



Development of a Project Proposal for the Implementation of Climate Adaptation and Mitigation Technologies in Eastern Uganda

Conceptual Framework Leading to the Project Proposal

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Acronyms and Abbreviations

1. Introduction

The purpose of this framework is to develop a detailed, fundable proposal aimed at leveraging finance from entities under the financial mechanism of the United Nations Framework Convention on Climate Change (UNFCCC), specifically the Green Climate Fund (GCF). The primary objective is to support the implementation of climate change adaptation and mitigation technologies in Uganda, as identified through the Technology Needs Assessment (TNA) and Technology Action Plans (TAPs).

Uganda has conducted a systematic process for identifying and selecting climate technologies for mitigation and adaptation to climate change. This process culminated in the development of the TNA and TAPs, focusing on key sectors such as agriculture, water, forestry, and energy. Despite this progress, Uganda faces significant challenges in raising funds from established financial mechanisms under the UNFCCC, such as the Green Climate Fund (GCF), Adaptation Fund (AF), and the Global Environment Facility (GEF).

The main objective of this framework is to outline a comprehensive approach for the development of the GCF proposal aimed at enhancing the quality and quantity of agricultural production and services, thereby improving food security in Eastern Uganda. This involves identifying key considerations and strategic interventions that can be integrated into the proposal to secure funding from the GCF. It encompasses the entire process of project development, from initial stakeholder engagement and data collection to proposal drafting and submission. It aims to align project activities with national development priorities and the GCF investment criteria and results framework, ensuring that the proposed project activities are both technically sound and financially viable.

By leveraging international climate finance mechanisms, Uganda can implement critical adaptation and mitigation technologies that address the adverse effects of climate change in Eastern Uganda. This initiative is crucial for building long-term resilience in vulnerable communities, promoting sustainable agricultural practices, and ensuring long-term food security.

Expected outcomes:

The successful implementation of this framework will result in:

- A comprehensive fundable project proposal that meets GCF's investment criteria and results framework,
- Enhanced capacity of local and national stakeholders to engage with international climate financing entities,
- The ultimate improvement of agricultural systems in eastern Uganda thereby enhancing productivity and food security through the adoption of climate-resilient technologies,
- Strengthened national and subnational policies and strategies for climate change adaptation and mitigation.

This framework serves as a foundational document, guiding the development of project proposal and ensuring that all necessary elements are considered and integrated to maximize the likelihood of securing funding and achieving sustainable development goals in Uganda.

2. Context and Rationale

Uganda is a land-locked country in East Africa, straddling the equator with a diverse range of geographical features including lakes, rivers, mountains, and forests. This diversity contributes to its rich biodiversity but also presents unique climate-related challenges. Three-quarters of Uganda lies within the tropical belt, experiencing a largely tropical climate with average temperatures between 25-29°C. Despite its favorable climate for agriculture, Uganda is highly vulnerable to climate variability and change due to its dependence on natural resources.

The country is experiencing significant impacts of climate change, which include changing weather patterns, drop in water levels, and increased frequency of extreme weather events like floods, as well as drought, whose social economic impacts make communities very vulnerable. Observed climate data shows a general increase in average temperatures and changes in precipitation patterns over recent decades, including more frequent and severe drought and flood events.

In Eastern Uganda, severe flooding has resulted in frequent land and mudslide events which have not only damaged agricultural landscapes but also resulted in the loss of lives and significant economic losses. In parts of northeastern Uganda and northern Uganda, severe droughts have significantly impacted agricultural productivity, freshwater availability, and human settlements thus resulting in increased food and water insecurity as well as negatively impacting the health and wellbeing of local communities. These climatic changes disrupt agricultural cycles, reduce water availability, increase the incidence of pests and diseases, adversely impacting agriculture, water resources, forestry, and energy sectors.

Despite these challenges, Uganda has opportunities for sustainable development. The country is rich in natural resources, with vast agricultural potential, water bodies, and biodiversity. Additionally, there is significant potential for renewable energy sources such as solar, wind, and hydropower, which can support sustainable agricultural practices and rural development. Opportunities exist in leveraging international support and enhancing national capacities to mitigate and adapt to these climate challenges.

Uganda has benefited from various initiatives supported by the United Nations and other international bodies aimed at improving education, training, research, and capacity building related to climate change. The government's continued efforts in developing local and national plans, supported by international cooperation, are crucial for addressing these challenges effectively. Uganda's established policy and institutional frameworks, such as the National Climate Change Policy and the Climate Change Bill, provide a supportive environment for implementing climate adaptation and mitigation projects, further enhanced by collaboration with international agencies.

2.1. Current state of agriculture in Uganda.

Agriculture in Uganda encompasses crop cultivation, animal husbandry, and fisheries, playing a significant role in the nation's economy. It employs over 80% of the rural population, contributing approximately 21.92% to the GDP, 46% of export earnings, and 68% of total employment as of 2019, according to Uganda's Third National Communication to the UNFCCC.¹ The sector is integral not only to food and nutrition security but also to the provision of raw materials for agro-based industries and overall economic development. The agricultural landscape is diverse, with crops, livestock, and fisheries all contributing significantly to the economy.

