific project activities will be delivered through sub-contracts with participating institutions, such as Ministries, NGOs, research institutions (particularly FOFIFA) and local organizations. Collaboration with the FOFIFA, as key project partner, will be further formalized through a tri-partite MOU between MEF, FOFIFA and MinAgri. FOFIFA will ensure local coordination of the project activities in the sites
Ministère de l'Eau	Public	
Ministère de l'Enseignement Supérieur et de la Recherche Scientifique	Public	
Direction Générale de la Météorologie	Public	
FOFIFA	Centre de recherche sur l'agriculture	

7. PROCHAINES ÉTAPES

Identifiez et décrivez brièvement les prochaines étapes que vous entreprendrez pour développer ce document en une note conceptuelle, y compris le traitement par le NDA du GCF (ou le point focal national pertinent pour le LDCF ou AF si c'est la cible), l'identification d'un partenaire de livraison accrédité, y compris les délais. Il peut également s'agir de synthétiser les informations disponibles afin de fournir un contexte plus large pour la description du projet, d'identifier et d'organiser une ou plusieurs réunions avec l'entité accréditée proposée afin de garantir son engagement, d'organiser des réunions avec les principales parties prenantes, etc.

*amélioration du concept note et consultation des parties prenantes (M+3)

*validation du concept note (M+4)

*approbation du concept par la PF AF et soumission du projet au AF (M+4)

8. BESOINS D'ASSISTANCE TECHNIQUE

Décrivez brièvement l'assistance technique qui sera nécessaire immédiatement pour faire avancer les travaux et les moyens possibles de mobiliser cette assistance. Indiquez également le soutien spécifique que le LEG et le GCF (si l'idée vise le LDCF ou l'AF, mentionnez-les) peuvent fournir.

*développement du concept note surtout sur les données nécessaires au niveau régional

*assistance technique de l’agence accréditée pour la formulation du concept note (et tout au long du processus) selon le template du AF

Madagascar: Amélioration de l'accès á l'eau potable en milieux urbains et ruraux

Ateliers de rédaction de plans d'adaptation nationaux (PAN) 2022-2023
Version du 12 juillet 2022

1. GENERAL INFORMATION

Quel est le problème spécifique lié au climat à traiter ? Quels sont les risques et vulnérabilités spécifiques et quels sont les principaux facteurs d'impact climatique ? Soyez aussi précis que possible.

D'après le cabinet britannique d'analyse des risques (Maplecroft, 2012), (www.maplecroft.com), Madagascar constitue le 3ième pays le plus vulnérable au changement climatique après l'Inde et le Bangladesh. Ce même cabinet évoque que pour les 30 ans à venir, ces trois pays seront durement frappés par le changement climatique, suivis par Népal, Mozambique, Philippines, Haïti, Afghanistan, Zimbabwe et Birmanie. Pour le cas spécifique des cyclones, il est le 10ème pays le plus exposé au monde (COI, 2011).

Du fait de sa position géographique dans l'Océan Indien et de l'importance des variations altitudinales et latitudinales, Madagascar présente un climat très varié, régi principalement par le régime d'Alizé pour la partie orientale avec une influence (pendant une partie de l'année) de la mousson pour la partie nord-est et de la Zone de Convergence Intertropicale (ZCIT) dans la partie occidentale.

Avec les catastrophes naturelles, les pollutions et les différentes pressions anthropiques, le changement climatique influence la qualité et la durabilité des ressources en eau et se faisant, menace la santé publique. Dans ce contexte, le changement climatique se présente comme un facteur aggravant les limites d'accès à l'eau potable et à l'assainissement. Les ressources en eau sont impactées aussi bien en termes de quantité (tarissement ou insuffisance dans les localités connaissant déjà des stress hydriques) que de qualité (pollution, salinisation).

Pour la partie méridionale, la température a significativement augmenté depuis les années 1950 avec un surplus moyen de 0,2°C pour l'année 2000. Dans la partie septentrionale, l'augmentation est apparue aux environs des années 1970 mais avec des températures enregistrées assez basses par rapport aux observations du début du XXème siècle (l'année 2000 est de 0,1°C plus froid en moyenne que les observations de début du siècle). Ces observations sont identiques à d'autres tendances régionales observées avec une phase de refroidissement à partir des années 1940 jusqu'à des valeurs minimales autour des années 1950- 1970.

Ce refroidissement est généralement attribué à l'augmentation des aérosols volcaniques et sulfatés, après quoi les impacts des émissions anthropiques dominent (1950-1970) la tendance générale (GIEC, 2007).

Une analyse montre également une diminution significative des précipitations moyennes annuelles durant la période 1961 – 2005 surtout pour la partie orientale de l'île. Cette tendance

est accompagnée d'une augmentation de la longueur des jours « secs » (sans précipitation) qui indique une diminution de la fréquence des pluies mais également d'une diminution des jours avec des précipitations supérieures à 10mm (moins de jours avec de fortes averses).

Madagascar est également sujet aux cyclones, aléa typique de la zone Océan Indien. Néanmoins, depuis 1994, si le nombre des cyclones par saison est resté plus ou moins invariable, leurs intensités se sont aggravées (DGM, 2008). Entre 1975 et 1989, le nombre de cyclones de catégorie 4-5 (vents supérieurs à150 km/heure) était de 18, tandis qu'à peu près pour la même durée, entre 1990 et 2004, ce chiffre est passé à 50, traduisant une nette augmentation.

Dans le sud, autant comme dans le reste du pays, il y a eu réchauffement qui se manifestait surtout par l'augmentation des températures minimales journalières. De 1961 à 2005, la hausse de la température minimale journalière a été plus de 1°C (TADROSS et *al*., 2008).

Les sécheresses sont de plus en plus fréquentes et deux années sèches se sont succédées de 2009 à 2010, puis de 2012 à 2015, laissant les populations face à des difficultés économiques et alimentaires. Principalement pour l'extrême sud du pays, on note une hausse importante des températures de 1,6°C à 2,6°C. Le long des régions côtières, cette augmentation est de 1,1°C à 1,8°C et dont l'augmentation pour l'ensemble de l'île est de 1,3°C à 2,5°C (BNGRC, 2015).

Les précipitations sont devenues irrégulières et non prédictibles. Les pluies habituelles, régulières et prolongées, cèdent la place à des pluies torrentielles de courte durée et difficiles à contrôler, affectant entre autres le stockage et l'arrosage des champs de culture (WWF, 2010).

2. CONTEXTE DU CHANGEMENT CLIMATIQUE (DANS LA MESURE OU IL EST CONNU)

Fournir des détails sur les points suivants :

Les systèmes à risque et le problème de changement climatique (c'est-à-dire le danger) qui les affecte;

Comment le changement climatique a conduit aux impacts spécifiques pour lesquels la mesure d'adaptation proposée est considérée comme nécessaire, ou comment les projections futures du changement climatique conduiront à ces impacts ; Lien entre le problème du changement climatique et le risque - pour un système particulier, ou une partie de la population - en examinant la vulnérabilité de ce système ou de ce groupe au danger climatique spécifique ;

Si un scénario futur plausible (sous l'effet du changement climatique et des facteurs socio-économiques connexes) existe, inclure des informations sur la manière dont les risques et les vulnérabilités sont susceptibles d'évoluer à moyen et long terme.

En 2018, le taux moyen national d'accès à l'eau potable est de 27,7 %, tandis que 9,9% de la population utilisent des latrines améliorées gérées en toute sécurité. En milieu rural, la consommation de l'eau de surface (lac, rivière, ruisseau) est pratiquée par plus de 20% de la population. Ce taux tend à la baisse face aux impacts du changement climatique (évapotranspiration accrue, tarissement des ressources, etc.). Ainsi, cette défaillance en eau-assainissement-hygiène est en partie à l'origine des maladies à support hydrique dont la diarrhée, qui représentent les principales causes de morbidité et de mortalité à Madagascar, surtout celles des enfants. Outre les problématiques liées à la qualité (salubrité, potabilité), le secteur Eau et Assainissement fait également face au manque de moyens freinant l'optimisation d'une bonne gestion, aux conséquences de la dégradation de l'environnement (ensablement, érosion, etc.), à l'insuffisance de la protection contre les crues et autres aléas climatiques, et à l'exposition permanente aux pollutions. À ceci s'ajoutent la faible sensibilisation de la population vis à vis de l'utilisation de l'eau et de la maintenance des infrastructures hydrauliques, l'application insuffisante des textes règlementaires et les impacts des diverses pressions anthropiques et naturelles telles que la déforestation et l'érosion. De l'autre côté, le manque d'entretien et la vétusté des infrastructures ne feront qu'exacerber la situation, notamment dans les nombreux quartiers des milieux urbains. Le changement climatique constitue un facteur de risque de propagation de maladies, les maladies déjà climato-sensibles risquant de s'exacerber dans ce contexte de forte exposition dans les milieux urbains et ruraux. Face à ce contexte, le pays est conscient de la nécessité de mettre en œuvre et à l'échelle la Gestion Intégrée des Ressources en Eau (GIRE) qu'il est en train de développer progressivement. Par ailleurs, les Directives nationales pour les infrastructures Accès à l'Eau-Potable résistantes aux aléas climatiques ont été également établies.

Une étude menée par le PNUD dans le Sud de Madagascar, les besoins en eau potable rurale, urbaine et autres besoins ont été mis dans un seul lot. D'après PNUD (2010), les besoins en eau agricole ont été calculés à partir d'un débit fictif continu de 2 l/s/ha bien qu'il puisse y avoir une amélioration du système d'irrigation dans le futur. L'estimation se fait sur la base de la superficie des périmètres fonctionnels avec une double culture sur la moitié de la superficie. Pour les besoins en eau pastorale, en se basant sur la notion d'UBT et en adoptant une augmentation constante des effectifs du cheptel de 15% tous les 5 ans, les besoins en eau pastorale ont estimés à 12,1 Millions de m3 en 2015 et 14,0 Millions de m3 en 2020 (PNUD, 2010).

3. OBJECTIF(S) D'ADAPTATION DU PROJET

Indiquez un objectif d'adaptation compte tenu du problème décrit ci-dessus pour le projet. Il s'agit d'un résultat à moyen ou long terme qui est souhaité pour la question décrite dans l'énoncé du problème.

*L'accès universel à l'eau potable de bonne qualité et à l'assainissement (en cohérence avec le Plan Emergence de Madagascar et l'atteinte des ODD) tenant compte du changement climatique est garanti ;

*Les priorités spécifiques aux femmes sont identifiées et prises effectivement en compte dans les planifications et les constructions d'infrastructures d'eau et d'assainissement.

4. Objectifs et activités pour atteindre le(s) but(s)

Quels sont les objectifs du projet à poursuivre pour contribuer à la réalisation du but, et décrivez les activités à mener pour atteindre chaque objectif. Ces éléments devront être affinés ultérieurement et alignés sur l'approche du projet du partenaire de mise en œuvre et sur la politique du Fonds à laquelle vous postulez.

*Élargir sur tout le territoire la construction et la réhabilitation d'infrastructures d'eau et d'assainissement adaptées au changement climatique suivant la « Directive Nationale pour la construction des infrastructures d'Alimentation en Eau Potable (AEP) à l'échelle communautaire résistantes aux aléas climatiques » établie, et tenant compte du contexte urbain ou rural ;

*Dans le prochain Code de l'eau révisé, prévoir dans la partie concernant la GIRE les modes de gouvernance des infrastructures (clarification des responsabilités, notamment celles des collectivités et des AUE, responsabilité quant aux recherches de financement, rôle de l'État, implication du secteur privé, etc.) ;

*Définir et documenter comme des référentiels nationaux des objectifs et des indicateurs de réduction des inégalités homme-femme dans la planification et la mise en œuvre de l'amélioration de l'accès à l'eau potable et à l'assainissement ;

*Renforcer la promotion des messages clés WASH et soutenir les initiatives sur la bonne pratique d'hygiène, afin de réduire les maladies liées à l'eau et l'assainissement ;

*Renforcer les capacités des acteurs clés à tous les niveaux en termes de gestion des ressources en eau, en les appuyant à la planification stratégique et opérationnelle des activités prioritaires en réponse aux impacts des aléas climatiques ;

*Au niveau des Collectivités (Régions, Communes), intégrer dans les planifications de travail des actions ciblées renforcées d'Information-Education-Communication communautaire pour la protection des bassins-versants, la lutte contre la déforestation et le respect des infrastructures (tenant compte des différents facteurs : genre, socio-économie, contexte environnemental et climatique) ;

*Au niveau de chaque région, élaborer régulièrement (tous les ans) un plan de contingence et opérationnel et tenant compte du genre, pour le secteur eau et assainissement face aux aléas climatiques.

5. DÉTAILS DU PROJET

Titre du projet :

Amélioration de l'accès à l'eau potable en milieux urbains et ruraux

Site et échelle du projet (niveau national/sous-régional/district) :

National

Entité promotrice/exécutrice potentielle (nom de l'organisation) :

Ministère en charge de l'eau

Entité accréditée potentielle :

UNICEF

Partenaires du projet (autres organisations partenaires supplémentaires devant participer à la mise en œuvre) :

Ministère de l'Environnement, BNGRC,

Coût :

50 millions USD/GCF

6. PRINCIPAUX ACTEURS (DANS LE PAYS/LA ZONE DU PROJET)

Listez les principaux acteurs qui auront un rôle à jouer dans le développement et la mise en œuvre du projet.

Acteur (institution, agence, etc.)	Type d'institution	Rôle ou responsabilité dans le projet

7. PROCHAINES ÉTAPES

Identifiez et décrivez brièvement les prochaines étapes que vous entreprendrez pour développer ce document en une note conceptuelle, y compris le traitement par le NDA du GCF (ou le point focal national pertinent pour le LDCF ou AF si c'est la cible), l'identification d'un partenaire de livraison accrédité, y compris les délais. Il peut également s'agir de synthétiser les informations disponibles afin de fournir un contexte plus large pour la description du projet, d'identifier et d'organiser une ou plusieurs réunions avec l'entité accréditée proposée afin de garantir son engagement, d'organiser des réunions avec les principales parties prenantes, etc.

- Consultation et réunion avec les parties prenantes ; (alignement avec les stratégies sectorielles)
- Définition de l'arrangement institutionnel du projet ;
- Validation du concept note ;
- Soumission du proposal au GCF.

8. BESOINS D'ASSISTANCE TECHNIQUE

Décrivez brièvement l'assistance technique qui sera nécessaire immédiatement pour faire avancer les travaux et les moyens possibles de mobiliser cette assistance. Indiquez également le soutien spécifique que le LEG et le GCF (si l'idée vise le LDCF ou l'AF, mentionnez-les) peuvent fournir.

- Assistance technique sur la formulation du concept note ;
- Soumission du concept note

Malawi: Climate Resilient integrated catchment management in Malawi

NAP writing workshop template – UNEP
Project concept note

1. GENERAL INFORMATION:

Project title: Climate Resilient integrated catchment management in Malawi

Project site and scale: National

Proponent/Executing Entity: Environmental Affairs Department

Accredited entity: United Nations Environment Programme

Project partners: Ministry of Agriculture, Ministry of Water and Sanitation, Department of Forestry, Department of Fisheries, Department of Parks and Wildlife, Department of Climate Change and Meteorological Services, Water boards, ESCOM, EGENCO, CISONECC.

2. PROJECT DESCRIPTION

Context and Baseline: 2 paragraphs explaining the broad context of the project and the problem intended to be solved. Describe the context of the target community/ beneficiaries (livelihood, ethnicity, gender, geography, ecosystems, political context etc). Describe the climate risk that this project seeks to address. List the available climate scenarios/ data available to back up the project proposal and define what information is missing at this stage.

Well managed and healthy catchment areas provide ecosystems services that allows the human population and biodiversity to flourish. In the event of extreme weather events such as floods and drought, the impact on communities, infrastructure and economic activities are minimized and managed, and communities are able to sustain their livelihoods.

In Malawi, high proportion of the population is poor and largely dependent on natural resources and ecosystem services for their livelihood.
Local community population is mostly characterized by subsistence farming with small land holding sizes i.e. less than 1 acre per household,
With rapid population growth and unsustainable land use practices leading to clearing grasslands and forested areas for agricultural production, and settlement, unmanaged grazing for livestock – resulted to degradation of most catchments in the country.
Energy consumption - 90% of electricity is produced from hydro-power and this only reaches to about 15% of the country population. The majority of population depend on biomass for energy consumption which puts pressure on the forest areas.

High dependence on unsustainable extractive practices from resources such as forests areas e.g. charcoal and timber production, has led to creation of bare lands, weakening of river banks, drying of wetlands, and consequently siltation of most rivers due to high soil erosion rate. Degraded catchments resulting in diminished recharge capability for sub-surface water resources, and water holding capacity for surface water resources.

Exposed to the high risk of infrastructure and property damage, and crop and livestock losses due climatic hazards like flooding, since the natural buffer to slow run-off has been depleted.
Risk of drought or dry spells escalating the impact of drying up of wetlands which affects winter cropping, livestock forage.

Flooding affecting infrastructures such as hydro-power station resulting in low energy generation capacity, more load shedding, more utilization of biomass energy.
Drying of rivers has also affected expansion of hyrdo-power generation in the country.
Project will address the escalating levels of catchment degradation for improved resilience to hazards such as floods and drought.

Problem statement: What is the underlying problem from a climate change adaptation perspective? What are the non-climate drivers and what are the climate change drivers? Describe the main root causes and barriers (social, gender, fiscal, regulatory, technological, financial, ecological, institutional, etc.) that need to be addressed.

Underlying problem from a climate change adaptation perspective

- High vulnerability of communities and ecosystems to effects of climate related events i.e. floods and dry spells (Low agriculture outputs, Prevalence of water borne diseases etc)

Non-climate drivers

- Rapid population growth and unsustainable land use practices
- Socio-economic activities i.e. charcoal production
- Inadequate capacity of structures responsible for catchment management

Climate change drivers

- Extreme weather events

Main root causes and barriers

- Lack of alternative livelihood activities
- Inadequate access to information
- Cultural values hindering women participation

Objectives of the project: Briefly state the overall project goal, what is the adaptation objective(s) to be pursued to achieve that goal, and describe the activities to be used to support the objectives. This will have to be adjusted to be aligned with the Fund policy you are applying to.

Goal – is to have restored and well managed catchments for improved resilience of communities and ecosystems to impacts of climate change

Objectives

To institutionalize climate sensitive catchment management principles and strategies for improved community and ecosystem resilience.

- Capacity building for national and local structures to implement catchment management strategies
- Mainstreaming climate change considerations into local policies, strategies and action plans
- Implement the "polluter pays" principle for managing polluting of production resources
- Integrate principles of social inclusion to ensure involvement of women, children and vulnerable groups

Promoting payment for ecosystem services

To sustainably manage catchments for effective conservation of biodiversity i.e aquatic and terrestrial ecosystems, and improved ecosystem services

- Restore landscapes and promote resilient watershed ecosystem services
- Capacity building for councils, CMCs, VNRMCs to promote in-situ and ex-situ conservation for both aquatic and terrestrial ecosystems, including managing invasive species
- Capacity building for communities to implement sustainable soil and water conservation measures
- Promoting climate smart agriculture techniques to improve agricultural output
- Introduction of youth-centric interventions e.g. introduction and/ or revamping of youth clubs aimed at empowering youth to take active roles in promoting environmental and climate change awareness.
- Promote waste management initiatives

To affect improvement of community resilience through targeted socio-economic interventions at household level, and improved climate services provision.

- Capacity building to community for skills development such as business management
- Introduction and implementation of alternative livelihood activities for household income generation
- Identifying and addressing gaps in climate information service delivery for improved decision making e.g. using forecasts to plan for the farming activities

Capacity building in Installation and management of early warning systems for improved disaster preparedness

Stakeholders: list the stakeholders that will have a role to play in the project and are likely to be positively and negatively impacted by the project. Draft a power/interest map.