Crop Agriculture

Uganda benefits from favorable rainfall and fertile soils, supporting a wide range of food and cash crops across the country. Major food crops include cereals (maize, millet, sorghum, rice), root crops (cassava, sweet potatoes, Irish potatoes), pulses (beans, cowpeas, pigeon peas), and oil crops (groundnuts, soybeans, sesame). Plantain bananas, crucial for food and beer production, are also widely cultivated. Cash crops such as coffee, tea, cotton, and tobacco are key foreign exchange earners, with coffee being the most significant export.

The sector is predominantly dependent on smallholder farmers practicing subsistence farming, which is non-monetary and mainly for home consumption. Commercial agriculture, involving additional cash crops, plays a vital role in the economy, particularly in the central regions where coffee is often intercropped with food crops like bananas and beans. Despite its importance, the agricultural sector has grown at only 2% annually over the past five years, lagging behind the growth rates of other East African countries.

Animal Agriculture

Uganda's livestock sector is substantial, with over 14.2 million cattle, 16 million goats, 4.5 million sheep, 47.6 million poultry, and 4.1 million pigs as of 2020. Despite these impressive numbers, productivity remains low. Weekly milk production per cow is about 8.5 liters, and egg production per week stands at 4-5 eggs for exotic and indigenous chickens, respectively. Climate change exacerbates challenges such as poor feeding and nutrition, inadequate breeding practices, and heightened disease prevalence, all of which impact livestock health and productivity.

Fisheries

Uganda's fisheries sector is a significant contributor to the national economy, providing livelihoods to an estimated 1.5 million people, with a majority being women and youth. The country's vast water resources, including five major lakes (Victoria, Albert, Kyoga, Edward, and George) and numerous minor lakes, rivers, and swamps, support a rich fish population. Uganda is the second-largest aquaculture producer in Sub-Saharan Africa, with production increasing from just over 800 tons in 2000 to 117,600 tons in 2015, dominated by catfish and Nile tilapia.

¹ [Uganda Third National Communication to the UNFCCC](#), 2022.

Fish exports are a major source of foreign earnings, making it the second-largest export earner for Uganda. The fisheries sector, however, faces challenges such as overfishing, pollution, and the impacts of climate change, which threaten its sustainability.

2.2. Key Challenges in agricultural productivity and food security

Climate Change Effects on Productivity and Food Security:

Climate change has a profound impact on agricultural productivity and food security in Uganda, manifesting through a range of adverse effects. The increasing frequency and intensity of extreme weather events such as droughts and floods are major challenges. Over the past two decades, the frequency of these extreme events has escalated, with eight of the ten most severe floods and droughts occurring within this period. These events disrupt farming activities, damage crops, and significantly reduce yields, thereby threatening food security.

The heavy dependency on rain-fed agriculture exacerbates the sector's vulnerability. About 96% of farming land in Uganda relies on rainfall, making them highly susceptible to climate variability and change. This reliance on unpredictable rainfall patterns results in fluctuating agricultural productivity, with severe implications for food security, especially during prolonged droughts or unexpected heavy rains.

Moreover, rapid population growth is placing additional pressure on the agricultural sector. By 2050, agricultural production must increase by 60% to meet the food security demands of the growing population. This significant increase in production is challenging under current conditions and is further complicated by the adverse impacts of climate change, which threatens to reduce available arable land and degrade soil quality.

Challenges from Water, Energy, and Forestry Sectors:

Water scarcity is a critical issue, as limited irrigation infrastructure forces farmers to depend largely on rainfall. Only 1% of farming land is irrigated, making the sector highly vulnerable to droughts. This lack of irrigation infrastructure limits the ability of farmers to mitigate the effects of dry spells and maintain consistent crop yields.

Energy constraints also hinder agricultural productivity. High electricity costs and inadequate energy infrastructure limit the development of value-added agricultural products, which are essential for enhancing food security and generating higher incomes for farmers. The lack of affordable and reliable energy sources limits the capacity for processing and preserving agricultural products, leading to post-harvest losses and reduced food availability.

The forestry sector faces significant challenges due to deforestation driven by agricultural expansion. This deforestation reduces forest cover, impacting biodiversity and contributing to climate change. Unsustainable agricultural practices in forested areas exacerbate soil degradation and reduce the availability of ecosystem services that support agriculture, such as water regulation and soil fertility.

2.3. Importance of Climate Adaptation and Mitigation

Urgent Climate Actions Needed:

To address these challenges, urgent climate adaptation and mitigation actions are necessary. Increasing agricultural resilience is paramount. This involves transitioning from rain-fed agriculture to integrated irrigation systems and modern farming practices. Implementing higher-value crops, soil conservation measures, and efficient land use are critical steps toward building a resilient agricultural sector.

Developing infrastructure to support agricultural production and processing is also essential. Expanding storage facilities, transportation networks, and processing plants can help stabilize food supply, reduce post-harvest losses, and improve market access for farmers. Such infrastructure investments are crucial for enhancing food security and supporting sustainable agricultural growth.

Enhancing data collection and early warning systems is vital for effective climate adaptation. Accurate and timely climate information enables farmers to make informed decisions about planting and harvesting, thereby reducing the risks associated with climate variability. Improving early warning systems can help farmers prepare for extreme weather events and minimize their impact on agricultural productivity.

Importance of Climate Adaptation and Mitigation:

Climate adaptation and mitigation are critical for maintaining economic stability in Uganda. Agriculture is a cornerstone of the country's economy, contributing significantly to GDP, employment, and export earnings. Sustaining these economic benefits in the face of climate change requires robust adaptation strategies that enhance the resilience of the agricultural sector.