Stakeholder	Type of institution	Role / Responsibility in the project	Likely to be positively or negatively impacted by the project
Ministry of Agriculture (Department of Land Resources Conservation; Department of Crops,	Public	Promotion of Climate Smart agriculture initiatives within the catchments	

Department of Livestock)		
Ministry of Water and Sanitation	Public	Facilitate the development and implementation of catchment management plan including capacity building of relevant structures on catchment management.
Ministry of Lands	Public	Facilitate land management, including defining land tenure systems, designation of land uses
UNEP	Development partner	Provide technical and financial oversight during implementation
Environmental Affairs Department	Public	Coordinate implementation and monitoring of project activities and provide technical environmental management issues.
Department of forestry	Public	Coordinate forest landscape restoration activities
Department of National Parks and Wildlife	Public	Coordinate management activities in national wildlife conservation facilities
Department of Fisheries	Public	Coordinate activities on management of fish and aquatic resources, and promotion of sustainable fisheries practices.
Local communities	Public	Are the primary stewards, residing within the vicinity of the catchments, and are the primary beneficiaries of the intended actions. including men, women, youth, children, and person with disabilities
Civil Society Network on Climate Change (CISONECC)	NGO	Support Government in advocating for adoption and implementation of best practices under the project.

3. NEXT STEPS

Identify and briefly describe next steps that you will undertake to further develop this concept note, including timelines. These can include: collect data and undertake analysis to fill information gaps; identify and organize meeting(s) with proposed accredited entity to secure their engagement; organize meetings with key stakeholders; elaborate a stakeholder interest/power spider map; elaborate a theory of change; plan a pre-feasibility study, etc.

- Conduct stakeholder consultations
- Conduct data collection for further analysis

- Engagement with potential accredited entity
- Facilitate adoption and approval at various national levels – technical and steering committee

Mali: Sécurité climatique et résilience des communautés vulnérables des régions ouest du Mali

NAP write workshop template - UNEP
Project concept note

1. INFORMATIONS GENERALES

Titre du projet : Sécurité climatique et résilience des communautés vulnérables des régions ouest du Mali.

Site et échelle du projet : niveau national

Promoteur/Entité d'exécution : Agence de l'Environnement et du Développement Durable

Entité accréditée : PNUE - Co-execution: UNCCD/LoCAL

Partenaires du projet : - Ministère de l'Environnement, de l'Assainissement et du Développement Durable;

- Ministère du développement rural;

- Ministère en charge de l'Administration territoriale et de la Décentralisation;

- Ministère en charge de l'Energie et de l'Eau;

- Ministère de l'équipement et du transport; (Météo)

- Ministère en charge de l'économie et des finances;

- Ministère en charge de l'Enseignement supérieur et de la Recherche scientifique;

- Société civile (Coordination des Associations et ONGs Féminines (CAFO) Réseau climat;

- Conseil National du Patronat du Mali (secteur privé).

2. DESCRIPTIF DU PROJET

Contexte et base de référence : 2 paragraphes expliquant le contexte général du projet et le problème que l'on veut résoudre. Décrire le contexte de la communauté cible/ des bénéficiaires (moyens de subsistance, ethnicité, genre, géographie, écosystèmes, contexte politique etc). Décrivez le risque climatique que ce projet cherche à traiter.

Dressez la liste des scénarios climatiques disponibles/des données disponibles pour étayer la proposition de projet et définissez les informations manquantes à ce stade.

Population cible: communautés vulnérables des régions ouest du Mali

Moyens de subsistance:

Agriculteurs, éleveurs, pêcheurs,

femmes, jeunes, les personnes âgées, les personnes vivant avec le handicap.

Enjeux: conflits agro pasteurs;

L'immigration interne et externe, l'exode rural

Ethnies:

Les Sarakolé, kassonké, les bambara, les peul etc.

Géographie: 4 régions de l'ouest: Kayes, Koulikoro, Nara et Kita.

Le projet proposé s'attaque aux défis interdépendants de la dégradation des terres et du changement climatique au Mali, qui menacent ensemble la durabilité à long terme des paysages productifs vulnérables dans les régions ouest du pays.

L'économie du Mali en générale et des régions cibles en particulier repose essentiellement sur l'exploitation des ressources naturelles. La croissance démographique (3,36 %/an) et les contraintes climatiques ont entraîné une surexploitation et une dégradation de ces ressources. Les deux tiers du pays sont arides et semi arides dominés par les problèmes de désertification. Les risques naturels se sont accrus avec l'intensification des changements climatiques : sécheresses à répétition, inondations, vents forts, feux de brousse, déstabilisation du régime des pluies. L'agriculture qui est la plus touchée représente 45% du PNB et occupe environ 80% de la population active.

Cette situation est d'autant plus grave que les scénarios climatiques à l'horizon 2100 prévoient en moyenne une augmentation des températures 3°C et une diminution des pluies de 22% sur l'ensemble du pays.

Le scénario climatique: Pessimiste RCP 8.5 à moyen terme 2050
Ce modele prevoit :
+3°CTemperature (annual mean);
-7%Precipitation (annual mean);
-12 % Humidité des sols (moyenne annuelle);
+15 % Débit d'eau (moyenne annuelle);
-8 % Ruissellement de l'eau (moyenne annuelle).

Problématique : Décrivez quel est le problème sous-jacent avec une perspective d'adaptation au changement climatique ? Quels sont les facteurs non climatiques et quels sont les facteurs de changement climatique ? Décrivez les raisons principales et les principaux obstacles (sociaux, sexospécifiques, fiscaux, réglementaires, technologiques, financiers, écologiques, institutionnels, etc.) qui doivent etre addressés

Le problème sous-jacent est la dégradation croissante des paysages productifs.
Le problème que le projet cherche à résoudre est que la région centrale du Mali est caractérisée par des paysages productifs vulnérables, qui souffrent d'une grave dégradation des terres et

d'une baisse de leur productivité, de la désertification et de l'empiètement du Sahara, de la perte de biodiversité, de conflits intercommunautaires fréquents et d'une exposition croissante au changement climatique. Tous ces facteurs entravent la capacité des écosystèmes à fournir des biens et des services essentiels aux moyens de subsistance, à la sécurité alimentaire, à la santé humaine et au développement économique général, ce qui nuit à la résilience climatique des communautés locales.

Les facteurs climatiques sont:
- Hausse des température;
- Irrégularité de la pluviométrie avec des poches de sécheresse;
- Inondation;
- Secheresse;
- Vagues de chaleur;
- Perte de la biodiversité;
- Erosion des sols;
- Vents violents;
- Feux de brousse;
- Diminution de la nappe phréatique.

Les facteurs non climatiques sont:
- Feux de brousse;
- Pollution des sols (pollution chimique à travers les engrais, et l'orpaillage);
- Pression sur les ressources naturelles (coupe abusive du bois, surpâturage;
- Conflit intercommunautaire (agro-pasteurs);
- Détérioration dramatique de sa situation sécuritaire;
- Pression démographique;
- Exode rural;
- Technologies d'adaptation mal adaptées et mal connues

Les changements climatiques vont accentuer ces facteurs existants à travers l'augmentation des températures et la dégradation des systèmes productifs

Objectifs du projet : Indiquez brièvement le but général du projet, quel est le ou les objectifs d'adaptation à poursuivre pour atteindre ce but, et décrivez les activités qui seront utilisées pour soutenir les objectifs. Ces éléments devront être ajustés pour s'aligner sur la politique du Fonds auquel vous postulez.

L'objectif est d'aider les communautés vulnérables des régions cibles à être plus résilientes, gage d'une adaptation à long terme.

- Cela à travers l'amélioration et la pérennisation des moyens de subsistance des communautés vulnérables agropasteurs;
- Les principaux bénéficiaires sont à plus de 3 millions de personnes, dont au moins 50 % de femmes, comme les jeunes et les femmes.
Les bénéficiaires secondaires seront les prestataires publics et privés de services d'élevage, ainsi que les institutions nationales et régionales concernées.
- Le projet comporte cinq composantes : i) santé animale, ii) gestion des ressources naturelles, iii) accès au marché, iv) gestion des crises pastorales et v) appui institutionnel

Parties prenantes : dressez la liste des parties prenantes qui auront un rôle à jouer dans le projet et qui sont susceptibles d'être affectées positivement et/ou négativement par le projet. Réalisez une carte pressentant les pouvoirs et les intérêts des parties prenantes.

Partie prenante	Type d'institution	Role / Responsabilité dans le projet	Susceptibles d'être impactés positivement ou négativement par le projet
MEADD	Etatique	Mise en oeuvre	Impact positif
Ministère du développement rural (agriculture, elevage, pèche)	Etatique	Mise en oeuvre	Impact positif
CNPM (Secteur privé)	secteur privé	Mise en oeuvre, et mobilisation.	Impact positif
Coordination des Associations et ONGs Féminines (CAFO)	société civile et genre	Mise en oeuvre	Impact positif
Collectivités territoriales	Etatique	Mise en oeuvre	Impact positif

3. PROCHAINES ÉTAPES

Identifiez et décrivez brièvement les prochaines étapes que vous entreprendrez pour développer davantage cette note conceptuelle, notamment le calendrier. Il peut s'agir de: collecter des données et entreprendre une analyse pour combler les lacunes en matière information; identifier et organiser une ou plusieurs réunions avec l'entité accréditée proposée afin d'obtenir son engagement; organiser des réunions avec les principales parties prenantes ; élaborer une carte des intérêts/pouvoirs des parties prenantes ; élaborer une théorie du changement ; planifier une étude de préfaisabilité, etc.

Mauritania: Promotion of local cereals adapted to climate change

National adaptation plan (NAP) writing workshops 2022–2023
Project idea workout
Version of 12 July 2022

1. PROBLEM STATEMENT AND ITS NATIONAL CONTEXT

What is the specific climate-related problem to be addressed? What are specific risks and vulnerabilities and what are main climate impact drivers? Be as specific as possible.

Rainfed agriculture is considered the most exposed to the effects of climate change. Indeed, the decrease in rainfall has several impacts on this type of agriculture, namely

- Lowering of the water table in the oases
- Soil depletion and loss of fertility
- Land salinization
- Rural Exodus
- Food insecurity

2. CLIMATE CHANGE CONTEXT (TO THE EXTENT KNOWN)

Provide details on the following:

- Systems at risk and the climate change problem (i.e., the hazard) affecting them;
- How climate change has led to the specific impacts for which the proposed adaptation action is considered necessary, or how future projections of climate change will lead to those impacts;
- Linkage between climate change problem to risk – to a particular system, or section of the population – by examining the vulnerability of that system or group to the specific climate hazard;
- If a plausible future scenario (under climate change and related social economic drivers) exists, include information about how the risks and vulnerabilities are likely to change in the medium and long-term.

The agriculture sector contributes MRO 14.7 billion to nominal GDP and employs about 109,800 people (2017), or 16.2% of total employment. The rate of coverage of cereal needs is about 34% and the cost of cereal imports is about 300 million USD,

Losses in July 2020 (Flood/ Trarza): 40% of 29,000 ha cultivated;

The production system in Diéri is very random with losses of about 70% according to the years 2017. Farmers estimate 80% losses in a drought year and 40% in a hot year.

Climate scenarios: The rainfall data from synoptic stations show a general trend of progressive decrease in rainfall in Mauritania. The level of statistical significance of this indicator is very high in most stations (92%).

Extrapolations of the results of the RGPH-2000 on the projected rural population until the end of 2008 in the wilayas, estimated the number of food insecure people at 420,821. Of these, 173,757 people are severely food insecure and 247,064 people are moderately food insecure. In peri-urban areas, where an estimated 33,109 people (a prevalence of 3.4%) are food insecure, the situation is relatively better than in rural areas (WFP, Mauritania; June 2009).

3. ADAPTATION GOAL (S) OF THE PROJECT

State a goal for adaptation given the problem described above for the project. A goal would be a medium- to long-term outcome that is desired for the issue captured in the problem statement.

Promotion of local cereal varieties and introduction of new drought resistant and high yielding varieties

4. OBJECTIVES AND ACTIVITIES TO MEET THE GOAL (S)

What are project objectives to be pursued to contribute to achieving the goal, and describe the activities to be carried out to achieve each objective. This will have to be refined later and aligned with the project approach of the delivery partner and the Fund policy you would apply to.

- Selection and collection of seeds of existing local cereal varieties (millet, corn, green beans) through a participatory approach with the populations
- Develop the marketing of the production to guarantee a better economic return
- Train farmers on smart farming by integrating new varieties resistant to CC effects
- To introduce new varieties by applying different techniques such as: Cordon enherbés+zai, Agroforestry and minimum tillage, SRI.

5. PROJECT DETAILS

Project title:

Promotion of local cereals adapted to climate change

Project site and scale(national/ sub-regional/ district level):

national level

Potential Proponent/Executing Entity(name of organization):

MEDD

Potential Accredited entity:

UNEP

Project partners:

MA

6. MAIN ACTORS (IN THE COUNTRY/PROJECT AREA)

List the main actors that will have a role to play in the project development and implementation.

Actor (institution, agency, etc.)	Type of institution	Role or Responsibility in the project
MEDD	Government	Coordination, execution
MA	Government	Technical partner
GCF	Bottom Bayer	Financing
FAO	Bottom Bayer	Tech support, end
PAM	Bottom Bayer	Tech support, end
UNEP	Accredited Entity	Technical support and follow-up

7. NEXT STEPS

Identify and briefly describe next steps that you will undertake to further develop this into a concept note, including processing through the GCF NDA (or relevant national focal point for the LDCF or AF if that is the target), identification of an accredited delivery partner, including timelines. These can also include: synthesize available information to provide broader context for the project description; identify and organize meeting(s) with proposed accredited entity to secure their engagement; organize meetings with key stakeholders; , etc.

1. Proposal and discussion of the assisted person with the accredited entity/NDA and focal point
2. Mobilize national and international expertise for the formulation of the concept note
3. Do a Feasibility Study
4. Project area identification
5. Preliminary Project Summary APS
6. APD
7. Project planning, budgeting, etc.

8. TECHNICAL ASSISTANCE NEEDS

Briefly describe what technical support will be needed immediately to advance the work and possible ways to mobilize the support. Also include specific support that the LEG and GCF (if idea is targeting the LDCF or AF, then include reference to them) can provide.

- Technical support until financing is obtained
- Support for institutional capacity building

- Coordinate and monitor with the state the implementation of the project to ensure that these objectives are met

Mauritania: Ecological Habitats Adapted to the Lifestyles of Vulnerable Populations in CC

National adaptation plan (NAP) writing workshops 2022–2023
Project idea workout
Version of 12 July 2022

1. PROBLEM STATEMENT AND ITS NATIONAL CONTEXT

What is the specific climate-related problem to be addressed? What are specific risks and vulnerabilities and what are main climate impact drivers? Be as specific as possible.

The construction and building sector is a major contributor to GHG emissions, accounting for 39% of global CO2 emissions due to the use of fossil fuels.
On the other hand, intense heat waves, long periods of drought and heavy rainfall expose the most vulnerable populations to several risks. The focus here is on those related to housing.
For example:

- The city of Titanium suffered a flood of 80% of its area in 2008, with rainfall of over 160mm, which caused significant damage;
- The country often faces significant heat waves that can reach up to 50°C, causing mortality cases especially among the most vulnerable people.

These situations are exacerbated by the habitat conditions, which are often not adapted to extreme climatic conditions.

Main Impacts:

- Housing often sketchy because construction in hard costs
- Habitats not adapted to extreme situations (extreme heat, sandstorms, floods)
- Extreme living conditions for populations (health)
- Non-durable habitats (cement, concrete iron, aluminum, etc.)

2. CLIMATE CHANGE CONTEXT (TO THE EXTENT KNOWN)

Provide details on the following:

- Systems at risk and the climate change problem (i.e., the hazard) affecting them;
- How climate change has led to the specific impacts for which the proposed adaptation action is considered necessary, or how future projections of climate change will lead to those impacts;
- Linkage between climate change problem to risk – to a particular system, or section of the population – by examining the vulnerability of that system or group to the specific climate hazard;
- If a plausible future scenario (under climate change and related social economic drivers) exists, include information about how the risks and vulnerabilities are likely to change in the medium and long-term.

¾ of the surface of Mauritania is invaded by the desert. It is very vulnerable to CC. Among the affected sectors, the habitat presents environmental and socio-economic challenges, related to:

- The design and construction of sustainable and resilient housing

- Management of natural resources and improvement of the living environment and resilience of communities.

- In the villages, the populations are considered as real climate refugees because they have lost everything they needed for a decent survival.

- These populations, essentially breeders and farmers, depend heavily on rainfall for the development of their activities, which is becoming increasingly rare and poorly distributed in time and space.

- Moreover, these scattered groups, due to the scarcity of natural resources, must be regrouped and supported to better adapt to the inadequacies of basic social services.

New cluster sites must offer more favorable conditions.

Simulation models have established climate scenarios that confirm that the temperature will increase by 0.4 every 10 years by 2050.

3. ADAPTATION GOAL (S) OF THE PROJECT

State a goal for adaptation given the problem described above for the project. A goal would be a medium- to long-term outcome that is desired for the issue captured in the problem statement.

Provide habitats for vulnerable populations, integrating renewable energy systems and insisting on the use of local building materials in the face of new climate change constraints.

4. OBJECTIVES AND ACTIVITIES TO MEET THE GOAL (S)

What are project objectives to be pursued to contribute to achieving the goal, and describe the activities to be carried out to achieve each objective. This will have to be refined later and aligned with the project approach of the delivery partner and the Fund policy you would apply to.

- **Objective 1: The return to local construction methods and ecological and/or renewable materials**
    - Act 1.1: Identification of Eco materials in the target area
    - Act 1.2: Design an architectural plan suitable for the climatic conditions of the target area. (Clay towards rivers, stones in mountainous areas etc..)

- **Objective 2: Integrate local know-how**

- Act 2.1: Promotion of local know-how at national level (exchange of skills between local communities)
- Act 2.2: Creation of local employment
- Act 2.3: Cost reduction

- **Objective 3: Transition to green energy**
  - Act 3.1: acquisition of solar panels; wind turbines according to the intervention area
  - Act 3.2: Provide low energy household equipment

5. PROJECT DETAILS

Project title:

Ecological Habitats Adapted to the Lifestyles of Vulnerable Populations in CC

Project site and scale (national/ sub-regional/ district level):

national level

Potential Proponent/Executing Entity (name of organization):

MEDD

Potential Accredited entity:

UNEP

Project partners:

MHU

6. MAIN ACTORS (IN THE COUNTRY/PROJECT AREA)

List the main actors that will have a role to play in the project development and implementation.

Actor (institution, agency, etc.)	Type of institution	Role or Responsibility in the project
MEDD	Governmental	Coordination, execution
MHU	Governmental	Technical partner
Ministry of Energy, private sector, (Somelec and others	Government, Private	Technical partner
Ministry of Health	Governmental	Technical partner and Monitoring & Evaluation
Local communities	Governmental	Consultation-Beneficiary and Mobilization
IRENA	NGO	Technical assistance, knowledge management and sharing

GCF	Donor of funds	Financing
UNEP	Accredited Entity	Tech support, end

7. NEXT STEPS

Identify and briefly describe next steps that you will undertake to further develop this into a concept note, including processing through the GCF NDA (or relevant national focal point for the LDCF or AF if that is the target), identification of an accredited delivery partner, including timelines. These can also include: synthesize available information to provide broader context for the project description; identify and organize meeting(s) with proposed accredited entity to secure their engagement; organize meetings with key stakeholders; , etc.

1; Proposal and discussion with the accredited entity/NDA and focal point
2; Mobilize national and international expertise for the formulation of the concept note
3; Identification of the project intervention area
4; Conduct a Feasibility Study
5; Preliminary design APS
6; Detailed Preliminary Project
7; Planning the implementation of the Project

8. TECHNICAL ASSISTANCE NEEDS

Briefly describe what technical support will be needed immediately to advance the work and possible ways to mobilize the support. Also include specific support that the LEG and GCF (if idea is targeting the LDCF or AF, then include reference to them) can provide.