Ensuring food security for a growing population necessitates transforming agricultural practices to withstand climate variability. This includes adopting sustainable methods that increase productivity, such as climate-smart agriculture and agroforestry practices. Expanding food production capacity through these methods is essential for meeting future food security demands.

Environmental sustainability is another critical aspect of climate adaptation and mitigation. Efforts such as reforestation and sustainable land management practices help reduce agriculture's environmental impact and enhance ecosystem resilience. These practices not only contribute to climate mitigation by sequestering carbon but also improve soil health and water availability, supporting long-term agricultural productivity.

3. Alignment with UNFCCC financial mechanisms

The United Nations Framework Convention on Climate Change (UNFCCC) has established several financial mechanisms to support developing countries in addressing climate change. These include the Green Climate Fund (GCF), the Global Environment Facility (GEF), and the Adaptation Fund, among others. For this project, the developed proposal along with all requisite annexes will be submitted to the GCF. The GCF supports projects that aim to limit or reduce greenhouse gas emissions in developing countries and help vulnerable societies adapt to the unavoidable impacts of climate change. It prioritizes projects with significant impact potential, a paradigm shift potential, sustainable development potential, and strong country ownership.

Here are key aspects to consider for alignment with GCF's investment criteria and results framework:

Project Relevance and Impact:

Ensure the project addresses key climate change challenges and needs identified in the TNA and other mitigation and adaptation plans. Demonstrate how the project contributes to climate adaptation and mitigation, emphasizing its potential impact on reducing vulnerability and enhancing resilience in the agricultural sector.

Country Ownership:

Align the project with national priorities and development plans, such as the National Development Plan III, National Adaptation Plan for Agriculture, the Nationally Determined Contributions (NDCs), etc. Engage relevant national and local stakeholders throughout the project development process to ensure their buy-in and support.

Sustainability and Scalability:

Highlight the project's potential for sustainability and scalability. This includes demonstrating how the project outcomes can be sustained beyond the initial funding period and scaled up to benefit a larger population or area. Incorporate elements that promote long-term resilience, such as capacity building, technology and knowledge transfer, and institutional strengthening.

Co-financing and Leveraging Resources:

Identify potential co-financing opportunities from other sources, including the national budget, private sector investments, and other international development partners (IDPs). Demonstrate how the project leverages additional resources to maximize its impact and sustainability.

Environmental and Social Safeguards:

Ensure the project adheres to national and international environmental and social safeguards and standards to prevent or mitigate negative impacts. This includes conducting comprehensive environmental and social impact assessments (ESIAs) and developing management plans to address/manage identified risks.

Monitoring and Evaluation:

Develop a robust monitoring and evaluation (M&E) framework to track the project's progress and impact. This includes setting clear, measurable indicators and establishing mechanisms for regular reporting and adaptive management at the national and subregion or district level.

Gender and Social Inclusion:

Integrate gender considerations and promote social inclusion throughout the project. This involves conducting a gender analysis and developing a Gender Action Plan to ensure that the project benefits all segments of society, including woman-led households, youth, and economically disadvantaged populations.

By ensuring alignment with these criteria, the project proposal will be better positioned to secure funding from the GCF, effectively addressing climate change challenges while contributing to sustainable development and enhanced food security in Eastern Uganda.

4. Project Goals and Objectives

The project is designed to address the barriers to adoption of climate-smart technologies, prioritized in the Technology Action Plans (TAPs), for strengthening the resilience in agriculture, forestry, energy sectors in Eastern Uganda and guarantee inclusive and sustainable growth.

Specific objectives of the project proposal:

- To improve climate resilience in Uganda's agriculture sector through the promotion of climate-smart farming practices.
- To promote sustainable economic growth by catalyzing local nature-based enterprise development, with technical and financial resources and enhanced markets access.
- To strengthen institutional capacity and policy frameworks to ensure the sustainability of climate action, with capacity building, advocacy, and improved monitoring and evaluation mechanisms.

Goal statement:

IF the climate-smart technologies prioritized in the Technology Action Plans (TAPs) for Uganda, are effectively applied in water and energy use in agricultural systems, and forest landscapes in Eastern Uganda, **THEN** the resilience of local communities to climate threats and their carbon offsets will be increased, contributing to the NDC goals of low-carbon and climate-resilient development, **BECAUSE** adoption of climate-smart technologies will mitigate carbon emissions, improve resource efficiency, and promote sustainable land management practices for a more sustainable and resilient future for Uganda and its inhabitants.

4.1. Specific goals related to agricultural productivity and food security

- Strengthen agricultural resilience by investing in research and development of climate-adapted seed varieties for NARO and other agricultural research institutions, increasing seed affordability through district-level seed banks, capacity building for extension workers, and improving water management systems through water harvesting technologies. This will be accompanied by establishing community-based irrigation systems to support production even in the dry months.
- Promote sustainable economic growth through catalyzing local nature-based enterprise development, providing technical and financial resources and enhancing market access for agricultural products. This is poised to improve technical skills amongst vulnerable populations, create jobs in the sector, and reduce food imports to enhance economic resilience.
- Enhance institutional capacity and policy frameworks by building capacity of local and national institutions, updating and implementing policy frameworks, including capacity building and advocacy for climate-smart agriculture, and improving M&E and backstopping mechanisms for sustained impact.
- Provide significant environmental improvements by delivering environmental and social co-benefits through enhancing land management practices and promoting clean energy solutions, resulting in improved water infiltration, reduced river sedimentation, increased biodiversity through forest landscape restoration, reduction in indoor pollution, and better nutrition and educational outcomes for children.