- Technical and financial support until financing is obtained
- Coordinate and monitor with the state the implementation of the project to ensure that these objectives are met

Mozambique: Building Local Climate Resilience in Mozambique, Sofala and Cabo Delgado

NAP writing workshop template – UNEP
Project concept note

1. GENERAL INFORMATION:

Project title: Building Local Climate Resilience in Mozambique, Sofala and Cabo Delgado

Project site and scale: District level

Proponent/Executing Entity: MOPHRH, MAEFP, MTA, MADER

Accredited entity: UNDP

Project partners: FAO, UN-HABITAT, IUCN

2. PROJECT DESCRIPTION

Context and Baseline: 2 paragraphs explaining the broad context of the project and the problem intended to be solved. Describe the context of the target community/ beneficiaries (livelihood, ethnicity, gender, geography, ecosystems, political context etc). Describe the climate risk that this project seeks to address. List the available climate scenarios/ data available to back up the project proposal and define what information is missing at this stage.

Mozambique has an area of 799,380 km2 with an eastern shoreline bathed by the Indian ocean extending to 2,700 km. Mozambique's population has been increasing on average at 2.4% per year and is now estimated to be 26 million, of which 46.1% live in poverty, under $1.25 per day (National Poverty Assessment, 2016). Although Mozambique has made impressive economic progress in recent years, it remains one of the poorest countries in the world with a GDP per capita of US$802 per year. Agriculture contributes 24% to national GDP and engages 80% of the population and 90% rural households. Rural poverty decreased, accompanied by economic growth until 2003, however, in the last five to ten years there has been a slowdown in progress on poverty reduction resulting from several factors, among which include recent climatic impacts. The country faces major climate risks, such as:

- droughts, with impact on agriculture and livelihoods, especially in the south of the country where the Limpopo watershed constitutes the biggest agricultural production area;
- floods, which are a major hazard to agriculture, infrastructure and livelihoods and
- coastal erosion, storm flows and rising sea levels which threaten Mozambique's coastal zone and cities.

These events have significant impacts on livelihoods and food security. Construction of new infrastructure such as roads, schools and hospitals have difficulties keeping up with infrastructure destroyed or damaged by natural disasters. Moreover, rising sea levels sea-level are expected to

result in submersion of coastal areas, increasing erosion, salt water intrusion, desertification and consequent reduction in arable land.

Every year during the rainy season, people are affected in some part of the country through losing their home, their crops or their belongings due to floods, droughts, rain storms, strong winds or tropical cyclones. Natural disasters are becoming more extreme and frequent, and their impacts exacerbated, albeit strong efforts that have succeeded in keeping casualties down. An analysis of the impacts and frequency of natural disasters in Mozambique in the period 1956 to 2008 demonstrates that drought and floods are the climatic events that most affect the population, living in vulnerable areas, with floods being the most common occurrences. From 1956 – 2008 drought affected more than 16 million people.

The economic impact of climate change is well described in the study "Economics of Adaptation to Climate Change: Mozambique" (World Bank, 2010). The study indicates that the economic cost of the disasters that occurred in Mozambique between 1980 and 2003 was around USD 1.74 billion. Nonetheless, this value underestimates the losses and impact on the poorest populations that live mostly in the coastal zones (60%) and depend for their basic subsistence on fisheries and rain-fed agriculture. Coastal populations, their livelihoods and infrastructures are exposed to tropical cyclones and to sea level rise. Based on the same study, the climate scenarios point towards the reduction of the national welfare. The report projects greater losses, estimated between USD 2-7 billion for the period covering 2003 to 2050. This is equivalent to an annual loss that varies from USD 0.6 and 1.2 billion per year until 2030.

Climate Scenarios

The vulnerability analysis carried out considered the climate projections developed by INGC "Studies on the Impacts of Climate Change on Disaster Risk in Mozambique Synthesis Report – Second Version" in 2009.

The methodology of the INGC study was based on climatological modeling (temperature and rainfall) with the main purpose of understanding how Mozambique's climate may already be changing and how it can be expected to change in the future. This study details the observed changes in the country's seasonal climate during the period 1960 to 2005, in terms of temperatures and rainfall patterns (INGC, 2009).

Both historical trends and future projections were derived from daily temperatures (maximum and minimum) and rainfall values recorded since 1960, from 32 synoptic weather stations within Mozambique (INGC, 2009).

To project future scenarios in terms of the country's climate (temperature and rainfall), focusing on the mid-century (2046-2065) and late-century (2080-2100) periods, seven general circulation models were used: ECHAM, GFDL , IPSL, CCCMA, CNRM, CSIRO and GISS.

INGC's projections (2009) anticipate that climate change in Mozambique is mainly manifested in the following:

Temperature patterns

• Atmosphere – with an average increase between 1.5ºC and 3.0ºC in the period between 2046 and 2065 and recording of more hot days and fewer cold days, with an increase in the maximum and minimum temperature;
• Oceans – with rising mean sea levels and changes in the distribution and availability of fish stocks and effects on marine ecosystems (such as corals);

Precipitation patterns

• With irregular rainfall behaviour in terms of start and end times, rainfall (heavy precipitation phenomena in a short space of time) and duration of the rainy season (drought), disfiguring the notions of "official" and "real" start of the agricultural season, which may result in some regions in a decrease in current potential yields of around 25%;
• With a growing reduction in potential agricultural income levels of up to 20% in the main crops that constitute the basis of food security and an essential condition for improving the per capita income of Mozambican families;

Increased frequency and intensity of extreme events (droughts, floods and tropical cyclones);

• Persistence of the situation of extraordinary floods in identifiable places in the country which can be referred to as "risk zones";
• Cyclones and other strong winds;
• Prolonged droughts;

Sea level rise: 15 cm, 30 cm and 45 cm as a consequence of thermal expansion and 15 cm, 110 cm and 415 cm as a consequence of the reduction of continental ice caps in the years 2030, 2060 and 2100, respectively;

• Areas with potential increased risk identified due to the emergence of other adverse natural phenomena such as loss by submersion and erosion of coastal areas, intrusion of saline water, desertification;
• Reduction of areas available for agricultural practice in green or low-lying areas;
• Many of the country's main coastal urban centers, including Maputo, Beira and Quelimane, are already in a critical situation in terms of vulnerability (human lives, properties, social infrastructure, etc.) to the effects of climate change.

Problem statement: What is the underlying problem from a climate change adaptation perspective? What are the non-climate drivers and what are the climate change drivers? Describe the main root causes and barriers (social, gender, fiscal, regulatory, technological, financial, ecological, institutional, etc.) that need to be addressed.

Climate change impacts due to the increasing frequency and intensity of extreme events, with negative impacts for sectors such as infrastructure, agriculture, health, fisheries, food security and nutrition, among others. Non-climate drivers as high levels of poverty and vulnerability among the population, poor infrastructure, weak governance mechanisms and institutional capacity results in lower country adaptive capacity to prepare and respond to climatic events and disasters.

Barriers:

- High levels of poverty - population living in disaster risks areas; inadequate housing infrastructure
- Urban planning instruments and building codes lacking resilient components
- Lack of knowledge and utilization of resilient construction practices and techniques

Objectives of the project: Briefly state the overall project goal, what is the adaptation objective(s) to be pursued to achieve that goal, and describe the activities to be used to support the objectives. This will have to be adjusted to be aligned with the Fund policy you are applying to.

Overall goal: Build local resilience of Mozambique provinces

Specific objectives:
• Improve infrastructure resilience in rural areas
• Review building codes and urban planning instruments to integrate the resilience component
• Promote the utilization of resilient construction practices and techniques

Stakeholders: list the stakeholders that will have a role to play in the project and are likely to be positively and negatively impacted by the project. Draft a power/interest map.

Stakeholder	Type of institution	Role / Responsibility in the project	Likely to be positively or negatively impacted by the project

3. NEXT STEPS

Identify and briefly describe next steps that you will undertake to further develop this concept note, including timelines. These can include: collect data and undertake analysis to fill information gaps; identify and organize meeting(s) with proposed accredited entity to secure their engagement; organize meetings with key stakeholders; elaborate a stakeholder interest/power spider map; elaborate a theory of change; plan a pre-feasibility study, etc.

Nepal: Integrated Green Economy and Green Job Promotion Programme through Sustainable Forest Management and Circular Economy in the Tarai, Chure Hills and Mountains

National adaptation plan (NAP) writing workshops 2022–2023
Project idea workout
Version of 12 July 2022

1. PROBLEM STATEMENT AND ITS NATIONAL CONTEXT

What is the specific climate-related problem to be addressed? What are specific risks and vulnerabilities and what are main climate impact drivers? Be as specific as possible.

Problems-

- Loss of Livelihood opportunities and employment
- Loss of ecosystems and ecosystem services due to illegal felling, encroachment, drought, forest fire and soil erosion.

National context-

- 45% area under forest cover
- Most of the forest area managed by community user group
- Strong community network for forest management
- Laws, Plan, policies are amended according to new political system

2. CLIMATE CHANGE CONTEXT (TO THE EXTENT KNOWN)

Provide details on the following:

- Systems at risk and the climate change problem (i.e., the hazard) affecting them;
- How climate change has led to the specific impacts for which the proposed adaptation action is considered necessary, or how future projections of climate change will lead to those impacts;
- Linkage between climate change problem to risk – to a particular system, or section of the population – by examining the vulnerability of that system or group to the specific climate hazard;
- If a plausible future scenario (under climate change and related social economic drivers) exists, include information about how the risks and vulnerabilities are likely to change in the medium and long-term.

Climate impacts

Acute

Increased frequency and severity of:

Extreme weather events	Heat waves
Floods	Landslides
Avalanches	Forest fires

Chronic/Slow onset:

Drought	Changes in precipitation pattern
Snow cover changes	Glacier retreat
GLOFs	

Key factors of vulnerability:

- 28.6% of the population is multidimensional poor; 18.7% live in absolute poverty
- Significant disparities between rural and urban areas
- Significant disparities along lines of caste and ethnicity
- Low levels of gender equality
- Reliance on ecosystem services for subsistence livelihoods
- Largely natural resource-dependant agrarian economy
- High reliance on natural rainfall and insufficient irrigation systems
- Small, fragmented landholdings in rural areas
- Poor urban and land use planning - rapid and haphazard urbanization
- Large number of informal settlements due to rural-urban migration
- Poor health infrastructure
- Inadequate access to improved technologies
- Inadequate evidence and knowledge base
- Illiteracy (in 2018, 32% of the population was not literate)
- Inadequate, but improving, governance structures
- High dependence on international finance to address adaptation priorities

3. ADAPTATION GOAL (S) OF THE PROJECT

State a goal for adaptation given the problem described above for the project. A goal would be a medium- to long-term outcome that is desired for the issue captured in the problem statement.

Increasing resilience and adaptive capacity of community through sustainable forest management and creation of green jobs.

4. OBJECTIVES AND ACTIVITIES TO MEET THE GOAL (S)

What are project objectives to be pursued to contribute to achieving the goal, and describe the activities to be carried out to achieve each objective. This will have to be refined later and aligned with the project approach of the delivery partner and the Fund policy you would apply to.

- To generate adaptation services through the management of forestry resources in the target area
- To develop Framework for Green Economy and Green Job Promotion that promote green jobs
- To explore, assess, and promote green jobs that support maintaining healthy ecosystem.
- To enhance livelihoods of forest dependent communities through diversifying income sources and promoting the circular economy in the forest sector.

5. PROJECT DETAILS

Project title:

Integrated Green Economy and Green Job Promotion Programme through Sustainable Forest Management and Circular Economy in the Tarai, Chure Hills and Mountains

Project site and scale(national/ sub-regional/ district level):

Tarai, Chure hills and Mountain/National

Potential Proponent/Executing Entity(name of organization):

Ministry of Forests and Environment and or Departments, Province forest ministry.

Potential Accredited entity:

UNEP, FAO, UNDP, NTNC.

Project partners:

FeNFIT, FNCCI, FECOFUN, ACOFUN, FUGs, AFFON, NGOs, JABAN, HIMWANTI

6. MAIN ACTORS (IN THE COUNTRY/PROJECT AREA)

List the main actors that will have a role to play in the project development and implementation.

Actor (institution, agency, etc.)	Type of institution	Role or Responsibility in the project
FNCCI, FeNFIT, FECOFUN	Federation of private sectors	Investment and co-funding
JABAN, HIMWANTI, AFFON	NGOs	Coordinate to implement
FUGs	CBOs	Mobilize community

7. NEXT STEPS

Identify and briefly describe next steps that you will undertake to further develop this into a concept note, including processing through the GCF NDA (or relevant national focal point for the LDCF or AF if that is the target), identification of an accredited delivery partner, including timelines. These can also include: synthesize available information to provide broader context for the project description; identify and organize meeting(s) with proposed accredited entity to secure their engagement; organize meetings with key stakeholders; , etc.

1. Formalize with government consent
2. Consultation with various stakeholders
3. Prepare final draft
4. Submit to NDA for approval
5. Submit final proposal to GCF, GEF, AF

8. TECHNICAL ASSISTANCE NEEDS

Briefly describe what technical support will be needed immediately to advance the work and possible ways to mobilize the support. Also include specific support that the LEG and GCF (if idea is targeting the LDCF or AF, then include reference to them) can provide.

- Technical support for the proposal development.
- Technical expertise for proposal development.
- Sharing knowledge from similar projects of other countries.

Nepal: Strategic Programme on Reducing Climate Risks and Vulnerabilities, and Capacity Building of Local Governments and Stakeholders on Integrating Climate Change Adaptation into Local Level

National adaptation plan (NAP) writing workshops 2022–2023
July 2022

1. PROBLEM STATEMENT AND ITS NATIONAL CONTEXT

What is the specific climate-related problem to be addressed? What are specific risks and vulnerabilities and what are main climate impact drivers? Be as specific as possible.

Problems:

Climate change impacts has multiple effects on livelihood at local levels

- Impacts on agriculture
- Loss of agricultural production and Food Security
- Water safety and security
- Sanitation and Health Hazard
- Loss of crop and biodiversity
- Migration

National context:

- Local level Governments have institutional structure, resources, have some policy instruments,
- Limited capacity to understand potential impacts of climate change hence less represented in policy, planning and implementation
- Lack of capacity to climate, gender and disaster responsive planning and implementation.

2. CLIMATE CHANGE CONTEXT (TO THE EXTENT KNOWN)

Provide details on the following:

Systems at risk and the climate change problem (i.e., the hazard) affecting them;

How climate change has led to the specific impacts for which the proposed adaptation action is considered necessary, or how future projections of climate change will lead to those impacts;

Linkage between climate change problem to risk – to a particular system, or section of the population – by examining the vulnerability of that system or group to the specific climate hazard;

If a plausible future scenario (under climate change and related social economic drivers) exists, include information about how the risks and vulnerabilities are likely to change in the medium and long-term.

Climate impacts
Acute

Increased frequency and severity of:

Extreme weather events	Heat waves
Floods	Landslides
Avalanches	Forest fires

Chronic/Slow onset:

Drought	Changes in precipitation pattern
Snow cover changes	Glacier retreat
GLOFs	

Key factors of vulnerability:

- Loss of production, productivity, and nutrients due to moisture loss induced by increasing temperatures and extremes such as prolonged dry spells, hailstorms, and windstorms.
- Loss of agricultural land due to increased severity and frequency of climate change-related droughts, floods, and landslides.
- Infestation of pest and diseases in the agriculture and livestock sector leading to reduction of agriculture and livestock production and productivity.

3. ADAPTATION GOAL (S) OF THE PROJECT

State a goal for adaptation given the problem described above for the project. A goal would be a medium- to long-term outcome that is desired for the issue captured in the problem statement.

To develop integrated climate responsive planning and implementation system in the local level government for climate adaptive and resilient local level.

4. OBJECTIVES AND ACTIVITIES TO MEET THE GOAL (S)

What are project objectives to be pursued to contribute to achieving the goal, and describe the activities to be carried out to achieve each objective? This will have to be refined later and aligned with the project approach of the delivery partner and the Fund policy you would apply to.

Objectives

- To assess the climate risks and vulnerabilities at local level
- To integrate the adaptation activities in policies, plan and programs through local level adaptation plan (LAPA).
- To enhance the capacity of local level governments and relevant stakeholders.

Activities

- Climate vulnerabilities assessment
- Prepare local adaptation plan of action
- Need assessment
- Integrate climate actions in local level policies, periodic and annuals planning systems
- Climate budget code systems
- Develop climate information (forecasting, early warning etc.) data management system
- Building capacity of various stakeholders
- Technology development

5. PROJECT DETAILS

Project title:

Strategic Programme on Reducing Climate Risks and Vulnerabilities, and Capacity Building of Local Governments and Stakeholders on Integrating Climate Change Adaptation into Local Level

Project site and scale (national/ sub-regional/ district level):

Local Levels

Potential Proponent/Executing Entity (name of organization):

Line Ministries, Departments, Province line ministries, local level governments

Potential Accredited entity:

WFP, UNEP, FAO, UNDP, NTNC.

Project partners:

NGOs, CBOs, Private sectors associations.

6. MAIN ACTORS (IN THE COUNTRY/PROJECT AREA)

List the main actors that will have a role to play in the project development and implementation.

Actor (institution, agency, etc.)	Type of institution	Role or Responsibility in the project
Local level governments	Governments	Implementation, monitoring, reporting
Ministries (Federal and provincial)	Governments	Fund managements, Coordinate to implement and policy and technology support, monitoring and review
NGOs and CBOs		Implementation and Mobilize community
Private sectors		Partnership for implementation, Supply technology and goods

7. NEXT STEPS

Identify and briefly describe next steps that you will undertake to further develop this into a concept note, including processing through the GCF NDA (or relevant national focal point for the LDCF or AF if that is the target), identification of an accredited delivery partner, including timelines. These can also include: synthesize available information to provide broader context for the project description; identify and organize meeting(s) with proposed accredited entity to secure their engagement; organize meetings with key stakeholders; , etc.

- Formalize with government consent
- Consultation with various stakeholders
- Prepare final draft
- Submit to NDA for approval
- Submit final proposal to GCF, GEF, AF

8. TECHNICAL ASSISTANCE NEEDS

Briefly describe what technical support will be needed immediately to advance the work and possible ways to mobilize the support. Also include specific support that the LEG and GCF (if idea is targeting the LDCF or AF, then include reference to them) can provide.

- Technical support for the proposal development.
- Technical expertise for proposal development.
- Sharing knowledge from similar projects of other countries.

Niger: Projet de renforcement de la résilience des producteurs par la restauration des terres dégradées

NAP write workshop template - UNEP
Project concept note

1. INFORMATIONS GENERALES

Titre du projet : Projet de renforcement de la résilience des producteurs par la restauration des terres dégradées.

Site et échelle du projet : région de Tahoua

Promoteur/Entité d'exécution : CNEDD

Entité accréditée : PNUE

Partenaires du projet : - Ministère de l'Agriculture

- Ministère en charge de l'Environnement
- Ministère de l'Elevage
- HCi3N
- Ministère en charge de l'eau

2. DESCRIPTIF DU PROJET

Contexte et base de référence : 2 paragraphes expliquant le contexte général du projet et le problème que l'on veut résoudre. Décrire le contexte de la communauté cible/ des bénéficiaires (moyens de subsistance, ethnicité, genre, géographie, écosystèmes, contexte politique etc). Décrivez le risque climatique que ce projet cherche à traiter.

Dressez la liste des scénarios climatiques disponibles/des données disponibles pour étayer la proposition de projet et définissez les informations manquantes à ce stade.

La région de Tahoua, à l'instar des autres régions du Niger, est touchée par la dégradation des terres qui s'accélère du Nord vers le Sud. Avec un taux d'accroissement annuel de la population de 4,6% (INS, 2014), jugé très important, les besoins en denrées alimentaires de cette région augmentent proportionnellement. Ce qui entraine la réduction du temps de la jachère qui se traduit par la dégradation des sols et la baisse de la production agricole (Michel et Guéro, 2000).

La situation environnementale de la région est caractérisée par une forte pression anthropique sur les ressources naturelles notamment les terres. Ces pressions anthropiques cumulées aux aléas climatiques accélèrent la dégradation des terres. Les superficies cultivables sont limitées en raison du croît démographique. Les espaces pastoraux sont menacés par le front agricole. Les sols, pauvres et encroûtés par endroits, connaissent une baisse de productions agro-sylvo-pastorales considérable. Ce qui expose les populations et les écosystèmes à la vulnérabilité climatique et à l'insécurité alimentaire et nutritionnelle. C'est pour réduire la vulnérabilité des populations que ce projet a été initié. Les actions retenues dans le cadre du présent microprojet font partie des priorités du Plan du Développement Régional. Ce projet est conforme aux orientations nationales inscrites dans l'initiative 3N (les Nigériens nourrissent les Nigériens) à travers son axe 3 ''amélioration de la résilience des groupes vulnérables face aux changements climatiques''.

Pour la période de 2041 – 2070:
- Température: + 2°C
- Water discharge 8%
- Aridité: + 7%
- Soils moisture: + 2%
- Water runoff: + 4%
- Précipitation: - 1%

La situation climatique n'est pas favorable au développement des cultures sans intervention technique, d'où la formulation de ce projet.

Problématique : Décrivez quel est le problème sous-jacent avec une perspective d'adaptation au changement climatique ? Quels sont les facteurs non climatiques et quels sont les facteurs de changement climatique ? Décrivez les raisons principales et les principaux obstacles (sociaux, sexospécifiques, fiscaux, réglementaires, technologiques, financiers, écologiques, institutionnels, etc.) qui doivent etre addressés

- Pauvreté des populations
- Dégradation des terres : érosion physique, coupes abusives (bois de feu, coupes aériennes) et diminution des nutriments des sols
- Accès à la terre : réduction de la taille des terres de cultures avec le croît démographique, apparition des conflits fonciers
- Insécurité alimentaire : moyens de production inadaptés
- Exode rural : départ des jeunes

Objectifs du projet : Indiquez brièvement le but général du projet, quel est le ou les objectifs d'adaptation à poursuivre pour atteindre ce but, et décrivez les activités qui seront utilisées pour soutenir les objectifs. Ces éléments devront être ajustés pour s'aligner sur la politique du Fonds auquel vous postulez.

Objectif général: contribuer à l'amélioration de la sécurité alimentaire et nutritionnelle des populations dans le contexte des changements climatiques et de COVID-19.

Objectifs spécifiques
- Augmenter la capacité de productions agricoles des terres
- Assurer l'appropriation des technologies d'adaptation au niveau communautaire

Parties prenantes : dressez la liste des parties prenantes qui auront un rôle à jouer dans le projet et qui sont susceptibles d'être affectées positivement et/ou négativement par le projet. Réalisez une carte pressentant les pouvoirs et les intérêts des parties prenantes.

Partie prenante	Type d'institution	Role / Responsabilité dans le projet	Susceptibles d'être impactés positivement ou négativement par le projet
Ministère de l'Agriculture	Etatique	Encadrement et suivi des travaux	Positif
Ministère en charge de l'Environnement	Etatique	Encadrement et suivi des travaux	Positif
Ministère en charge de l'eau	Etatique	Encadrement et suivi des travaux	Positif
Ministère de l'Elevage	Etatique	Encadrement et suivi des travaux	Positif
HCi3N	Etatique	suivi des travaux	Positif
Collectivités locales	Etatique	suivi des travaux	Positif
ONGs	OSC	Exécution des travaux	Positif
Secteur privé	privé	Commercialisation des produits	Positif
Bénéficiaires		Exécution des travaux	Positif

3. PROCHAINES ÉTAPES

Identifiez et décrivez brièvement les prochaines étapes que vous entreprendrez pour développer davantage cette note conceptuelle, notamment le calendrier. Il peut s'agir de: collecter des données et entreprendre une analyse pour combler les lacunes en matière information; identifier et organiser une ou plusieurs réunions avec l'entité accréditée proposée afin d'obtenir son engagement; organiser des réunions avec les principales parties prenantes ; élaborer une carte des intérêts/pouvoirs des parties prenantes ; élaborer une théorie du changement ; planifier une étude de préfaisabilité, etc.

- Réunion de cadrage avec l'entité accréditée :
- Consultation des parties prenantes
- Collecte et analyse des données
- Rédaction de la note conceptuelle
- Soumission à l'AND pour observations
- Lettre de non objection de l'AND
- Soumission au GCF

Rwanda: Building resilience to landslide and flooding hazards through implementing Sebeya Catchment restoration

NAP write workshop template - UNEP
Project concept note

1. GENERAL INFORMATION

Project title:

Building resilience to landslide and flooding hazards through implementing Sebeya Catchment restoration

Project site and scale:

Rutsiro, Ngororero, Nyabihu and Rubavu Districts

Proponent/Executing Entity:

Rwanda Environment Management Authority (REMA)

Accredited entity:

Ministry of Environment

Project partners:

Ministry of Finance and Economic Planning, Ministry of Agriculture and Animal Resources, Rwanda Water Board, Rwanda Forestry Authority, Rwanda Agriculture Board, Ministry of Local Government, Rubavu District, RENGOF, Farmers Cooperatives.

2. PROJECT DESCRIPTION

Context and Baseline: 2 paragraphs explaining the broad context of the project and the problem intended to be solved. Describe the context of the target community/ beneficiaries (livelihood, ethnicity, gender, geography, ecosystems, political context etc). Describe the climate risk that this project seeks to address.

List the available climate scenarios/ data available to back up the project proposal and define what information is missing at this stage.

- Sebeya River gets its source in the mountains of Rutsiro District in Western Rwanda.
- The river flows for over 110 kilometers with a catchment area of 286 square kilometers spanning in 4 districts namely Rutsiro, Ngororero, Nyabihu and Rubavu.
- Since ten past years, every rainy season, thousands of people (1,233 households in March 2018) including many women and children are displaced and see their property (homes, crops

and livestock) damaged by floods and landslides, as result of poor agriculture practices, deforestation, and unsustainable mining practices upstream to mention few.
• With future climate change, the consequences are expected to be higher. As in Rubavu district many models agree on the increase in precipitation and water runoff (https://climateinformation.org/create-report/)

Problem statement: What is the underlying problem from a climate change adaptation perspective? What are the non-climate drivers and what are the climate change drivers?

Describe the main root causes and barriers (social, gender, fiscal, regulatory, technological, financial, ecological, institutional, etc.) that need to be addressed.

Non climatic drivers: Poor agricultural practices and unsustainable mining
Climatic drivers: Heavy rainfall

Root causes and barriers: Currently despite the effort of the GoR to restore degraded ecosystems and landscapes, a great part of Sebeya catchment is not well-managed and the changing climate coupled with result in increasing the runoff, landslides upstream, and increasing floods in downstream. This has led to loss of soil fertility and loss of biodiversity in the region.

Objectives of the project: Briefly state the overall project goal, what is the adaptation objective(s) to be pursued to achieve that goal, and describe the activities to be used to support the objectives. This will have to be adjusted to be aligned with the Fund policy you are applying to.

The project aims to restore Sebeya catchment through afforestation and the promotion of agroforestry, climate smart agriculture as part of an effort to restore the catchment to fight against floods and landslides and improve livelihood of communities through job creation and improvement of soil fertility.

Stakeholders: list the stakeholders that will have a role to play in the project and are likely to be positively and negatively impacted by the project. Draft a power/interest map.

Stakeholder	Type of institution	Role / Responsibility in the project	Likely to be positively or negatively impacted by the project

3. NEXT STEPS

Identify and briefly describe next steps that you will undertake to further develop this concept note, including timelines. These can include: collect data and undertake analysis to fill information gaps;

identify and organize meeting(s) with proposed accredited entities to secure their engagement; organize meetings with key stakeholders; elaborate a stakeholder interest/power spider map; elaborate a theory of change; plan a pre-feasibility study, etc.

Sao Tome and Principe: Enhancing preparedness in addressing floods through early warning systems

NAP write workshop template - UNEP
Project concept note

1. GENERAL INFORMATION

Project title:

Enhancing preparedness in addressing floods through early warning systems.

Project site and scale:

National

Proponent/Executing Entity:

INM

Accredited entity:

PNUD

Project partners:

UNEP, WMO, CONPREC

2. PROJECT DESCRIPTION

Context and Baseline: 2 paragraphs explaining the broad context of the project and the problem intended to be solved. Describe the context of the target community/ beneficiaries (livelihood, ethnicity, gender, geography, ecosystems, political context etc). Describe the climate risk that this project seeks to address.

List the available climate scenarios/ data available to back up the project proposal and define what information is missing at this stage.

According to the National Strategy for Disaster Risk Management (2016), Sao Tome and Principe is particularly vulnerable to coastal and river flash floods following heavy rainfall. Flash floods and severe storms are frequently associated with hail, thunder, lightning and violent winds. The convergence of these hazards from 2014 to 2016 resulted in widespread flooding across coastal communities that destroyed homes and caused loss of lives.

More recently, rainfall in 2021 in Sao Tome and Principe peaked between 27 and 28 December 2021, causing the water levels of the country's rivers to rise. According to the country's Meteorological Institute, the country had not recorded such heavy rainfall in over 30 years. On 30

December 2021, the government of Sao Tome declared a state of disaster due to the damage caused and appealed for aid to international partners.

Problem statement: What is the underlying problem from a climate change adaptation perspective? What are the non-climate drivers and what are the climate change drivers?

Describe the main root causes and barriers (social, gender, fiscal, regulatory, technological, financial, ecological, institutional, etc.) that need to be addressed.

There is a need for the elaboration of Local Climate Adaptation Plans and DRR Action Plans at district and community levels. Besides, the systematic observation of climate change aspects concerns the climatological and hydrological networks, considering that the country does not yet have an oceanographic network.

The weather network is relatively modest with some national STP stations to be managed by INM.

In STP the hydrological observations are under the responsibility of the Directorate General of Natural Resources and Energy.

Overall, STP needs to strengthen the production of data and information on a broader range of variables, with greater frequency, and in a disaggregated form, to support an evidence-based response to climate change and natural hazards, environmental degradation, and to monitor biodiversity loss and unsustainable environmental practices, and evaluate the environmental impact of investment and development proposals.

Objectives of the project: Briefly state the overall project goal, what is the adaptation objective(s) to be pursued to achieve that goal, and describe the activities to be used to support the objectives. This will have to be adjusted to be aligned with the Fund policy you are applying to.

- Coordinated early warning systems and improved preparedness and Response capacity in STP.
- This entails also better capacity of meteorological services which is currently very limited.
- Strengthening community preparedness and adaptation capacities through awareness raising activities and the development of early warning systems.

Stakeholders: list the stakeholders that will have a role to play in the project and are likely to be positively and negatively impacted by the project. Draft a power/interest map.

Stakeholder	Type of institution	Role / Responsibility in the project	Likely to be positively or negatively impacted by the project
INM	Public	Coordinator	
PNUD	Public	Fund Mobilization	
UNEP, WMO	International Organization	Partner	
LEG, NAP technical working group	Technical advice / assistance	To mobilize engagement of	

		relevant organizations to support the project development and implementation To provide inputs/comments in project design – concept note, full proposal, and review reports	
Companies, enterprises	Private sector	Implementing, monitoring, financing partner / beneficiaries	
NGOs, CBOs, associations	Civil society	Monitoring/evaluation	Positively
Research institutions, Universities	Academia		
Local communities	Beneficiaries		Positively

3. NEXT STEPS

Identify and briefly describe next steps that you will undertake to further develop this concept note, including timelines. These can include: collect data and undertake analysis to fill information gaps; identify and organize meeting(s) with proposed accredited entities to secure their engagement; organize meetings with key stakeholders; elaborate a stakeholder interest/power spider map; elaborate a theory of change; plan a pre-feasibility study, etc.

- The public consultation
- Collect of data
- Cartography and analysis of the data
- Interpretation

Senegal: Renforcement de la résilience a l'insécurité alimentaire, hydrique et sanitaire

NAP write workshop template - UNEP
Project concept note

1. INFORMATIONS GENERALES

Titre du projet : Renforcement de la Résilience à l'insécurité alimentaire, hydrique et sanitaire

Site et échelle du projet : niveau national

Promoteur/Entité d'exécution : Ministère de l'environnement et du Développement durable

Entité accréditée : CSE/ LBA

Partenaires du projet : autres organisations partenaires s engagées dans la mise en œuvre.

2. DESCRIPTIF DU PROJET

Contexte et base de référence : 2 paragraphes expliquant le contexte général du projet et le problème que l'on veut résoudre. Décrire le contexte de la communauté cible/ des bénéficiaires (moyens de subsistance, ethnicité, genre, géographie, écosystèmes, contexte politique etc). Décrivez le risque climatique que ce projet cherche à traiter.

Dressez la liste des scénarios climatiques disponibles/des données disponibles pour étayer la proposition de projet et définissez les informations manquantes à ce stade.

La croissance démographique, l'expansion de l'urbanisation, le développement de l'industrialisation, de l'agriculture, du tourisme, ainsi que les changements climatiques et les évolutions dans les styles de vie, y compris dans l'alimentation, exercent des contraintes croissantes sur les ressources en eau et les écosystèmes, qui obligent à rechercher les moyens de bien gérer cette ressource à toutes les échelles possibles, en particulier dans le cas plus complexe des eaux artificiel et superficiel.

Les zones d'intervention du projet sont confrontées à des risques d'inondation, des vagues de chaleur, d'intrusion marine. Ces risques ont entrainé la salinisation des terres, des pertes de terres arables, une recrudescence de maladies climatiques, inaccessibilité de l'eau potable etc.

A l'horizon 2035, les prévisions indiquent une augmentation moyenne entre 1,17 et 1,41°C et une baisse générale de la pluviométrie de 16 mm voire même de 89 mm en moyenne. Cependant, il sera nécessaire d'étudier de manière plus approfondie les scénarios climatiques disponibles pour certaines localités identifiées dans le projet.

Problématique : Décrivez quel est le problème sous-jacent avec une perspective d'adaptation au changement climatique ? Quels sont les facteurs non climatiques et quels sont les facteurs de changement climatique ? Décrivez les raisons principales et les principaux obstacles (sociaux, sexospécifiques, fiscaux, réglementaires, technologiques, financiers, écologiques, institutionnels, etc.) qui doivent etre addressés

Objectifs du projet : Indiquez brièvement le but général du projet, quel est le ou les objectifs d'adaptation à poursuivre pour atteindre ce but, et décrivez les activités qui seront utilisées pour soutenir les objectifs. Ces éléments devront être ajustés pour s'aligner sur la politique du Fonds auquel vous postulez.

Le Gouvernement du Sénégal a mis en place à travers le PSE, un ensemble de mesures visant à atténuer la vulnérabilité des communautés et groupes vulnérables contre l'insécurité alimentaire, l'exposition ou la survenance des risques sociaux et crises dues aux catastrophes naturelles/climatiques et anthropiques. Ces conséquences notées sont dues à des facteurs climatiques tels que : les inondations, les vagues de chaleur, et des facteurs non climatiques tels que : la salinisation des terres, mauvaise urbanisation, croissance de la démographie,

Ainsi, le pays dispose d'une stratégie nationale de protection sociale et une politique pour la résilience des communautés qui vise à garantir un meilleur accès aux services essentiels et aux transferts sociaux pour les plus pauvres et les plus vulnérables et relever les défis liés à la gestion des changements climatiques et à l'adaptation.

Les objectifs du projet consistent à faire :

- La Promotion de pratiques permettant une utilisation rationnelle des ressources en eau ;
- Développement des capacités de surveillance épidémiologique des phénomènes de santé sensibles au changement climatique (certaines conditions climatiques favorisent, le développement de certains insectes par exemple le l'anophèle femelle qui favorise le paludisme et la bilharziose)
- Développement et Promotion de variétés et espèces adaptées Mise à l'échelle de l'Agroécologie / agriculture intelligente au changement climatique (semence certifier et adapter aux variations climatiques)

Ce projet va se focaliser sur la :

Ligne d'action : Promotion de pratiques d'utilisation rationnelle des ressources en eau
Programme de résilience des ressources en eaux souterraines et superficielles face aux effets du changement climatique

• programme de transfert d'eau
• Programme de mobilisation et valorisation des eaux de ruissellement dans les bassins versants des régions centre et est du Sénégal
• Programme pour l'amélioration de l'accès à l'eau potable en milieu rural (PPRA)

Parties prenantes : dressez la liste des parties prenantes qui auront un rôle à jouer dans le projet et qui sont susceptibles d'être affectées positivement et/ou négativement par le projet. Réalisez une carte pressentant les pouvoirs et les intérêts des parties prenantes.

Partie prenante	Type d'institution	Role / Responsabilité dans le projet	Susceptibles d'être impactés positivement ou négativement par le projet
- Entité accréditée (Le Centre de Suivi Ecologique (CSE) - Ministères, Membres de l'administration territoriale (DEEC; COMNACC; Commission Nationale de Développement Durable (CNDD); L'Agence Nationale de l'Aviation Civile et de la Météorologie (ANACIM);e Centre d'Etudes et de Recherches sur les Energies renouvelables (CERER) , des collectivités locales, des élus locaux, des experts et des membres de la société civile des régions es acteurs Institutionnels (Ministères, Directions techniques, Assemblée Nationale, CESE), les institutions de recherche (Universités, institutions de recherche, centre de recherche…), les Collectivités territoriales, gence, ONG, Secteur privé, Société Civile les Communautés (OCB, OP…).	le gouvernement -l'Administration territoriale - collectivités locales, - - - élus locaux,	**Les membres du Gouvernement (Ministères, représentants)**: Les projets et programmes s'inscrivent dans le cadre de la politique globale mise en œuvre par le Gouvernement du Sénégal pour favoriser une croissance économique à fort impact sur le développement humain en vue de réduire la pauvreté, accroitre la résilience des communautés vulnérables et d'atteindre les objectifs du Développement durable (ODD). Dans le cadre du programmes pays, ils devront insister plus sur l'intégration et la mise à jour des politiques sectorielles afin d'y intégrer les problématiques liées aux changements climatiques pour aller vers une trajectoire transformationnelle sobre en investissement carbone et résiliente aux changements climatiques. La structuration des projets/ programmes sur le plan institutionnel et financier pourra permettre de définir les rôles et niveau de contribution des partenaires (ONG, secteur privé, PTF) d'avoir un dispositif de suivi au sein des départements techniques sur l'exécution des projets et programmes. **La Société Civile et les ONGs**: Is sont proches de la	**Positivement:** - Amélioration des conditions de vie et d'existence des personnes vulnérable et impactées; - Le Gouvernement du Sénégal a mis en place les conditions pour rendre attractive la « destination Sénégal » en termes d'investissement. Il est noté un nombre important de possibilités de mobilisation de ressources sous forme de prêts, de dons, de prise de participation, etc. Sur cette dynamique, des efforts importants ont été consentis par le Gouvernement du Sénégal, par le biais de l'Agence de Promotion des Investissements et des Grands Travaux (APIX) qui a mis en place des conditions visant à accroître l'attractivité du Sénégal pour les investisseurs; - soutenu par un cadre réglementaire clair, les Etablissements financiers intervenant au Sénégal peuvent mettre à la disposition du secteur privé des sources de financement nombreuses et diversifiées. **Négativement** - L'accès difficile aux financements, plus

	population, et ont un rôle dans la promotion d'un changement de paradigme vers des modèles de développement résilients au climat et sobres en carbone dans une perspective de contribution à l'effort collectif. Ces acteurs développent des projets pilotes, à but démonstratifs qui pourront être mis à l'échelle avec le fonds vert climat. En plus, dans le cadre de leur action, ils aident à remonter l'information adéquate de veille pour leur prise en compte par les politiques. Elles ont la capacité, de développer des projets et programmes communautaires, de sensibiliser les populations sur les effets néfastes du changement climatique, et de jouer le rôle de partenaire de mise en œuvre sur le terrain **le secteur privé**: seccteur incontournable dans le cadre de la mise en œuvre du programme-pays, le secteur devra jouer pleinement son rôle de catalyseurs par la création de richesse (emplois, cofinancement, durabilité, amélioration du pouvoir d'achat, replicabilité) à travers le développement de projets et programmes d'envergure permettant de résoudre les écarts au niveau de la technologie, du respect des normes environnementales et de limiter les des émissions des gaz à effet de serre (GES)	particulièrement au financement; - Absence d'entités nationales accréditées opérant avec les instruments financiers du FVC (Prise de participations, prêts concessionnels, garanties …) sur le marché sénégalais pour une diversification des sources et options de financement ; - La difficulté des acteurs privés et publics à répondre aux dossiers type de demande de fonds dans les temps, tout en respectant les standards ; - L'insuffisante prise en compte des enjeux des changements climatiques dans l'élaboration des documents stratégiques, lois et réglementation ; - aible mise en exergue des services énergétiques en tenant compte des différentes technologies plus efficaces (par exemple dans le secteur du transport promouvoir les véhicules utilisant du biocarburant, du gaz, de l'électricité, hybride etc.) - La difficulté d'accès à l'information climatique pour l'aide à la prise de décision et amélioration des pratiques d'usage; - Faible niveau de conscientisation de la population et des acteurs sur l'importance d'intégrer l'impact du changement climatique dans les opérations/activité

	les partenaires techniques et financiers: la capacité de lever des financements directement, et d'accompagner l'exécution des projets et programmes prioritaires dans le pays. Aussi, dans le cadre du programmes pays, ils peuvent appuyer dans le co-financement afin d'augmenter le niveau d'impact du projet	- Faible implication du secteur privé dans la lutte contre les changements climatiques notamment sur l'adaptation ;

3. PROCHAINES ÉTAPES

Identifiez et décrivez brièvement les prochaines étapes que vous entreprendrez pour développer davantage cette note conceptuelle, notamment le calendrier. Il peut s'agir de: collecter des données et entreprendre une analyse pour combler les lacunes en matière information; identifier et organiser une ou plusieurs réunions avec l'entité accréditée proposée afin d'obtenir son engagement; organiser des réunions avec les principales parties prenantes ; élaborer une carte des intérêts/pouvoirs des parties prenantes ; élaborer une théorie du changement ; planifier une étude de préfaisabilité, etc.