4.2. Expected Outcomes in Terms of Agricultural Productivity and Food Security

Strengthen Agricultural Resilience:

- **Increased Crop Yields:** The development and adoption of climate-adapted seed varieties will result in crops that are more resistant to pests, diseases, and extreme weather conditions, leading to higher and more stable yields.
- **Enhanced Water Security:** Improved water management systems and the establishment of community-based irrigation will ensure that crops receive adequate water even during dry months, reducing the risk of crop failure and enhancing food security.
- **Better Extension Services:** Capacity building for extension workers will ensure that farmers receive timely and accurate advice on climate-smart farming practices, further improving crop productivity.

Promote Sustainable Economic Growth:

- **Economic Empowerment:** By catalyzing local nature-based enterprise development and providing technical and financial resources, the project will empower local communities economically, creating jobs and reducing dependency on food imports.
- **Market Access:** Enhanced market access for agricultural products will allow farmers to sell their produce at better prices, increasing their income and encouraging more investment in sustainable farming practices.
- **Skill Development:** Improving technical skills among vulnerable populations will lead to more efficient and innovative agricultural practices, boosting overall productivity.

Enhance Institutional Capacity and Policy Frameworks:

- **Policy Implementation:** Strengthened institutional capacity and updated policy frameworks will ensure the sustainability of climate-smart agriculture practices, leading to long-term improvements in agricultural productivity and food security.
- **Effective Monitoring and Evaluation:** Improved M&E and backstopping mechanisms will enable the continuous assessment and improvement of agricultural practices, ensuring sustained impact and adaptation to changing conditions.

Provide Significant Environmental Improvements:

- **Sustainable Land Management:** Enhanced land management practices will lead to better soil health, reduced erosion, and increased agricultural productivity.
- **Clean Energy Adoption:** Promoting clean energy solutions will reduce reliance on traditional biomass for energy, leading to lower greenhouse gas emissions and improved indoor air quality.
- **Biodiversity and Ecosystem Services:** Increased biodiversity through forest landscape restoration will support ecosystem services that are crucial for agricultural productivity, such as pollination and water regulation.
- **Improved Nutrition and Education:** The combined effects of increased agricultural productivity, economic empowerment, and reduced indoor pollution will lead to better nutrition and health outcomes, particularly for children, which in turn can enhance educational performance and overall well-being.

5. Stakeholder Mapping & Engagement Plan

Developing a comprehensive fundable project proposal that encompasses the specific needs in the project area and the broader national socio-economic development priorities is a critical outcome of this project. The TA project will additionally result in the increased technical capacities of key actors to craft bankable project proposals crucial to accessing finance for the country's climate mitigation and adaptation ambitions. This aligns with the CTCN's core mission of technology and knowledge transfer and ensures the direct involvement of local communities and end users in the project's development process. It is, therefore, essential that all necessary stakeholders and partners collaborate closely towards the achievement of this goal.

5.1. Stakeholder Roles and Responsibilities

[insert results of the stakeholder mapping]

The project team at SSA is comprised of three (3) international experts in climate change, project development, innovative climate technology transfer, capacity building, and the climate financing mechanisms under the UNFCCC. They will lead the development of the project's deliverables in close collaboration with the NDE and other actors. Additionally, two local consultants will join the team and support all in-country consultation processes and assessments necessary during the proposal development. The following stakeholders have been

identified:

Science, Technology, and Innovation (STI) Secretariat: as the NDE, STI will lead the project and all national stakeholder consultation and engagement activities.

Ministry of Finance, Planning, and Economic Development (GCF NDA): MFPED will provide strategic oversight to ensure alignment with national climate priorities and enable access to the GCF for the submission of concept note, full proposal, and the no objection letter.

Ministry of Water and Environment (GCF DAE): MWE will provide support during the development of the project proposal and other preparatory activities. This will include support towards all gender, environmental, and social impact assessments, feasibility studies, etc. MWE will also support the knowledge transfer component of this TA by gathering and disseminating useful insights.

Other ministries and parastatal agencies pertinent to this initiative will also support the implementation process to ensure maximum impact within their mandates. These include but not limited to;

- Ministry of Agriculture, Animal Industry, and Fisheries.
- Ministry of Energy and Mineral Development
- Ministry of Gender, Labor, and Social Development
- Ministry of Science, Technology, and Innovation
- Ministry of Local Government including district level officers
- National Forestry Authority
- National Environmental Management Authority
- National Water and Sewerage Corporation

Research Institutions, including but not limited to;

- National Agricultural Research Organization
- Uganda Bureau of Statistics (UBOS)
- Makerere University
- National Crops Resources Research Institute

Financial institutions: a major barrier to climate technology buy-in amongst target populations is the lack of access to adequate financial services and credit. Financial institutions will play a key role in enabling access to finance through affordable financial instruments/services.

- Uganda Development Bank (UDB)
- Stanbic Bank
- PostBank, Opportunity Bank,
- Agricultural Credit Facility, etc.

International development partners and NGOs working in the region.