- Faire des entretiens avec toutes les parties prenantes qui serviront à identifier et actualiser les données/informations scientifiques qui seront prises en compte et à comprendre le processus de leur intégration dans les politiques et stratégies au niveau national aussi bien qu'au niveau local.

Sierra Leone: Adapting to Coastal climate change impacts through enhanced early warning information and coastal infrastructural development

NAP write workshop template - UNEP
Project concept note

1. GENERAL INFORMATION

Project title:

Adapting to Coastal climate change impacts through enhanced early warning information and coastal infrastructural development

Project site and scale:

National: Six Coastal districts in Sierra Leone (Western urban, Western rural, Bonthe, Moyamba, Kambia, Pujehun

Proponent/Executing Entity:

EPA-SL and SLMet in the Ministry of Environment

Accredited entity:

United Nations Development Programme (UNDP-SL)

Project partners:

Ministry of the Environment; Ministry of Tourism; Ministry of Youths; Ministry of Gender; Ministry of Finance; Ministry of Fisheries; Ministry of Local Government and Rural Development

2. PROJECT DESCRIPTION

Context and Baseline: 2 paragraphs explaining the broad context of the project and the problem intended to be solved. Describe the context of the target community/ beneficiaries (livelihood, ethnicity, gender, geography, ecosystems, political context etc). Describe the climate risk that this project seeks to address.

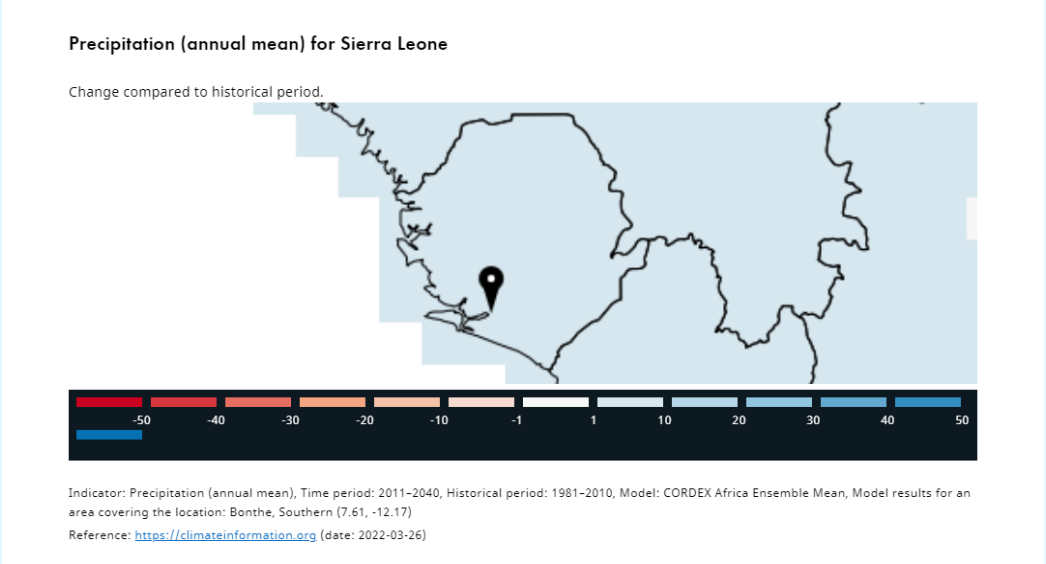
List the available climate scenarios/ data available to back up the project proposal and define what information is missing at this stage.

Sierra Leone is highly vulnerable to extreme weather events such as destructive severe weather and floods, which are increasing in number and severity as a consequence of climate change. Floods have recently become a major hazard in Sierra Leone in terms of both their magnitude and frequency which affect the coastline of Sierra Leone in term of coastal water rise. This affect livelihoods, infrastructure and production systems, hence impacting on Sustainable Development

(SD). Early Warning Systems (EWS) for floods that properly address all four EWS components, while also being community and impact-based. This project focuses on the coastal zone of sierra Leone which aims to demonstrate that an operational community and impact-based EWS for floods can be set up by leveraging the impact on the local stakeholders and knowledge.
On August 14th, 2017, Freetown experienced one of its most severe landslides. The landslide, comprising a mix of clay soil and boulders of up to 40 cubic meters, ripped through the city of Freetown with tremendous energy destroying everything in its path. Residents reported a large 'tidal wave' of material advancing down the river channel immediately after the landslide. The event had a massive human impact, with 1,141 declared dead or missing and over 6,000 people affected. The landslide caused major destruction of infrastructure, including 349 buildings, bridges, roads, schools, and health facilities. On the same day, flooding throughout the city also damaged infrastructure and affected households.
Calculated as the mean monthly values of daily precipitation averaged over all Januaries, Februaries, etc that are part of a 30 year period. This index is given as a relative change (100*(future period – reference period)/ reference period). Values of the future and reference period below 0.1 mm/day were set to 0 leading to missing values in the relative change. Here the medium ensemble value is given, calculated over the models listed in model attribute.
For the time period 2011–2040 compared to 1981–2010 (RCP 4.5)

- Median change is 3.8% (ensemble mean)
- 50% of the ensemble members (interquartile range) agree that the change lies between -0.69% and 7.2%

See the diagram below:



Problem statement: What is the underlying problem from a climate change adaptation perspective? What are the non-climate drivers and what are the climate change drivers?

Describe the main root causes and barriers (social, gender, fiscal, regulatory, technological, financial, ecological, institutional, etc.) that need to be addressed.

This project will seek to address the opportunity to integrate science-based climate information into coastal community decision making and infrastructural development of the six coastlines. It also tries to improve access to weather and climate information products for early warnings

services, alternative livelihood, afforestation of degraded mangrove areas, enhanced gender inclusion (with greater percentages of women), cleaning of sea weeds along the coastal beaches of Sierra leone and youth empowerment in coastal infrastructural defense mechanisms.
The project interventions will build the capacity of relevant MDAs, youths and women and improve weather station networks and coastal walls along the six coastal districts in Sierra Leone. The project will also improve the ability of users to integrate weather and climate information into decision making to enhance their resilience to climate change by making information products and early warnings clear and user-oriented.

Objectives of the project: Briefly state the overall project goal, what is the adaptation objective(s) to be pursued to achieve that goal, and describe the activities to be used to support the objectives. This will have to be adjusted to be aligned with the Fund policy you are applying to.

The main objective of this project is to capacitate relevant MDAs and six coastal communities to adapt to Coastal climate change impacts through enhanced early warning information and coastal infrastructural development. The specific objectives are:
Component 1: Rehabilitation of Coastal Infrastructure and Slope Stabilization
Sub-Component: Slope Stabilization and Remediation measures through mangrove reforestation
Component 2: Strengthening Institutional Capacity, this is to Build the technical capacity of MDAs, for the delivering of coastal infrastructural management mechanisms

Sub-component 3: Strengthening Disaster Risk Management and Early Warning Systems to improve the observation network and dissemination of Climate Information to six the coastal communities
Sub-component: Strengthening coastal communities
Component 4: Conserve and rehabilitate degraded mangrove areas along the six coastal districts in of Sierra Leone

Component 5: Empower women and youth groups in coastal communities for the right based approach to coastal zone management
- Strengthen capacity of stakeholders and institutions to implement climate smart actions
- Livelihood opportunities are maintained or strengthened in the six coastal districts

Component 6: Project effectively managed and monitored in a cost-effective

Stakeholders: list the stakeholders that will have a role to play in the project and are likely to be positively and negatively impacted by the project. Draft a power/interest map.

Stakeholder	Type of institution	Role / Responsibility in the project	Likely to be positively or negatively impacted by the project
Environmentalist, Meteorologist and CSOs	Ministry of Environment	-provide meteorological information -Lead in the reforestation of mangrove	positive

		-Provide guidance in other coastal defense mechanism -Raise environment and climate change awareness	
Tourist industry	Ministry of Tourism	Support in rehabilitation and restoration of tourist infrastructure	positive
Fishermen	Ministry of Fisheries	Support in the restoration of mangrove areas that are breeding zone for fish and other marine fauna and flora	positive
Financial secretary in the Ministry of Finance	Ministry of Finance	Co-finance	Positive
Woman (especially vulnerable women)	Ministry of Gender	-Provide support to the vulnerable women in the six coastal districts in Sierra Leone	Positive
Youths	Ministry of Youth	-Engage youths in mangroves reforestation project -Youth in climate change awareness raising programmes	positive
Local Councils	Ministry of Local Government and Rural Development	Take leadership in the restoration of degraded mangrove areas	Positive

3. NEXT STEPS

Identify and briefly describe next steps that you will undertake to further develop this concept note, including timelines. These can include: collect data and undertake analysis to fill information gaps; identify and organize meeting(s) with proposed accredited entities to secure their engagement; organize meetings with key stakeholders; elaborate a stakeholder interest/power spider map; elaborate a theory of change; plan a pre-feasibility study, etc.

- Stakeholders consultation
- Incorporate stakeholders' inputs into the concept
- Data collection
- To establish baseline information about the project
- Do quality control and finalization of the concept note
- Validation of the concept note
- Endorsement by NDA, and

- Submission of the note

South Sudan: Establish improved drought and flood Early Warning Systems in South Sudan through improved hydro-meteorological monitoring network

NAP write workshop template – UNEP
Project concept note

1. GENERAL INFORMATION

Project title:

Establish improved drought and flood Early Warning Systems in South Sudan through improved hydro-meteorological monitoring network

Project site and scale:

national

Proponent/Executing Entity:

South Sudan Meteorological Department

Accredited entity:

UNDP South Sudan

Project partners:

Ministry of Environment and Forestry, Ministry of Disaster Management, Ministry of Water Resource and Ministry of Agriculture and Food Security

2. PROJECT DESCRIPTION

Context and Baseline: 2 paragraphs explaining the broad context of the project and the problem intended to be solved. Describe the context of the target community/ beneficiaries (livelihood, ethnicity, gender, geography, ecosystems, political context etc). Describe the climate risk that this project seeks to address.

List the available climate scenarios/ data available to back up the project proposal and define what information is missing at this stage.

Climate change is likely to increase the frequency and intensity of extreme climatic events such as floods and droughts. For example, climate models results show that drought will increase as

For Soils moisture (annual mean)

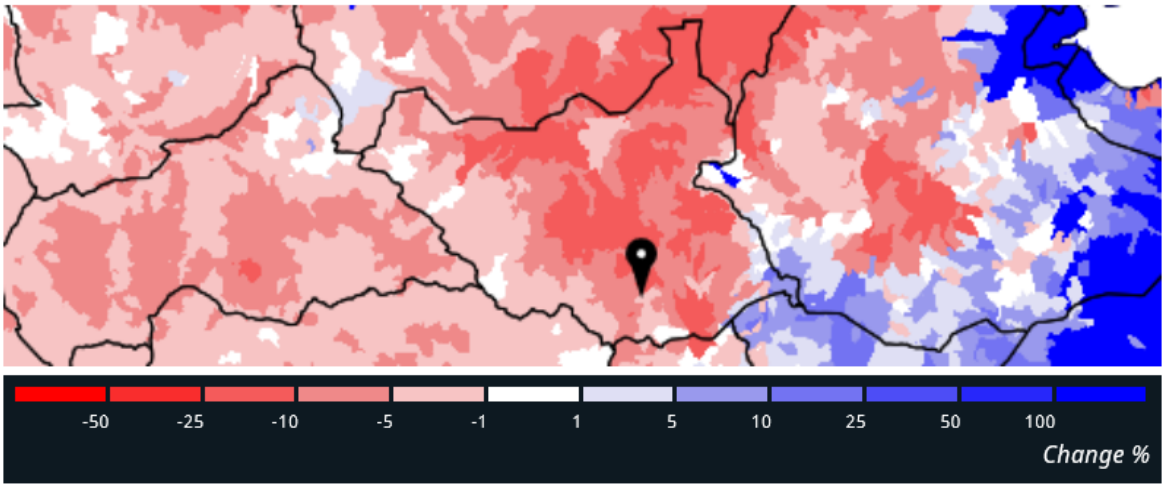
- The time period 2041–2070 compared to 1981–2010 (RCP 4.5)
- Median change is -7% (ensemble mean)

- 50% of the ensemble members (interquartile range) agree that the change lies between -18% and -1.4%

The impacts of these events will be severe on developing countries like South Sudan. Extreme climatic events can be monitored and predicted with current technologies such as climate models, satellites and radars. The Department of Meteorology in South Sudan, however, do not have adequate technical or financial capacity to provide accurate and timely user-specific weather and climate forecasts because of limited: i) facilities; ii) skilled personnel; and iii) technology. Currently, only five of the 28 hydro-meteorological stations located in South Sudan are operational. The country therefore relies upon regional climate models and data for its local forecasts. Communication, satellite and radar facilities that can support the generation of weather and climate information are also lacking. Consequently, there is limited climatic information available to identify areas in South Sudan that are vulnerable to the predicted impacts of climate change. There is also limited climatic information available to generate and disseminate flood and drought early warnings. Without a functional and efficient early warning system, communities are unprepared and therefore highly vulnerable to floods and droughts. There is therefore a need to: i) strengthen the hydro-meteorological monitoring network across the country so that extreme climatic events can be accurately measured and predicted; and ii) establish flood and drought early warning systems to reduce the vulnerability of communities to climate change.
ISSUES: Temperature increase, reduced moisture, aridity, increase/decreas discharge and runoffs and increase/decrease in precipitation.

Soils moisture (annual mean) for S. Sudan

Change compared to historical period.



Indicator: Soils moisture (annual mean), Time period: 2041–2070, Historical period: 1981–2010, Model: CORDEX Africa - WWHYPE Ensemble Mean, Model results for an area covering the location: Juba, Central Equatoria State (4.85, 31.58)

Reference: https://climateinformation.org (date: 2022-03-26)

Problem statement: What is the underlying problem from a climate change adaptation perspective? What are the non-climate drivers and what are the climate change drivers?

Describe the main root causes and barriers (social, gender, fiscal, regulatory, technological, financial, ecological, institutional, etc.) that need to be addressed.

Increasing temperatures leads to high evaporation resulting to soil water deficit. Soil water deficit lead to grassland and crop damage, causing crop failure and decrease in yields. On the other hand, heavy rains and overflow of the Nile River results into flooding, soil erosion and land degradation consequently leading to loss of agricultural land, destruction of properties, disease outbreak (human and livestock) and new pests. The project seek to address capacity gaps, gender mainstreaming, coordination and awareness

Objectives of the project: Briefly state the overall project goal, what is the adaptation objective(s) to be pursued to achieve that goal, and describe the activities to be used to support the objectives. This will have to be adjusted to be aligned with the Fund policy you are applying to.

The main objective of the project is to establish a climate monitoring and Early Warning System for timely provision of accurate information for disaster preparedness to reduce the vulnerability of local communities to floods and droughts.

Stakeholders: list the stakeholders that will have a role to play in the project and are likely to be positively and negatively impacted by the project. Draft a power/interest map.

Stakeholder	Type of institution	Role / Responsibility in the project	Likely to be positively or negatively impacted by the project
South Sudan Department of Meteorology	Government	Executing Entity	Positively impacted
UNDP	NGO	Provide support	Positively impacted
Ministry of Environment and Forestry	Government	Project oversight	Positively impacted
Ministry of Water Resources & Irrigation	Government	Executing	Positively impacted
Ministry of Agriculture	Government		Positively impacted
Ministry for Disaster	Government		Positively impacted
NWD	CSO	Executing entity	Positively impacted

3. NEXT STEPS

Identify and briefly describe next steps that you will undertake to further develop this concept note, including timelines. These can include: collect data and undertake analysis to fill information gaps; identify and organize meeting(s) with proposed accredited entities to secure their engagement; organize meetings with key stakeholders; elaborate a stakeholder interest/power spider map; elaborate a theory of change; plan a pre-feasibility study, etc.

- Stakeholder consultations

- Data collections and analysis to fill the knowledge and information gap
- Meeting with accredited entities

Sudan: Sustainable Utilization of water resources to build resilience and food security in rural communities in White Nile State using integrated water management approaches

NAP writing workshop template - UNEP
Project concept note

1. GENERAL INFORMATION

Project title:

Sustainable Utilization of water resources to build resilience and food security in rural communities in White Nile State using Integrated water management approaches.

Project site and scale: national/ sub-regional/ district level

Um Rimmta | Al Dwaim | Kosti | Tandelti | Alsalam | Algabalain Localities – White Nile State

Proponent/Executing Entity:

Higher Council for Environment and Natural Resources

Accredited entity: / name of the organization that will execute the project with the Executing Entity

UNEP

Project partners: other additional partner organisations engaged in implementation.

Ministries (Water Resources and Irrigation, Directorate of Drinking Water and Sanitation, Agriculture and Forests, Animal Resources, Rangelands Directorate, , infrastructure, Finance)- State Government.

2. PROJECT DESCRIPTION

Context and Baseline: 2 paragraphs explaining the broad context of the project and the problem intended to be solved. Describe the context of the target community/ beneficiaries (livelihood, ethnicity, gender, geography, ecosystems, political context etc). Describe the climate risk that this project seeks to address.

List the available climate scenarios/ data available to back up the project proposal and define what information is missing at this stage.

Sudan is characterized by water scarcity , about 94% of the country area is located in the dry and semi-dry climates. The Nile and its tributaries constitute the main water sources however, characterized by high seasonality and controversy. Moreover, the country is hardly hit by the impacts of climate change including increased incidence of extreme events (floods and droughts).

The rains of the Sudan witnessed significant decline since early sixties of the 20th century (Osman et al., 2001). This is supported by the findings of Adam, (2000) who estimated that dry Sudan experienced a 19% reduction in rainfall upon comparing the two climatic normals of (1941-1970) and (1970-1999).

Despite the fact that Sudan suffers from chronic water scarcity, floods are also common in the country indicating high climatic variability and change. Even though flash floods are less common than riverine floods however, they may lead to very severe impacts, the most serious of which occurred in 1978, 1999, 2007, 2009, 2013, 2016, 2018, 2019 and 2020. Lately flash floods caused more severe impacts than river floods e.g. the flood of 2007 that is believed to be the most terrible flooding recorded in recent history.

The rainfall changes: Future projections till 2050 suggest that precipitation changes will vary from a reduction by 9% to an increase by 9%. Annually Kassala and Gedarif States will have the highest annual reductions estimated to nearly 3%, whereas other States will receive annual increase that ranges between 3% and 15%. The Red Sea, River Nile, Northern, North Darfur will be the highest seasonally vulnerable States, where the precipitation decrease will be around 9%.

And these rainfall patterns have led to serious drought episodes throughout the country
Air temperatures of Sudan have been slowly increasing during the period 1960 – 2009. Generally temperatures during the period 2000-2009 are almost 0.8^{O}C and 1.6^{O}C higher than that of the period 1960-1969 (HCENR, 2013). It's worth noting that rise in temperature will increase evaporative power and consequently crop water requirements will increase. In addition to that the vegetative cover (rangelands and forests) will be reduced and consequently water and wind erosion will increase.

For future projections till 2050 under the SRES A2ASF and B2ASF scenarios, the minimum temperature increase will be 1ºC and 0.4ºC in February and the maximum temperature increase will be 3ºC and 2.2ºC in November, respectively. The mean annual temperature increase will be 2.7ºC and 2ºC, respectively.

The baseline situation is one in which rural households in Sudan are becoming increasingly unable to withstand and recover from climatic shocks, particularly drought. While there are other types of shocks that farmer/pastoralist households are forced to endure related to health, forced migration, or conflicts, they are largely derivative of an inability to effectively cope with recurring drought episodes. This vulnerability is likely to intensify for dryland households in Sudan in the absence of effective climate change adaptation interventions that build increased resilience to drought.

The ability of farmer/pastoralist households to cope with droughts has been compromised by the increasing frequency of drought episodes. In the baseline situation, the time between climatic shocks is becoming shorter and shorter, leading to inadequate time to rebuild household assets to withstand subsequent weather-related shocks.

Within the context of its SNC, a vulnerability assessment of Sudan's water resources was conducted against the backdrop of two socioeconomic scenarios (no growth and 2% growth) unfolding over projected climate conditions up to 2050 and 2090. The findings suggest that under all socioeconomic and almost all climatic scenarios, water demand is expected to increase by up to 11% relative to the baseline conditions. Water flow in the Nile River will decrease considerably between 20% and 30%. By 2030, water storage will decrease by nearly 40% due to increase water

demand, but also to much warmer climate and associated higher evapotranspiration rates. This suggests that climate change will significantly exacerbate the risks of increasing water stress in Sudan over the next 40 years.

The project is aligned with Sudan's priorities as outlined in its Nationally Determined Contribution, NAP and GCF Country Program

Context of the target community/ beneficiaries (livelihood, ethnicity, gender, geography, ecosystems, political context etc):

Farmers and pastoralists in the White Nile State are likely to be continually impacted by climate hazards, in particular related to increasing frequency and severity of droughts (and floods). This is likely to cause crop failure, low productivity, death of livestock, and abandonment of pastures and fields due to desertification. This in turn will exacerbate already existing social and environmental stressors in the state

Problem statement: What is the underlying problem from a climate change adaptation perspective? What are the non-climate drivers and what are the climate change drivers?

Describe the main root causes and barriers (social, gender, fiscal, regulatory, technological, financial, ecological, institutional, etc.) that need to be addressed.

The problem statement : The acute vulnerability of subsistence farmers ,agro-pastoralist and nomadic pastoralist communities in Sudan's dryland zones to the increasing frequency of drought, a vulnerability that is compounded by deep poverty and reliance upon traditional rainfed agricultural practices that are proving to be increasingly unsustainable in the face of climate change.
The White Nile State is severely impacted by the climate change induced droughts and floods. Most notably, increasing temperatures, decreasing trends of annual precipitation as well as increased variability, are causing a gradual shift of climate end ecological zones from north to south. This situation has adversely impacted water availability and agricultural potential, through increased frequency of droughts, dust storms and heat waves. There is also an increasing frequency of extreme flooding events caused by an increase in intensity of rainfall both during the rainy season and in rainstorms (flash flooding).
These climate trends and risks are exacerbated by a number of non-climate issues such as: decreased vegetation cover due to overgrazing and deforestation, and inefficient management of water resources – thus further increasing trends of ecological zone shift and desertification.
Barriers:(economic, capacity and technical skills and social
The present economic hardships the government will not be able to finance water supply infrastructure
local communities will not be able to provide such substantial finance. (limited smallholder access to financing)
limited data infrastructure
Lack of public environmental awareness
limited number of equipped institutions/ experts

Objectives of the project: Briefly state the overall project goal, what is the adaptation objective(s) to be pursued to achieve that goal, and describe the activities to be used to support the objectives. This will have to be adjusted to be aligned with the Fund policy you are applying to.

This project offers an innovative tailored technological solution to target water resources affected by climate change which contribute to the resilience of most vulnerable communities, health and well-being, food and water security and ecosystem services
The project will increase the availability of water resources through the construction and/or rehabilitation of hafirs (i.e., dugout enlargements into which surface-water runoff is converged during the rainy season), water yards (i.e., water extraction and distribution facility which includes borehole, storage tank, animal watering basins and tap stands), and sand water-storage dams (i.e., rain water harvesting structures).

The project capitalizes on synergies in climate risk management practices across agriculture, water, and rangelands to enhance water/food security under changing climate conditions. Key results are enhanced resilience to climate risks among subsistence farmer and nomadic pastoralist communities and promoting an enabling environment for long-term (post-project) adaptation activities in Sudan. Moreover, the enhanced capacity of the state-level administration in areas of environmental governance, management of shared natural resources, inter- and intra-state relations and how to establish a network of early
warning systems will help prevent conflicts and out-mitigation in the targeted areas.

Activities:

- Install of water harvesting techniques.(Earth Dams, underground dams & Hafirs)
- Installation of water treatment equipment in order to filter the water.
- Awareness raising for the project beneficiaries(Basin forum, water users associations)
- Capture Lessons learnt and Disseminate it
- Involvement of local community as well as establishment of community committees with insuring the involvement of women and youth
- Small scale finance

Stakeholders: list the stakeholders that will have a role to play in the project and are likely to be positively and negatively impacted by the project. Draft a power/interest map.

Stakeholder	Type of institution	Role / Responsibility in the project	Likely to be positively or negatively impacted by the project
Water users(farmers and herders)		They hold the local knowledge, and are willing to share, how to make their value-chain more water-resilient	
State Water Corporation	Government	improved solar powered pumps	
LEG, NAP technical working group	Technical advice / assistance	To mobilize engagement of relevant organizations to	

		support the project development and implementation To provide inputs/comments in project design – concept note, full proposal, and review reports
The State's Range and Pasture Administration		rehabilitation of degraded rangelands
UNEP	International Organization	Accredited entity
Ministries (Water Resources and Irrigation, Directorate of Drinking Water and Sanitation, Agriculture and Forests, Animal Resources, Rangelands Directorate, infrastructure, Finance)-	Government	

3. NEXT STEPS

Identify and briefly describe next steps that you will undertake to further develop this concept note, including timelines. These can include: collect data and undertake analysis to fill information gaps; identify and organize meeting(s) with proposed accredited entity to secure their engagement; organize meetings with key stakeholders; elaborate a stakeholder interest/power spider map; elaborate a theory of change; plan a pre-feasibility study, etc.

- Collection and analysis of information, data and reports on the various water sources in the project area from the relevant federal and state authorities' ministries.
- Consultation with the other project stakeholders, such as the State Water Corporation, the Federal Authority for Drinking Water and Sanitation, CSOs and the Dams Implementation Unit, to integrate updated information on other initiatives and how the initiatives can complement each other.
- Communicate with the UNEP to further enhance the CN.

Tanzania: Strengthening climate resilience in the flood prone areas and drought areas in Tanzania

NAP writing workshop template - UNEP
Project concept note

1. GENERAL INFORMATION

Project title:

Strengthening climate resilience in the flood prone areas and drought areas in Tanzania

Project site and scale: national/ sub-regional/ district level

Seven (7) Sub-Region

Proponent/Executing Entity:

Vice President's Office and Fist Vice President's Office

Accredited entity: / name of the organization that will execute the project with the Executing Entity

UNEP

Project partners: other additional partner organisations engaged in implementation.

Ministry of Agriculture, Ministry of Administration Regional and Local Government Authority, Ministry of Health.

2. PROJECT DESCRIPTION

Context and Baseline: 2 paragraphs explaining the broad context of the project and the problem intended to be solved. Describe the context of the target community/ beneficiaries (livelihood, ethnicity, gender, geography, ecosystems, political context etc). Describe the climate risk that this project seeks to address.

List the available climate scenarios/ data available to back up the project proposal and define what information is missing at this stage.

Tanzania like other countries globally, has been facing several challenges related to climate change that threaten livelihoods of its citizens and socio-economic development at large. This climate change adverse impacts such as flood, other impacts include sea level rise, drought, and pest and diseases have let devastating effect on agriculture production, human settlement, biodiversity, food security and infrastructure in most area of the country namely, Arusha, Mara, Mwanza, Dodoma, Morogoro, Shinyanga and Dar es Salaam. For example, in 2011 chicken (35.3%), ducks (14.7%), goat (5.0%), pigs (2.7%), sheep (1.7%), and cattle (0.1%) were also dead because of the floods impacts in various parts of the country. Additionally, in December 2011 and January 2012 floods led to 40 deaths and displaced more than 10,000 settlements in Dar es

Salaam. Further, heavy rainfall and associated floods caused devastating destruction of infrastructures (such as roads, bridges, and railways).

The report of Controller and Audit General (2021) covering a period of five financial years (July 2015/16 to June 2019/20) revealed that flooding is estimated to be the costliest hazard at the national level, causing about 62% of losses from natural disasters from 1990 – 2014. The Audit further revealed that for the year 2016 to 2020 there has been an increase in the number of reported deaths due to floods, ranging between 17 in the year 2017 to 122 deaths in 2020. On the other hand, it was found that the proportion of the number of reported deaths due to floods compared to the cases reported from all other disasters was high in the year 2017 (77%) and for the year 2020, (91%). In addition, an increasing trend in the number of reported destructive events such as complete or partial house demolitions, in various households, ranging between 182 and 22,680 in the year 2016 and 2020, respectively. On the other hand, severe and recurrent droughts has led to death of 700,000 livestock including 316,437 cattle, 236,359 goats and 92,640 sheep died especial northern part of the country in late 2009 to the early 2010.

The evident from World Meteorological Organization, shows the climate scenarios of few selected regions as follows: In Arusha region, temperature (annual mean) for the time period 2011-2040 compared to 1981-2010 (RCP 8.5) indicate that, median change is 0.91°C (ensemble mean) and 50% of the ensemble members (interquartile range) agree that the change lies between 0.81°C and 1.1°C; In Mara region, precipitation (annual mean) for the time period 2011-2040 compared to 1981-2010 (RCP 8.5) indicate that, median change is 3.7% (ensemble mean) and 50% of the ensemble members (interquartile range) agree that the change lies between 1% and 6.9%; In Mwanza region, Water runoff (annual mean) for the time period 2011-2040 compared to 1981-2010 (RCP 8.5) indicate that, medium change is 4.1% (ensemble mean) and 50% of the ensemble members (interquartile range) agree that the change lies between -4.2% and 21%; and In Dodoma region, Soils Moisture (annual mean) for the time period 2011-2040 compared to 1981-2010 (RCP 8.5) indicate that, medium change is 3.8% (ensemble mean) and 50% of the ensemble members (interquartile range) agree that the change lies between -1.8% and 12%.

In that regards, it is important in addressing climate change adverse impacts by strengthening climate resilient in the dry land ecosystems and flood prone areas through integrated landscape ecosystem management, improved urban drainage design, and Climate smart agriculture is of critical important for ensuring sustainable economic growth in the country.

Problem statement: What is the underlying problem from a climate change adaptation perspective? What are the non-climate drivers and what are the climate change drivers?

Describe the main root causes and barriers (social, gender, fiscal, regulatory, technological, financial, ecological, institutional, etc.) that need to be addressed.

Flooding has increasingly become frequent and causes severe damage to infrastructures in both urban and rural areas. It also causes havoc to urban transport, markets, communication, business, and other services, increase or reduces of temperature lead unpredictable rain fall and rain patterns have changed. Despite of this, measures to address flooding continue to be insufficient and lack of intergrade water shed management. On the other hand, severe and recurrent droughts continue to causes loss of life for human and properties by affecting food security. However poor farmers including women and youth continue practice subsistence

farming involving poor technology and unimproved seeds and depend on rain fed agriculture. The aggregated effects of flooding have serious impacts on most vulnerable groups which includes Farmers, Livestock keepers, Youth and Women. In addition, non-climate factors such as unsustainable agricultural practices; deforestation; illegal and uncontrolled solid wastes that block drainage systems; and unsustainable fishing methods are among the factors amplify the adverse impacts of climate change.

Objectives of the project: Briefly state the overall project goal, what is the adaptation objective(s) to be pursued to achieve that goal, and describe the activities to be used to support the objectives. This will have to be adjusted to be aligned with the Fund policy you are applying to.

Overall objective
Strengthening climate resilient in the terrestrial ecosystems through improved urban drainage design and integrated landscape ecosystem management.

Specific Objectives
- Integrated flood and water shed management.
- To ensure comprehensive and holistic flood control mechanisms in upstream and downstream communities.
- Promote sustainable management of water catchments and water bodies (lakes and dams) to reduce flood risks.

OUTCOME
- **Flood and watershed management are integrated**

ACTIVITIES
- Install systematic monitoring and early warning in water resources;
- Demarcation of water sources for protection and conservation;
- Establish programmes and mechanisms for assessment and monitoring of water sources.

OUTCOME
- **Flood in upstream and downstream communities are controlled**

ACTIVITIES
- Undertake trees planting in water sources;
- Construction of rainwater harvesting technologies;
- Construction of climate resilience WASH infrastructure, technologies and services.

OUTCOME
- **Water catchments and water bodies are managed to reduce flood risks**

ACTIVITIES
- Formulation and support water resources governance through catchment water users' associations (WUAs) and other best practices;
- Construction of Flood control structures (eg. Sea wall and Dykes);
- Develop and adopt efficient groundwater resources exploitation technologies;
- Promote environmentally sound waste water management systems.

Stakeholders: list the stakeholders that will have a role to play in the project and are likely to be positively and negatively impacted by the project. Draft a power/interest map.

Stakeholder	Type of institution	Role / Responsibility in the project	Likely to be positively or negatively impacted by the project
MDAs	Government	- Coordination and implementation - Monitoring and evaluation	Yes
LGAs	Local Government	Implementation	Yes
Academia	Training and research	Innovation of new technology	Yes
CSOs & NGOs	Non state actors	Awareness	Yes
Private sectors	Private	Resource mobilization and implementation	Yes
LEG, NAP technical working group	Technical advice / assistance	To mobilize engagement of relevant organizations to support the project development and implementation To provide inputs/comments in project design – concept note, full proposal, and review reports	No

3. NEXT STEPS

Identify and briefly describe next steps that you will undertake to further develop this concept note, including timelines. These can include: collect data and undertake analysis to fill information gaps; identify and organize meeting(s) with proposed accredited entity to secure their engagement; organize meetings with key stakeholders; elaborate a stakeholder interest/power spider map; elaborate a theory of change; plan a pre-feasibility study, etc.

- Stockholders consultation
- Data collection
- Data analysis and compilation and development of baseline
- Development of full proposal
- Organizing validation workshops
- Government endorsement/approval
- Submission of the project proposal to the potential funder
- (Financial approval and implementation)

Tanzania: Sea level rise and terrain risk assessment and strategic intervention in Tanzania

NAP writing workshop template - UNEP
Project concept note

1. GENERAL INFORMATION

Project title:

Sea level rise and terrain risk assessment and strategic intervention in Tanzania

Project site and scale: national/ sub-regional/ district level

Sub-Regional - Coastlines of Dar es Salaam, Lindi, Mtwara, and Tanga (Tanzania mainland) and Zanzibar

Proponent/Executing Entity:

Vice President Office, United Republic of Tanzania and First Vice President's Office, Zanzibar Revolutionary Government

Accredited entity: / name of the organization that will execute the project with the Executing Entity

UNEP

Project partners: other additional partner organisations engaged in implementation.

President's Office, Regional Administration and Local Government, Prime Minister's Office (Disaster Risk Management); Ministry of Land, Housing and Human Settlement Development; Ministry of Fisheries and Livestock Development; Ministry of Infrastructure; Ministry of Agriculture; Ministry of Blue Economy; Zanzibar Environmental Management Authority; and National Environment Management Council.

3. PROJECT DESCRIPTION

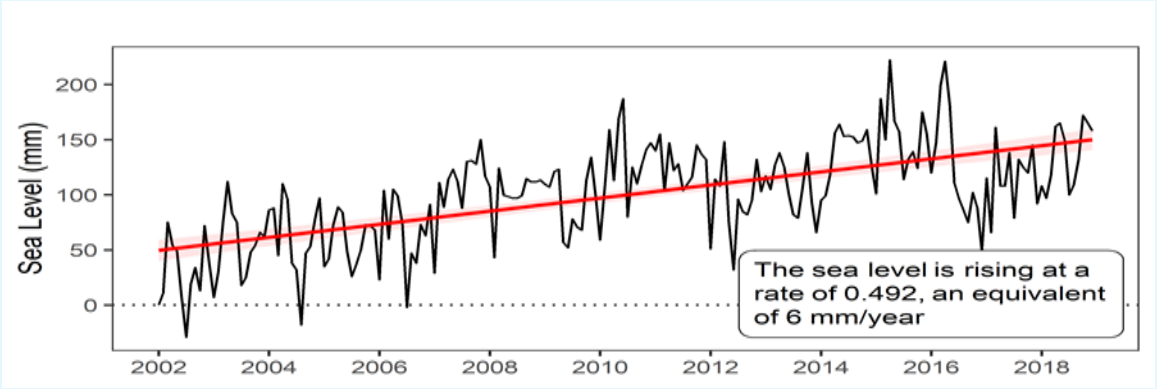
Context and Baseline: 2 paragraphs explaining the broad context of the project and the problem intended to be solved. Describe the context of the target community/ beneficiaries (livelihood, ethnicity, gender, geography, ecosystems, political context etc). Describe the climate risk that this project seeks to address.

List the available climate scenarios/ data available to back up the project proposal and define what information is missing at this stage.

The United Republic of Tanzania, consist of Tanzania mainland and Zanzibar. The country has a Territorial Sea of 64,000 sq. km., an Exclusive Economic Zone (EEZ) covering an area of about 223,000 sq. km , and include larger islands of Zanzibar and has a stretch of rich coastline of about

1,450 kilometers. Tanzanian coastal resources are of immense strategic importance to many social and economic sectors such as shipping, fishing, tourism, trade, agriculture, settlements and industrial developments. Nearly 16 million people live on the coastal Tanzania and rely on coastal resources and terrestrial ecosystem for their livelihood. In Zanzibar, which has about 30 percent of its land mass below 5m above sea level, ocean-based tourism is key to sustainable development.

On the other hand, the coastline face challenges related to climate change, in particular sea level rise. Sea level in Tanzania is rising at rate of 0.492, equivalent to 6mm per annum from 2002 to 2018 . Figure 1-1 shows trend in rise in Dar es Salaam coastline since 2002.



Currently, sea level rise in Tanzania mainland has led to beach erosion and destruction coast infrastructures (e.g., Mbweni JKT, Kinondoni Municipality, Mikadi Beach, Kigamboni). Other challenges relate to pollution from untreated municipal and industrial wastewater discharges, loss of marine biodiversity, beach erosion, submerging of small island, inundation of agricultural land, fresh water intrusion, clearance of mangroves, destruction of infrastructures such as hotels, roads, residential houses, ports and harbors. Rapid assessment of Dar es Salaam, Mtwara and Zanzibar shorelines show that beach erosions is alarming and threatening existence of security infrastructures, ports, hotels, roads, households and biodiversity resources at an alarming rate.

Government interventions has included deployment of nature-based solutions such mangrove and coral reef restoration. In addition, engineering solution such as construction of seawalls and groins. On the other hand, Some sea level risk assessments has been conducted in Dar es Salaam and Zanzibar. However, there is no comprehensive sea level rise and terrain risk assessment that can guide policy and technical interventions. This may lead to the risk of underestimating sea water level extremes if we use the available data set.

In that regards, it is important to undertake assessment of sea level rise and terrain risk assessment of all coastline in Tanzania mainland and Zanzibar coastline.