- Food and Agriculture Organization (FAO)

Multi Community Based Development Initiative (MUCOBADI)
 UN Disaster Risk Reduction
 World Vision International, etc.

Farmer groups, farmer field schools, and civil society organizations:

Eastern and Southern Africa Small Scale Farmers Forum (ESCAFF-Uganda)
 Eastern Uganda Farmers’ Coalition
 Uganda National Farmers’ Federation
 Bugiri Agri Institutions Development Association and other district level farmers groups, etc.

5.2. Strategies for effective stakeholder engagement and participation.

[insert stakeholder engagement plan]

6. Implementation Plan

6.1. Activities, Deliverables, and Milestones

This TA project will be implemented through a series of components, over twelve (12) months, leading to specific outputs that will culminate in a full project proposal package for submission to the GCF. At the core of this endeavor is the need for close collaboration between key actors during the proposal development process to ensure that the final product meets the national climate action needs and priorities as well as the climate context of the target areas. It will be implemented according to the following outputs:

Activities	Deliverables	Deadline
Output 1: Development of a response plan, implementation planning, and communication documents		
Activity 1.1: Develop a comprehensive Response Plan	Response plan	30/01/2024
Activity 1.2: Formulate an implementation plan	Implementation plan	30/01/2024
Activity 1.3: Develop a Monitoring and Evaluation Plan	Monitoring and evaluation plan	30/01/2024
Activity 1.4: Organize an inception meeting with key stakeholders to share plans and get feedback	Inception meeting report	30/04/2024
Activity 1.5: CTCN Impact Description (Initial and Final Version)	Impact description	30/01/2024 31/12/2024
Activity 1.6: Closure and Data Collection Report	Closure and data collection report	31/12/2024
Output 2: A conceptual framework leading to the project proposal for leveraging finance from entities under the financial mechanism of the UNFCCC giving due consideration to identifying key considerations for Improving quantity and quality of agricultural produce and services including enhancement of food security.		
Activity 2.1: Kick-off workshop with key stakeholders	A workshop report with input from stakeholders	30/08/2024

Activity 2.2: Draft a conceptual framework for the project proposal	Draft of a conceptual framework	30/08/2024
Activity 2.3: Draft the comprehensive concept note with the project's objectives, expected outcomes, and strategic approach	Detailed project concept note submitted to the GCF	31/05/2024
Activity 2.4: Development of the PPF	PPF application to the GCF	30/06/2024
Output 3: Engage local counterparts in Uganda to facilitate the process of developing the proposal.		
Activity 3.1: Create first draft of the project proposal	Project proposal draft with inputs from key stakeholders outlined in the terms of reference	30/09/2024
Activity 3.2: Consult the Ministry of Water and Environment and other key stakeholders to obtain their input into the proposal.		
Activity 3.3: Presenting the draft project proposal to the target communities to obtain their input on the proposal.		
Output 4: Validation of the project proposal		
Activity 4.1: Organize a workshop of stakeholders to validate the project proposal.	Validation workshop report	31/10/2024
Activity 4.2: Integrate input from the workshops and consultations for the development of a final proposal.	Draft proposal with inputs from the workshop integrated	31/10/2024
Output 5: Submit the final project proposal to GCF		
Activity 5.1: Address feedback received from the GCF	Final draft of the project proposal and PPF package	30/11/2024
Activity 5.2: Finalizing the Annexes		
Activity 5.3: Submit to the GCF final proposal with comments addressed.		
Activity 5.4: Drafting the final report	Final report to the CTCN	31/12/2024

6.2. Workplan for the Implementation of the Technical Assistance

Output 1: Development of a response plan, implementation planning, and communication documents

Deliverables	2023	2024											
	-1	1	2	3	4	5	6	7	8	9	10	11	12
Response Plan													
Implementation Plan													
Monitoring and Evaluation Plan													
Inception Meeting Report													
Impact Description (Initial and Final													
Closure and Data Collection Report													

Output 2: A conceptual framework leading to the project proposal for leveraging finance from

entities under the financial mechanism of the UNFCCC giving due consideration to identifying key considerations for Improving quantity and quality of agricultural produce and services including enhancement of food security.

Deliverables	2023	2024											
	-1	1	2	3	4	5	6	7	8	9	10	11	12
Kick-off workshop report													
Conceptual framework													
Project concept note													
PPF application													

Output 3: Engage local counterparts in Uganda to facilitate the process of developing the proposal.

Deliverables	2023	2024											
	-1	1	2	3	4	5	6	7	8	9	10	11	12
Project proposal draft with stakeholder inputs													

Output 4: Validation of the project proposal

Deliverables	2023	2024											
	-1	1	2	3	4	5	6	7	8	9	10	11	12
Validation workshop report													
Proposal with input from the validation workshop													

Output 5: Submission of the final project proposal to the GCF.