Problem statement: What is the underlying problem from a climate change adaptation perspective? What are the non-climate drivers and what are the climate change drivers?

Describe the main root causes and barriers (social, gender, fiscal, regulatory, technological, financial, ecological, institutional, etc.) that need to be addressed.

Increasing sea level rise affects a number of socio-economic activities along the coastline has led to intrusion of salty water in agriculture areas, destruction of biodiversity and settlement in the coastal areas. It also cause damage to infrastructures such as roads, offices, markets, hospitals, etc. In addition, surface water temperature has led to bleaching and remove the attractive of tourism which causes the decrease sources of income for Government and local people leave nearly the coasty area. Additionally, the most vulnerable groups in these areas are Fisheries, Farmers, Youth and Women.

Moreover, the non-climate factors which causes of beach erosion included unplanned settlement, illegal cutting of mangroves and dynamite fishing hence led to destruction of ecosystems and marine habitats.

Objectives of the project: Briefly state the overall project goal, what is the adaptation objective(s) to be pursued to achieve that goal, and describe the activities to be used to support the objectives. This will have to be adjusted to be aligned with the Fund policy you are applying to.

Overall objective
Assessment of sea level rise and terrain risk assessment of all coastline in Tanzania mainland and Zanzibar coastline.

Specific Objectives
- To assess impacts of sea level rise and terrain risk along the coast areas;
- To produce sea level rise and terrain digital models to help in decision making;
- Construction of seawalls along the area affected by sea level arise to reduce saltwater intrusion in agricultural farms and bore holes, where applicable
- To undertake mangrove and coral reef restoration
- Building capacity awareness enhance the protection biodiversity ecosystem

OUTPUT/OUTCOME
- **Impacts of sea level rise and terrain risk along the coast areas assessed**

ACTIVITIES
- Conduct assessment of sea level rise and terrain risk along the coast areas.
- Install monitoring and surveillance systems in coastal areas.
- Engagement of local communities in identification of risk areas.

OUTPUT/OUTCOME
- **Sea level rise and terrain digital models are conducted**

ACTIVITY
- Identification of consultancy to develop the model
- Production geo referenced digital map of areas prone to sea rise

OUTPUT/OUTCOME
- **Seawalls along the area affected by sea level arise to reduce saltwater intrusion in agricultural farms and bore holes constructed**

ACTIVITIES
- Construction of engineering structures in the identified areas.
- Promote nature-based solutions to rehabilitate and restore coastal and marine ecosystems areas.

- Support coastal communities to diversify alternative livelihoods to enhance adaptive capacity and reduce vulnerability to impacts of climate change.
- Support extension services and technologies for resilient development and management of fish resources and aquaculture.

OUTPUT/OUTCOME

- **Mangrove and coral reef restored**

ACTIVITIES

- Replanting of mangroves and coral reefs in degraded areas
- Develop and implement plan for management and restoration of marine and terrestrial protected areas.
- Review, develop and implement Marine Spatial and Integrated Coastal Zone Management Plans.

OUTPUT/OUTCOME

- **Capacity building for protection biodiversity ecosystem conducted**

ACTIVITIES

- Undertake training to build capacity and awareness on fishermen and farmers on climate smart fisheries technologies and practices.
- Procure and introduce more fuel efficient boats and encourage the use of static fishing gears.
- Support the use of media and digital platforms to ensure timely dissemination of information related to early warning.

Stakeholders: list the stakeholders that will have a role to play in the project and are likely to be positively and negatively impacted by the project. Draft a power/interest map.

Stakeholder	Type of institution	Role / Responsibility in the project	Likely to be positively or negatively impacted by the project
MDAs	Government	- Coordination and implementation - Monitoring and evaluation	Yes
LGAs	Local Government	Implementation	Yes
Academia	Training and research	Innovation of new technology	Yes
CSOs & NGOs	Non state actors	Awareness	Yes
Private sectors	Private	Resource mobilization and implementation	Yes
LEG, NAP technical working group	Technical advice / assistance	To mobilize engagement of relevant organizations to support the project development and implementation To provide inputs/comments in project design – concept note, full proposal, and review reports	Yes

4. NEXT STEPS

Identify and briefly describe next steps that you will undertake to further develop this concept note, including timelines. These can include: collect data and undertake analysis to fill information gaps; identify and organize meeting(s) with proposed accredited entity to secure their engagement; organize meetings with key stakeholders; elaborate a stakeholder interest/power spider map; elaborate a theory of change; plan a pre-feasibility study, etc.

- Stockholders consultation
- Data collection
- Data analysis and compilation and development of baseline
- Development of full proposal
- Organizing validation workshops
- Government endorsement/approval
- Submission of the project proposal to the potential funder
- (Financial approval and implementation)

Timor-Leste: Reduce climate vulnerability of forests through reforesting degraded lands and provide a sustainable source of fuel wood to the local community at the Municipal level in Timor-Leste

National adaptation plan (NAP) writing workshops 2022–2023ed
Project idea workout
Version of 12 July 2022

1. PROBLEM STATEMENT AND ITS NATIONAL CONTEXT

What is the specific climate-related problem to be addressed? What are specific risks and vulnerabilities and what are main climate impact drivers? Be as specific as possible.

- Environmental degradation: landslide, land degradation, food insecurity, changes of ecosystem
- Forest degradation resulted from long dry season/drought
- The majority of the community are highly dependent on fuel wood for daily use which lead to more degraded land in Timor
- Water shortage, security of place and income security

2. CLIMATE CHANGE CONTEXT (TO THE EXTENT KNOWN)

Provide details on the following:

- Systems at risk and the climate change problem (i.e., the hazard) affecting them;
- How climate change has led to the specific impacts for which the proposed adaptation action is considered necessary, or how future projections of climate change will lead to those impacts;
- Linkage between climate change problem to risk – to a particular system, or section of the population – by examining the vulnerability of that system or group to the specific climate hazard;
- If a plausible future scenario (under climate change and related social economic drivers) exists, include information about how the risks and vulnerabilities are likely to change in the medium and long-term.

- The preliminary report of the Integrated Vulnerability Assessment (IVA) at the village level showed that the majority of the community are vulnerable to climate change and limited capacity and resources to adapt to the changes
- Environmental degradation is one of the main issues identified in the IVA preliminary report, therefore NDCC would like to address the issue

- Based on the study done by John Barnet at all (2005), the temperature in Timor-Leste will be increased up to 1.2°C in 2030 and 3.6°C in 2070. The increasing of the temperature will greatly affect the rural community.
- This project is respond the NAP activities No. 18
- By implementing this project, there will be a direct response to the degraded areas, minimize the risk of landslide, increase food security and ecosystem at the local level. In addition, capacity building for the local community will be included.

3. ADAPTATION GOAL (S) OF THE PROJECT

State a goal for adaptation given the problem described above for the project. A goal would be a medium- to long-term outcome that is desired for the issue captured in the problem statement.

- Increase community's resilience through awareness rising, implementation of the climate change polices and implementing projects that enable them to improve their livelihood

4. OBJECTIVES AND ACTIVITIES TO MEET THE GOAL (S)

What are project objectives to be pursued to contribute to achieving the goal, and describe the activities to be carried out to achieve each objective. This will have to be refined later and aligned with the project approach of the delivery partner and the Fund policy you would apply to.

Environmental degradation: landslide, land degradation, food insecurity, changes of ecosystem

Objective 1. Addressing landslide and land degradation to improve environmental degradation
- Activity 1. Awareness rising to the local community
- Activity 2. Reforestation in the affected areas/project sites (conservation and agroforestry)
- Activity 3. Introduce dam/rain water collection to support reforestation activity

Objective 2. Enhancing food security of the local community
- Activity 1. Hands on training for the local communities on sustainable agriculture and introduce new alternatives
- Activity 2. Awareness rising on the climate change impact to the local community/small holders farmers to plan climate risk plan
- Activity 3. Implementing project on agriculture responding to the issues

Objective 3 Improving ecosystem health at the local
- Activity 1. Implementing Tara Bandu in project sites
- Activity 2. Identify and conserve the genetic trees and introduce trees to support soil fertility
- Activity 3. Conserving watershed areas

5. PROJECT DETAILS

Project title:

Reduce climate vulnerability of forests through reforesting degraded lands and provide a sustainable source of fuel wood to the local community at the Municipal level in Timor-Leste

Project site and scale:

5 municipalities (based on the IVA)

Potential Proponent/Executing Entity (name of organization):

State Secretariat of Environment, Ministry of Agriculture and Fisheries and Ministry of State Administration

Potential Accredited entity :

TBD

Project partners (other additional partner organizations to be engaged in implementation):

local NGOs and local community group

6. MAIN ACTORS (IN THE COUNTRY/PROJECT AREA)

List the main actors that will have a role to play in the project development and implementation.

Actor (institution, agency, etc.)	Type of institution	Role or Responsibility in the project
State Secretariat of Environment, National Directorate of Climate Change	Government	Leading institution for project development and executing and implementing partner
Ministry of Agriculture and Fisheries	Government	Implementing Partner
Ministry of State Administration	Government	Implementing Partner

7. NEXT STEPS

Identify and briefly describe next steps that you will undertake to further develop this into a concept note, including processing through the GCF NDA (or relevant national focal point for the LDCF or AF if that is the target), identification of an accredited delivery partner, including timelines. These can also include: synthesize available information to provide broader context for the project description; identify and organize meeting(s) with proposed accredited entity to secure their engagement; organize meetings with key stakeholders; , etc.

- Stakeholder consultation with the relevant ministries to provide more in depth information on the project idea, objectives and activities

- Coordinate closely with the NDA to consult the project idea and potential accredited entity
- Seeking technical and financial support
- Development of concept note and full funding proposal through stakeholder consultation

8. TECHNICAL ASSISTANCE NEEDS

Briefly describe what technical support will be needed immediately to advance the work and possible ways to mobilize the support. Also include specific support that the LEG and GCF (if idea is targeting the LDCF or AF, then include reference to them) can provide.

- Provide a qualified resource to review, provide advice and further analysis of the project document
- Financial support to hiring the consultants.

Timor-Leste: Implement integrated water resource management approaches to protect and rehabilitate watersheds critical for sustainable water supply along the river basin or agriculture and domestic purposes

National adaptation plan (NAP) writing workshops 2022–2023ed
Project idea workout
Version of 12 July 2022

1. PROBLEM STATEMENT AND ITS NATIONAL CONTEXT

What is the specific climate-related problem to be addressed? What are specific risks and vulnerabilities and what are main climate impact drivers? Be as specific as possible.

Timor-Leste is fully aware that climate change is one of the world's main challenges today. It has been bringing various catastrophes to our socio-economic and environment and is expected to get much worse in future. Timor-Leste has been experiencing massive floods, droughts, landslides, fires and extreme wind events. In addition, the sea level is rising about 5.5 mm per year with coastal erosion damaging infrastructure and other assets in the coastal areas. These climate change impacts lead to a decrease in agricultural production, food insecurity, water shortage, the destruction of infrastructure, loss of human life and biodiversity as well as human displacement. The Government of Timor-Leste considers a national climate change adaptation plan critically important for addressing climate change risks and building climate resilience as well as reducing vulnerability in the future.

2. CLIMATE CHANGE CONTEXT (TO THE EXTENT KNOWN)

Provide details on the following:

- Systems at risk and the climate change problem (i.e., the hazard) affecting them;
- How climate change has led to the specific impacts for which the proposed adaptation action is considered necessary, or how future projections of climate change will lead to those impacts;
- Linkage between climate change problem to risk – to a particular system, or section of the population – by examining the vulnerability of that system or group to the specific climate hazard;
- If a plausible future scenario (under climate change and related social economic drivers) exists, include information about how the risks and vulnerabilities are likely to change in the medium and long-term.

- The preliminary report of the Integrated Vulnerability Assessment (IVA) at the village level showed that water security is most vulnerable sector and it has impacted the livelihood
- Based on the Timor-Leste's INC on soil water content showed that more drier will be happened in the future (2071-2100) under different RCPs analysis
- Current government of TL is also considered water as the main national priority in the country
- Increased up to 1.2°C in 2030 and 3.6°C in 2070. The increasing of the temperature will greatly affect the rural community.
- This project is respond the NAP activities No. 14

3. ADAPTATION GOAL (S) OF THE PROJECT

State a goal for adaptation given the problem described above for the project. A goal would be a medium- to long-term outcome that is desired for the issue captured in the problem statement.

Increasing community's resilience by enhancing water resources management through enhancing bio physical watershed management and efficiency of water distribution in adapting to climate change

4. OBJECTIVES AND ACTIVITIES TO MEET THE GOAL (S)

What are project objectives to be pursued to contribute to achieving the goal, and describe the activities to be carried out to achieve each objective. This will have to be refined later and aligned with the project approach of the delivery partner and the Fund policy you would apply to.

Objective 1. Enhancing water resources and watershed management at the village level (5 Municipalities)
Activity 1. Awareness rising on water resources management and water use
Activity 2. Water conservation through rain water harvesting (manmade ponds in the upper areas of spring)
Activity 3. Watershed management by planting trees

Objective 2. Provide clean water supply to households at the village level in 5 Municipalities
Activity 1. Water quality testing for new and existing systems
Activity 2. Construct new water reservoirs
Activity 3. Rehabilitation of existing water supply systems
Activity 4. Training on water use and management to the local community and other users

5. PROJECT DETAILS

Project title:

Implement integrated water resource management approaches to protect and rehabilitate watersheds critical for sustainable water supply along the river basin or agriculture and domestic purposes

Project site and scale:

5 municipalities (based on the IVA)

Potential Proponent/Executing Entity (name of organization):

Secretary of State for the Environment

Potential Accredited entity:

TBD

Project partners (other additional partner organizations to be engaged in implementation):

Ministry of Public Works and Ministry of State Administration and NGOs (TBD)

6. MAIN ACTORS (IN THE COUNTRY/PROJECT AREA)

List the main actors that will have a role to play in the project development and implementation.

Actor (institution, agency, etc.)	Type of institution	Role or Responsibility in the project
State Secretariat of Environment, National Directorate of Climate Change	Government	Leading institution for project development and executing and implementing partner
Ministry of Public Works	Government	Implementing Partner
Ministry of State Administration	Government	Implementing Partner

7. NEXT STEPS

Identify and briefly describe next steps that you will undertake to further develop this into a concept note, including processing through the GCF NDA (or relevant national focal point for the LDCF or AF if that is the target), identification of an accredited delivery partner, including timelines. These can also include: synthesize available information to provide broader context for the project description; identify and organize meeting(s) with proposed accredited entity to secure their engagement; organize meetings with key stakeholders; , etc.

- Stakeholder consultation with the relevant ministries to provide more in depth information on the project idea, objectives and activities
- Coordinate closely with the NDA to consult the project idea and potential accredited entity
- Seeking technical and financial support

- Development of concept note and full funding proposal through stakeholder consultation

December 2022: finalize project idea with all relevant partners
2023-2024 : Concept note development and full funding project proposal developed and submitted

8. TECHNICAL ASSISTANCE NEEDS

Briefly describe what technical support will be needed immediately to advance the work and possible ways to mobilize the support. Also include specific support that the LEG and GCF (if idea is targeting the LDCF or AF, then include reference to them) can provide.

- Provide a qualified resource to review, provide advice and further analysis of the project document
- Financial support to hiring the consultants.

Togo: Renforcement de la résilience climatique des communautés rurales vulnérables au Togo pour la sécurité alimentaire et hydrique

Atelier PNA – canevas PNUE
Note conceptuelle de projet

1. INFORMATIONS GÉNÉRALES

Titre du projet :

Renforcement de la résilience climatique des communautés Rurales vulnérables au Togo pour la sécurité alimentaire et hydrique

Site et échelle du projet :

niveau régional

Promoteur/Entité d'exécution :

Ministère de l'environnement et des ressources forestières/Ministère des ressources en eau, Ministère de l'agriculture.

Entité accréditée :

Programme des Nations unies pour le développement (PNUD),

Partenaires du projet :

Fonds international des Nations unies pour l'enfance (UNICEF) et Programme mondial de l'eau (GWP).

2. DESCRIPTIF DU PROJET

Contexte et base de référence : 2 paragraphes expliquant le contexte général du projet et le problème que l'on veut résoudre. Décrire le contexte de la communauté cible/ des bénéficiaires (moyens de subsistance, ethnicité, genre, géographie, écosystèmes, contexte politique etc). Décrivez le risque climatique que ce projet cherche à traiter.

Dressez la liste des scénarios climatiques disponibles/des données disponibles pour étayer la proposition de projet et définissez les informations manquantes à ce stade.

Con ments pluvieux extrêmes. Selon le PNACC, ces changements devraient être plus marqués dans les régions des Savanes et de la Kara que dans les autres régions du pays. Les moyens de subsistance ruraux des populations de ces 2 régions, combinés à un niveau de pauvreté plus élevé, à des résultats sanitaires médiocres et à l'insécurité de l'eau, impliquent un degré plus

élevé de vulnérabilité aux impacts du changement climatique et des possibilités limitées d'adaptation efficace.

Dans les zones rurales du Togo, environ 50 % seulement de la population a accès à l'eau potable et 17 % seulement à des installations sanitaires de base. La mortalité due à la diarrhée et à la déshydratation qui en résulte représente jusqu'à 10 % des décès de nourrissons au Togo. Parmi les autres conséquences du manque d'eau potable et d'installations sanitaires de base, citons la faible fréquentation scolaire. Les filles abandonnent l'école parce qu'elles doivent marcher chaque jour sur de longues distances pour trouver de l'eau et la transporter chez elles. La prévalence des maladies d'origine hydrique est élevée au Togo. La plupart des populations rurales n'ont pas de toilettes dans leurs maisons, et pendant la saison des pluies, les puits non protégés et les autres sources d'eau sont souvent pollués par les déchets humains.

Les moyens de subsistance ruraux qui dépendent de l'agriculture subiront également des répercussions négatives, car la hausse des températures et l'allongement de la durée des conditions chaudes augmenteront les périodes de séchage des cultures. La productivité et la production des cultures de base - notamment le maïs, le riz et le sorgho - devraient être considérablement affectées dans les zones cibles du projet.
Les risques climatiques de cette zone sont la mauvaise répartition des pluies, le décalage saisonnier entrainant des inondations et des poches de sécheresse qui impactent la production agricole.

Les femmes, plus de 50% de la population active, sont toujours victimes de nombreuses pratiques discriminatoires, notamment en matière d'accès à l'éducation (52,4% contre 76,9% des hommes, filles 38,2% contre 50,8% de garçons), à la santé, à l'emploi, à la terre et aux postes de décision. Le revenu moyen des femmes représente un tiers de celui des hommes.

Selon les scénarios climatiques, le réchauffement du climat au Togo se poursuivrait avec des hausses de températures moyennes entre +0,9 et +4,5°C, soit des variations comprises entre 3,21 et 16,87% par rapport à la période 1961-1985. Quant aux pluies, elles connaîtraient des hausses entre +5 et +29 mm, correspondant à des variations comprises entre 0,10 et 0,55% par rapport à la période 1961-1985. Selon le scénario optimiste 4.5, la température dans les régions septentrionales du Togo va augmenter de 2°C à l'horizon 2041-2070

Le secteur agricole occupe une place prépondérante dans l'économie togolaise puisqu'il a représenté 39% en moyenne au cours de ces dernières années et a fourni plus de 20% des recettes d'exportation. Il fait vivre les 2/3 de la population et offre le plus de possibilités pour accélérer la croissance, assurer la sécurité alimentaire, créer des emplois, accroître les revenus des paysans et contribuer à la balance commerciale et au développement de l'agro-industrie. Le Togo pratique encore en majorité, l'agriculture pluviale et très vulnérable par les inondations et la sécheresse. Par exemple, 7 744,24 ha de champs dévastés en 2010 lors des inondations.