Deliverables	2023	2024											
	-1	1	2	3	4	5	6	7	8	9	10	11	12
Final proposal draft, annexes, and PPF Package to GCF													
Final report to the CTCN													

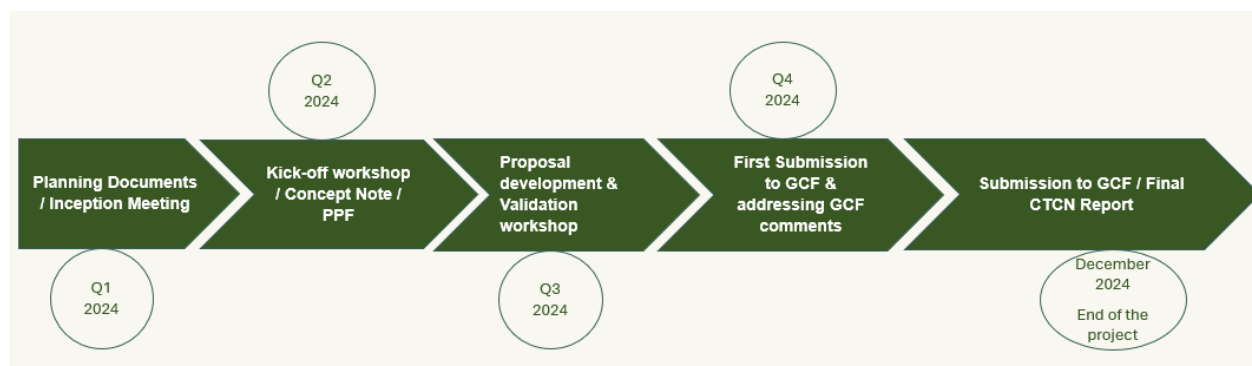


Figure 1: Project implementation timeline

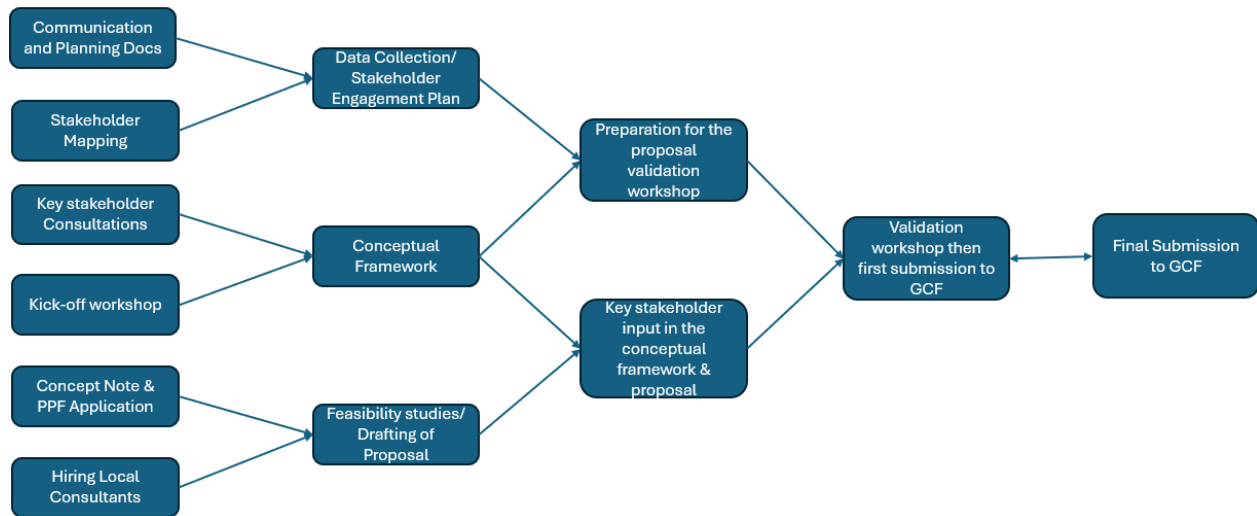


Figure 2: Conceptual framework leading to the final project proposal.

7. Monitoring and Evaluation

The Monitoring and Evaluation (M&E) plan for this project is meticulously crafted to ensure the project's objectives are met efficiently and to provide a robust framework for assessing its impact. By systematically tracking the implementation of project activities, the M&E plan will ensure that progress aligns with the planned timeline and deliverables. This continuous monitoring process will not only keep the project on course but also allow for timely adjustments in response to emerging challenges and opportunities.

A critical aspect of the M&E plan is the evaluation of the project's effectiveness in achieving its intended outcomes and impacts. This includes enhancing climate resilience and securing climate finance from the Green Climate Fund (GCF) and other development finance institutions. The M&E activities will involve regular data collection through surveys, interviews, and progress reports, which will be analyzed to measure changes in capacity, knowledge, and behavior among stakeholders. Additionally, the M&E plan will ensure accountability by providing a transparent mechanism for reporting progress and outcomes to all stakeholders, including funding entities, government bodies, and local communities.

The M&E plan also aims to facilitate continuous learning and improvement throughout the project lifecycle. By identifying lessons learned and best practices, the project can adapt and refine its strategies to maximize effectiveness. Regular feedback from stakeholders, gathered through workshops and consultations, will be integral to this process, ensuring that the project remains responsive to the needs and expectations of all involved parties.