Entre 1925 et 1992, le Togo a connu 60 inondations majeures avec des pertes de vies humaines et des dommages aux infrastructures importants. Depuis 2000, six inondations ont causé des dommages environnementaux, sociaux et économiques extrêmes. Dans le bassin de l'Oti, situé dans la région des Savanes, les fortes pluies de 1998, 2007, 2008 et 2010 ont provoqué des inondations dévastatrices, avec des dommages matériels importants et des pertes de vies humaines. La Croix-Rouge a par exemple signalé que les inondations de 2007 au Togo ont été particulièrement graves, avec près de 16 000 familles touchées. La Direction générale de l'aide humanitaire et de la protection civile de la Commission européenne (DG ECHO) a indiqué qu'au

13 octobre, 11 personnes étaient mortes, 4 000 bâtiments avaient été endommagés, 37 000 hectares de terres avaient été inondés et environ 57 000 personnes avaient été touchées par les inondations dans les régions de Savanes et de Kara, au nord du Togo. Les inondations de 2010 ont fait 79 773 touchés, 25 décès et 85 blessés, 3 947 maisons inondées, 7 320 écroulées, 194 décoiffées, 921 abandonnées, routes, lignes électriques, centres de santé, etc. endommagés.

Problématique : Décrivez quel est le problème sous-jacent avec une perspective d'adaptation au changement climatique ? Quels sont les facteurs non climatiques et quels sont les facteurs de changement climatique ? Décrivez les raisons principales et les principaux obstacles (sociaux, sexospécifiques, fiscaux, réglementaires, technologiques, financiers, écologiques, institutionnels, etc.) qui doivent être adressés.

Les inondations et les poches de sécheresse causées par la mauvaise répartition des pluies et le décalage des saisons impactent négativement la production agricole et les autres moyens d'existence surtout au nord du Togo ; ce qui nécessite le renforcement des capacités de résilience des populations locales.
Comme principaux obstacles :
Le personnel du gouvernement local pourrait ne pas avoir la capacité de soulever et de traiter les préoccupations et les griefs provenant des communautés ;
Les communautés locales, y compris les femmes et les populations autochtones, pourraient ne pas recevoir le soutien et les plateformes nécessaires pour exprimer leur désaccord avec les activités du projet ;
Le projet, s'il n'est pas géré de manière appropriée, pourrait reproduire les préjugés sexistes historiques.

Objectifs du projet : Indiquez brièvement le but général du projet, quel est le ou les objectifs d'adaptation à poursuivre pour atteindre ce but, et décrivez les activités qui seront utilisées pour soutenir les objectifs. Ces éléments devront être ajustés pour s'aligner sur la politique du Fonds auquel vous postulez.

L'objectif général du projet est d'accroître la résilience de certaines communautés rurales, pauvres et vulnérables situées dans les deux régions les plus septentrionales du Togo, Savanes et Kara, exposées aux impacts de l'augmentation prévue de la fréquence et de l'intensité des sécheresses et des précipitations extrêmes ainsi que de l'augmentation des températures. Cet objectif sera atteint par l'amélioration des résultats de santé, le renforcement de la sécurité de l'eau, et des moyens de subsistance résistants au climat.
Objectif 1 : renforcement d'un environnement favorable pour la gestion des ressources en eau résilientes au climat pour l'eau, l'assainissement et l'hygiène et l'agriculture résiliente au climat : Activité 1.1-Élaborer des plans de gestion intégrée des ressources en eau (GIRE) résilients au climat et sensibles au genre aux niveaux national et infranational ; Activité 1.2- Mener des actions de sensibilisation sur les impacts du changement climatique sur les infrastructures WASH, les ressources en eau et les moyens de subsistance des populations rurales aux niveaux national et local ;
Objectif 2 : Accès accru à des services d'eau, d'assainissement et d'hygiène résilients au climat et renforcement de la gestion des ressources en eau locales : Activité 2.1-Préparer des plans d'action communaux sur les services WASH résilients au climat et sensibles au genre. Activité 2.2 Établir/renforcer un réseau de surveillance des eaux souterraines afin de contrôler l'impact du

changement climatique sur les ressources en eau ; Activité2.3. : Mettre en place des stations collectives de collecte des eaux de pluie dans les zones ciblées, dans des bâtiments publics adéquats tels que les écoles, les centres de santé et les établissements religieux

Parties prenantes : dressez la liste des parties prenantes qui auront un rôle à jouer dans le projet et qui sont susceptibles d'être affectées positivement et/ou négativement par le projet. Réalisez une carte pressentant les pouvoirs et les intérêts des parties prenantes.

Partie prenante	Type d'institution	Rôle / Responsabilité dans le projet	Susceptibles d'être impactés positivement ou négativement par le projet
Sectoriels (Ministères de l'environnement/Ministère des ressources en eau/ DGMN/Min. agriculture)	gouvernement	Gouvernance au niveau central	positivement
collectivités locales	Autorités décentralisées (Maires)	Gouvernance du projet au niveau local	positivement
ONG	Société civile	Appui aux communautés locales à la mise en œuvre du projet	positivement
PTF	Partenaires de mise en œuvre.	Soutien financier et technique	positivement
Secteur privé	Entreprises	Appui du secteur privé sur les opportunités et la demande de services d'eau et d'assainissement résilients au climat	Positivement

9. PROCHAINES ÉTAPES

Identifiez et décrivez brièvement les prochaines étapes que vous entreprendrez pour développer davantage cette note conceptuelle, notamment le calendrier. Il peut s'agir de : collecter des données et entreprendre une analyse pour combler les lacunes en matière d'information ; identifier et organiser une ou plusieurs réunions avec l'entité accréditée proposée afin d'obtenir son engagement ; organiser des réunions avec les principales parties prenantes ; élaborer une carte des intérêts/pouvoirs des parties prenantes ; élaborer une théorie du changement ; planifier une étude de préfaisabilité, etc.

- Soumission au FVC ;
- Eventuelles études complémentaires à faire ;

- Approbation du projet par le FVC ;
- Exécution du projet.

Uganda: Strengthening livelihoods and community resilience to climate change through sustainable land use management, agricultural value chain approach and climate resilient schools

NAP writing workshop template - UNEP
Project concept note

1. GENERAL INFORMATION

Project title:

strengthening livelihoods and community resilience to climate change through sustainable land use management, agricultural value chain approach and climate resilient schools.

Project site and scale: national/ sub-regional/ district level

Victoria, Kyoga and Upper Nile water management zones in Uganda

Proponent/Executing Entity:

Ministry of Water and Environment

Accredited entity: / name of the organization that will execute the project with the Executing Entity

Ministry of Water and Environment

Project partners: other additional partner organisations engaged in implementation.

Ministry of Agriculture, Animal Industries and Fisheries; Ministry of Local Government, Ministry of Trade, Industries and Cooperatives, National Agricultural Research Organization and Ministry of Education and sports

2. PROJECT DESCRIPTION

Context and Baseline: 2 paragraphs explaining the broad context of the project and the problem intended to be solved. Describe the context of the target community/ beneficiaries (livelihood, ethnicity, gender, geography, ecosystems, political context etc). Describe the climate risk that this project seeks to address.

List the available climate scenarios/ data available to back up the project proposal and define what information is missing at this stage.

The livelihoods of the communities in Uganda is largely dependent on exploitation of natural resource base including agricultural ecosystems. Over 68.9% of households depend on rainfed subsistence agriculture as the main source of livelihood and income (NDP III). Schools and the learners are equally affected by climate change mostly the through devastating impacts from floods and heavy rainfall. Currently less actions are put in place to address climate change in education sector. However, the national climate change act of 2021, recognizes the need for integration of climate change in education sector.
Furthermore, the exploitation of natural resources and agriculture is predominantly characterized by unsustainable land use and management practices that undermine the productive potential of these agro-ecological ecosystems.

Climate change and variability risks are already affecting the ecosystems, livelihoods and education sector. As temperature and floods increase, Uganda experiences a lot of loss and damage for both social, livelihoods, ecosystem resilience reduction and infrastructure across the country landscapes. The country has experience low levels of agriculture productivity due to flooding and droughts, schools damaged due to floods and in drought are affect by shortage of water supply hence affecting learners class time looking for water, ecosystems are depleted by floods and drought and collectively livelihoods and food security and education are all affected.

This project/program is aimed to strengthen resilience of communities, ecosystems and education systems and infrastructure to adverse impact of climate change through sustainable agriculture and lands use practices, livelihood improvement and climate smart/resilience schools.

Project/program will benefit communities inclusively targeting vulnerable farmers, youth, schools, refugees, people with disabilities, local government and non-state actors in landslides, floods and drought prone areas with the Victoria, kyoga and upper nile water management zones as well as national institutions to implement the project/ program

Problem statement: What is the underlying problem from a climate change adaptation perspective? What are the non-climate drivers and what are the climate change drivers?

Describe the main root causes and barriers (social, gender, fiscal, regulatory, technological, financial, ecological, institutional, etc.) that need to be addressed.

- Unsustainable land use management and consumptive practices
    - Deforestation
    - Over cultivation
    - Overgrazing of natural vegetation
    - Inappropriate rotations e.g monoculture, conventional fallow
    - Clearing of land through bush burning
    - Inappropriate application of inorganic nutrients
    - Land fragmentation
    - people's awareness of sustainable land use
    - high biomass destruction by institutions and schools in quest for energy.
    -

That results into reduction in soil water quality, soil nutrient mining, loss of valuable beneficial soil micro and macro organism and other plant and animal species; and potentially land degradation, low agricultural production and degradation of the ecosystem; and decreasing overall agro-ecological productivity

- Coupled with climate change variability
  - Climate projections based on RCP 8.5 for a period of 2041-2070 predicts that;
  - Mean annual temperatures may increase by 2°C
  - Mean annual precipitation will decrease by 1%
- Impact on agriculture
  - Raising temperature, heat waves and floods
  - Increased evaporation and reduced precipitation.
  - shortens the growing seasons
  - Decreasing ground and surface recharge and quality
  - Reduction in soil moisture and humidity
  - Floods increase soil erosion and loss of nutrients
  - Water logging of agricultural fields with increased occurrence of pests and diseases.
  - Alter the occurrence of pests and diseases
  - Increase post-harvest loss
  - Reduction in areas suitable for agriculture or production of specific groups.
- Other non-climate drivers
  - a lack of climate-proof infrastructure, value-chain and market linkage support.

- Implications
  - Reduction in agricultural production and food insecurity with greater implications mainly to women and children
  - Reduction in quantity and quality of milk particularly for dairy cows and meat

Objectives of the project: Briefly state the overall project goal, what is the adaptation objective(s) to be pursued to achieve that goal, and describe the activities to be used to support the objectives. This will have to be adjusted to be aligned with the Fund policy you are applying to.

Enhancing resilience of communities and ecosystems to climate change through sustainable use management practices, value addition and climate resilient schools.

Specific objectives:

- Promote knowledge and adoption of practices around climate resilient sustainable land use and management practices
- Promote landscape ecosystem resilience
- Support alternative community livelihoods
- Strengthen adaptation Knowledge management
- To promote value addition, efficient harvesting, post-harvest handling, storage and access to markets.
- Mainstream climate change resilient practices in education systems and infrastructure

Specific activities:

Promote knowledge and adoption of practices around climate resilient sustainable land use and management practices

- Promote and expand climate smart agriculture and agroecological practices in various farm lands
- Capacity building on climate resilient sustainable land use and management practices

-

Promote landscape ecosystem resilience

- Enhance afforestation and re afforestation practices in the vulnerable catchments on both protected and community land
- Promote agro forestry on farmlands
- Establishment of bio energy plantations and woodlot in communities
- Promote energy cooking efficient technologies in communities

Support alternative community livelihoods

- Promote less climate sensitive climate livelihood options

Strengthen adaptation Knowledge management

- Establish local/community level knowledge and adaptation learning centres
- Strengthening community and national involvement in documentation of best adaptation practices, monitoring and evaluation for enhancing MRV for adaptation

To promote value addition, efficient harvesting, post-harvest handling, storage and access to markets.

- Enhancing post-harvest processes, value addition and access to markets
- Expand climate resilient road infrastructure in farming communities.

Mainstream climate change resilient practices in education systems and infrastructure

- Establish bio energy plantation and or woodlot in schools
- Promote energy efficient technologies in schools including cookstove technologies and solar lighting.
- Promote water harvesting and use efficiency in schools
- Promote climate smart agriculture technologies in schools
- Rehabilitate and construct climate resilient school infrastructure including class blocks and sanitation facilitates in flood and drought prone areas
- Development of climate change supplementary materials and building capacity for teachers and learner on climate change adaptation
- Establishment of climate change clubs in schools

Stakeholders: list the stakeholders that will have a role to play in the project and are likely to be positively and negatively impacted by the project. Draft a power/interest map.

Stakeholder	Type of institution	Role / Responsibility in the project	Likely to be positively or negatively impacted by the project
Farming communities (Farmer field schools)	Local	Entry point to farmers for implementation	Positively affected if project is well implemented
Ministry of Water and Environment	Government	Coordinate climate change adaptation interventions	Positive
Ministry of Agriculture, Animal	Government	Coordinate the climate resilient sustainable land use/management practices	Positive

Industry and Fisheries			
National Agricultural Research Organization	Government	Ensure that climate resilient and sustainable practices align with current and important research.	Positive
Ministry of trade, industries and cooperatives	Government	define the value addition and markets aspects that need to be incorporated in the project	
Local Civil Society Organizations	Non-Government	Support implementation on ground	
LEG, NAP technical working group	Technical advice / assistance	To mobilize engagement of relevant organizations to support the project development and implementation To provide inputs/comments in project design – concept note, full proposal, and review reports	

3. NEXT STEPS

Identify and briefly describe next steps that you will undertake to further develop this concept note, including timelines. These can include: collect data and undertake analysis to fill information gaps; identify and organize meeting(s) with proposed accredited entity to secure their engagement; organize meetings with key stakeholders; elaborate a stakeholder interest/power spider map; elaborate a theory of change; plan a pre-feasibility study, etc.

- Engage the Ministry of Water and Environment and other key stakeholders to refine the concept
- Engage the farming communities in the Kyoga and upper Nile water management zones to ensure alignment to the current context
- Engage UNEP to improve concept and develop the full proposal

Zambia: Climate Resilient Urban Settlements

NAP writing workshop template - UNEP
Project concept note

1. GENERAL INFORMATION

Project title:

Climate Resilient Urban Settlements

Project site and scale: national/ sub-regional/ district level

Sub-National (Lusaka, Kitwe & Ndola)

Proponent/Executing Entity:

Ministry of Infrastructure and Urban Development

Accredited entity: / name of the organization that will execute the project with the Executing Entity

UN Habitat

Project partners: other additional partner organisations engaged in implementation.

- Ministry Green Economy and Environment
- Ministry Water Development and Sanitation Development
- Ministry of Local Government

2. PROJECT DESCRIPTION

Context and Baseline: 2 paragraphs explaining the broad context of the project and the problem intended to be solved. Describe the context of the target community/ beneficiaries (livelihood, ethnicity, gender, geography, ecosystems, political context etc). Describe the climate risk that this project seeks to address.

List the available climate scenarios/ data available to back up the project proposal and define what information is missing at this stage.

Evidence shows that floods in Zambia affect on average about 20,000 people every year, equivalent to 0.11 % of the total population. The flood cycle is estimated at every 3 years. Informal urban settlements in Lusaka, Ndola and Kitwe districts includes one of the most

vulnerable to the impact of floods in the Urban areas. These areas are located in Agro Ecological Region II and III that receives 800mm to 1000mm of annual rainfall, which is fairly sufficient to cause flooding with poor drainage system. The flooding is exacerbated by poor drainage design and waste disposal that clogs drainage systems. In addition, most of the flooding is experience in low laying areas informal settlement and the CBD most of which lie on limestone geology that is characterized by flooding. Other drivers include uncoordinated planning, urban developments coupled with weak enforcement of building standards. Its common to find illegal structures built across of streams, in dambo areas, ground recharge areas building, which increases the risk of flooding. With increasing intensity and frequent of climate change events, it is projected that floods would increase in intensity and frequency affecting more than 8,204,576 urban dwellers. Urban population has been increasing in Zambia, its population in 2019 was 7,871,715, a 4.24% increase from 2018 and 2018 was 7,551,639, a 4.26% increase from 2017.

Project Broad Context

- Increase Resilience of Poor Urban Population in Informal Settlements by reducing:
    - Effect of floods on housing infrastructure in the informal settlements of the Project area
    - contribution of floods to the outbreak and spread of water borne disease such Cholera, bilharzia, dysentery

Target community
- Target is poor urban population living in informal settlements that are prone to flooding including marginalized social groups such women, elderly, child (orphans and vulnerable children) headed households. Zambia is one of the most urbanized countries in Africa south of the Sahara. It is estimated that 40 – 48 percent of the population of over 10 million live in urban areas. Informal settlements constitute a major part of the urban landscape of most cities in Zambia which constitute 70% of the urban population.

Climate Scenarios
- Climate models point to increased incidence and intensity of floods in the midcentury under both RCP 4.5 and RCP 8.5. Previous years with widespread floods include 1989, 2001, 2004, 2005, 2007, 2008, 2009, 2010, 2011, 2013, 2014, 2017. The floods of 2007 affected 75 districts (of the total of 110). The flood cycle is estimated at every 3 years.

Problem statement: What is the underlying problem from a climate change adaptation perspective? What are the non-climate drivers and what are the climate change drivers?

Describe the main root causes and barriers (social, gender, fiscal, regulatory, technological, financial, ecological, institutional, etc.) that need to be addressed.

Non Climatic Drivers
- Poor drainage design
- Waste disposal that clogs drainage systems
- Geology in low laying areas which lie on limestone geology that is characterized by flooding
- Uncoordinated planning, urban developments
- Weak enforcement of building standards
- Building of illegal structures across of streams, in dambo areas, ground recharge areas building, which increases the risk of flooding

Climatic factors
• Frequent and high intensity of flash floods
• Wind storms

Objectives of the project: Briefly state the overall project goal, what is the adaptation objective(s) to be pursued to achieve that goal, and describe the activities to be used to support the objectives. This will have to be adjusted to be aligned with the Fund policy you are applying to.

Project Goal:

To build resilience of about 3.5 million poor urban populations to the impact of climate change such floods and wind storms in the projects areas

Adaptation Objective:

• To construct, redesign and rehabilitate drainage networks to improve drainage and reduce flooding
• To introduce an efficient, effective and environmentally sustainable waste management system
• To strengthen climate smart standards and codes for the design and construction of infrastructure in informal settlements
• To strengthen enforcement of policy and legal framework for urban planning and development
• Strengthen coordination of planning and implementation of urban development.

Stakeholders: list the stakeholders that will have a role to play in the project and are likely to be positively and negatively impacted by the project. Draft a power/interest map.

Stakeholder	Type of institution	Role / Responsibility in the project	Likely to be positively or negatively impacted by the project
Local Authority	Government	Enforcement and Implementation	Positively
NGO (Habitat for Humanity)	International	Support for Outreach Finance & Gender Protection: advocacy for policy and legal reform	Positively
Zambia Federation for the Disabled	National/ Local NGO	Advocacy, empowerment and protection of people living with disabilities	Positively
Ministry of Green Economy & Environment	Government	Coordination and review of policy & legal framework on Climate Change	Positively
Ministry of Water and Sanitation Development	Government	Coordination and Implementation of water infrastructure developments	Positively
Gender Division-Office	Government	Outreach and Gender protection and empowerment	Positively

of the President			
Disaster Management and Mitigation Unit	Government	Coordination and implementation of disaster-risk reduction and responses	Positively
Private Sectors (Banks, Micro-finance, Insurance Companies)	Private	Financing, Insurance	Positively
UN-Habitat	UN Agency	Delivery Partner	Positively
Ministry of Infrastructure and Urban Development	Government	Project Implementation	Positively
Communities in Informal Settlements	Local	Provide Information how they are impacted, Local solutions for enhancing their resilience to impact of climate change Source baseline information and soci-economic data	Positively

3. NEXT STEPS

Identify and briefly describe next steps that you will undertake to further develop this concept note, including timelines. These can include: collect data and undertake analysis to fill information gaps; identify and organize meeting(s) with proposed accredited entity to secure their engagement; organize meetings with key stakeholders; elaborate a stakeholder interest/power spider map; elaborate a theory of change; plan a pre-feasibility study, etc.

- Engage key stakeholders in consultations on the project activities and their roles and responsibilities
- Collect baseline data and others social economic data relevant for the project analysis and reporting
- Formally engage the Accredited Entity and the National Designated Authority