7.1. Framework for Monitoring and Evaluation

Outputs/Activities	Indicators (KPIs)	Expected Results	Data Collection Method
Output 1: Development of a response plan, implementation planning, and communication documents			
<ul style="list-style-type: none"> - Develop a response plan. - Formulate an implementation plan. - Develop a monitoring and evaluation plan. - Organize an inception meeting. - CTCN Impact Description (Initial version) - Closure and data collection report 	<ul style="list-style-type: none"> - Number of strengthened tools and technical documents reviewed or developed. - Number of participants in the inception meeting disaggregated by gender. - Number of stakeholder institutions represented at the inception meeting. - Participant satisfaction with the planning and communication documents - Number of deliverables produced during the assistance. - Anticipated number of collaborations enabled by the TA 	<ul style="list-style-type: none"> - One (1) developed response plan submitted to the CTCN. - One (1) monitoring and evaluation plan approved by key stakeholders in ministries, secretariats, and organizations. - One (1) implementation plan - One (1) inception meeting report - The first CTCN impact description - Increased stakeholder capacity to draft compelling planning and communication documents in the context of CTCN technical assistance. 	<ul style="list-style-type: none"> - List of tools and technical documents reinforced, revised, and/or developed. - Headcount of inception meeting participants disaggregated by gender. - Meeting reports for all meetings held. - List of key stakeholders represented or participating. - Surveys and validated reports from the inception meeting
Output 2: A conceptual framework leading to the project proposal for leveraging finance from entities under the financial mechanism of the UNFCCC giving due consideration to identifying key considerations for Improving quantity and quality of agricultural produce and services including enhancement of food security.			
<ul style="list-style-type: none"> - Kick-off workshop with key stakeholders. - Draft a conceptual framework leading to the project proposal. - Draft of concept note. - Draft of PPF. 	<ul style="list-style-type: none"> - Total number of deliverables produced. - Number and type of materials used to deliver the workshop. - Number of participants in the workshop disaggregated by gender. 	<ul style="list-style-type: none"> - A gender-balanced participation at the kick-off workshop (ideally 50% women) - A variety of national stakeholder's present - Increased knowledge capacity and understanding of project proposal development. 	<ul style="list-style-type: none"> - Registration of participant details including names, gender, position, and institution - Surveys to collect data on workshop satisfaction and

Outputs/Activities	Indicators (KPIs)	Expected Results	Data Collection Method
	<ul style="list-style-type: none"> - Number of stakeholder institutions present and trained. - Percentage of participants reporting satisfaction with the presentations and trainings - Percentage of participants reporting increased knowledge, capacity, and understanding - Number of collaboration meetings held with proponents and other stakeholders 	<ul style="list-style-type: none"> - At least 75% satisfaction from the presentations and trainings - At least one (1) representative from each of the 10 districts in the project area - One (1) workshop report and one (1) conceptual framework produced 	<ul style="list-style-type: none"> increased knowledge and capacity. - Workshop minutes, summaries, and reports - List of meeting participants disaggregated by gender
Output 3: Engage local counterparts in Uganda to facilitate the process of developing the proposal.			
<ul style="list-style-type: none"> - Consult the Ministry of Water and Environment and other key stakeholders. - Present the draft project proposal to the target communities 	<ul style="list-style-type: none"> - Number of collaborations between stakeholders - Number of meetings held during the consultation process. - Number of participants in consultations disaggregated by gender. - Percentage of participants reporting satisfaction with the proposal - Percentage of participants reporting increased knowledge and understanding - Number of presentation sessions/meetings held with local community members. 	<ul style="list-style-type: none"> - Two (2) stakeholder consultation meetings - 75% of key stakeholders consulted with input obtained. - Gender-balanced participation - 90% satisfaction rate with the proposal - 80% reporting increased knowledge and understanding - Inclusive participation from women and youth (at least 40% women) - One (1) project proposal with input from local communities 	<ul style="list-style-type: none"> - Lists of meeting participants, their genders, positions, and organizations - Paper or digital surveys for satisfaction and knowledge data - Stakeholder mapping - Reports of all meetings and key community groups involved

Outputs/Activities	Indicators (KPIs)	Expected Results	Data Collection Method
	<ul style="list-style-type: none"> - Number of focus groups involving various community sectors 		
Output 4: Validation of the project proposal			
<ul style="list-style-type: none"> - Organize a workshop of stakeholders to validate the proposal. - Integrate input from workshops and consultations into the final proposal. 	<ul style="list-style-type: none"> - Total number of deliverables produced. - Number of participants in the workshop disaggregated by gender. - Number of stakeholder institutions present and trained. - Percentage of participants reporting satisfaction with the proposal and suggestions for improvement - Percentage of participants reporting increased knowledge, capacity, and understanding 	<ul style="list-style-type: none"> - Gender-balanced participation at the workshop (at least 50% women) - Variety of national stakeholders present - Increased knowledge and understanding of project proposal development. - 90% satisfaction with the proposal - One (1) workshop report, meeting minutes, and notes - One (1) validated project proposal submitted to the Green Climate Fund (GCF) 	<ul style="list-style-type: none"> - Registration of participant details - Paper or digital surveys for workshop satisfaction and knowledge capacity ratings - Workshop minutes, summaries, and reports - Questionnaires distributed to participants for data collection
Output 5: Submit the final project proposal to GCF			
<ul style="list-style-type: none"> - Address feedback received from the GCF. - Finalize the Annexes - Submit the final proposal with addressed comments. - Draft the CTCN final report 	<ul style="list-style-type: none"> - Number of comments received from the GCF. - Number of meetings held to address comments. - Number of annexes added to the final project proposal. - Amount of data collected throughout the implementation process. - Number of deliverables 	<ul style="list-style-type: none"> - One (1) project proposal with comments addressed and all annexes included. - One (1) final report to the CTCN 	<ul style="list-style-type: none"> - Final meeting notes and summaries - List of participants in meetings disaggregated by gender. - Various assessment and planning reports including other annexes. - Final report with all relevant data

7.2. Impact Description

The implementation of the climate-smart agriculture project in Uganda is poised to generate substantial positive impacts on the agricultural sector, contributing significantly to national food security and economic resilience. By promoting the adoption of climate-smart technologies and practices, the project aims to enhance the productivity and sustainability of agricultural systems. This will not only improve the livelihoods of farmers but also bolster the country's ability to withstand and adapt to the adverse effects of climate change.

One of the key expected outcomes is the increased resilience of local farming communities. By integrating climate-smart technologies, such as improved water management and the use of climate-resilient crop varieties, farmers will be better equipped to manage extreme weather events and other climate-related shocks. This resilience is crucial for maintaining stable food production levels, even in the face of increasing climatic variability. The project also emphasizes capacity building, ensuring that both farmers and local institutions have the knowledge and skills needed to sustain these practices over the long term.

In addition to enhancing resilience, the project is expected to drive sustainable economic growth in rural areas. By supporting local nature-based enterprises and improving market access for agricultural products, the project will create new economic opportunities and jobs. This is particularly important for vulnerable populations, including women and youth, who are often disproportionately affected by climate change. The development of these enterprises will also reduce reliance on food imports, further strengthening the country's food security.

Environmental sustainability is another critical impact area. The project promotes sustainable land management and the use of clean energy solutions, which will lead to significant environmental co-benefits. These include improved soil health, increased biodiversity through forest landscape restoration, and reduced greenhouse gas emissions. Additionally, the project will contribute to better water management, reducing river sedimentation and improving water infiltration, which are vital for both agricultural and ecological health.

Overall, the project is aligned with Uganda's national development goals and international climate commitments such as NDP III, NAP-Ag, and NDCs. By fostering a more resilient, productive, and sustainable agricultural sector, the project will support Uganda's efforts to achieve low-carbon, climate-resilient development. The long-term impacts will be felt not only in improved agricultural productivity and food security but also in enhanced economic stability and environmental health.

Contribution to Sustainable Development

SGD 2: By implementing technologies that limit post-harvest losses and community-based irrigation systems, the TA will reduce vulnerabilities, increase agricultural yields and food reserves resulting in increased food security for the local communities in Eastern Uganda.

SDG 5: The technical assistance is strategically designed to champion gender equality and inclusivity across every facet of the project. Through the integration of a gender-responsive approach, the project seeks to establish and uphold equal opportunities for both men and women in accessing and deriving benefits from climate technologies, with a specific focus on the target sectors. By prioritizing a gender-responsive approach, the project aims to create a more inclusive and empowering environment, recognizing the pivotal role that gender equality plays in the successful adoption and impact of climate technologies in critical sectors.

SDG 13.b: The Technical Assistance (TA) is carefully crafted to cultivate a profound understanding of climate technologies, emphasizing both adaptation and mitigation strategies within the targeted sectors. The TA aims to empower stakeholders with the tools needed for informed decision-making and the successful implementation of effective climate change action mechanisms. Furthermore, the TA places emphasis on engaging diverse stakeholders, including local communities and civil society, fostering inclusivity, and ensuring that climate resilience efforts resonate with the unique contexts of the targeted sectors. This comprehensive and adaptive approach positions the TA as a key driver in building resilience and facilitating sustainable responses to the evolving challenges of climate change.

7.3. Gender Considerations and Mainstreaming

This project incorporates significant gender considerations and mainstreaming to ensure that both women and men benefit equitably from the project's interventions. This approach acknowledges the different roles, responsibilities, and needs of women and men in agriculture, aiming to enhance gender equality and empower women within the agricultural sector.

Gender Assessment and Action Plan

A critical component of the project is the gender-sensitive needs assessment, culminating in a gender action plan. This involves collecting and analyzing data disaggregated by gender to understand the specific challenges and opportunities faced by women and men in agriculture. The assessment informs the design and implementation of project activities, ensuring they are tailored to address the unique needs of all genders.

Capacity Building and Empowerment

The project emphasizes capacity building for women farmers and extension workers. Training materials are designed to enhance the technical skills and knowledge of women in climate change. By doing so, the project aims to increase women's productivity and resilience to climate change. Additionally, efforts are made to involve women in decision-making processes at the community and institutional levels, thereby promoting their leadership and empowerment.

Access to Resources and Technologies

Ensuring equitable access to resources and technologies is another key focus of the project. The project also aims to facilitate access to climate-smart technologies, financial resources, and market opportunities for women farmers. This includes setting up district-level seed banks to make climate-adapted seeds more affordable and accessible. Moreover, the project will

promote women-led nature-based enterprises, providing technical and financial support to enhance their economic resilience.

Monitoring and Evaluation with a Gender Lens

The project's monitoring and evaluation framework integrates gender-specific indicators to track progress and impact on women and men. Data collection methods are designed to capture gender-disaggregated information, enabling the project team to assess the effectiveness of gender mainstreaming efforts continuously. Regular feedback mechanisms are to be established to ensure that any emerging gender-related issues are promptly addressed.

8. Project Risk Assessment and Management Strategies

The implementation of this technical assistance project may be affected and/or delayed by a variety of risks as described below. These risks can be mitigated using the following strategies. Should these strategies prove insufficient to address/manage risks or should other risks arise during the implementation timeline, the project team at SSA will communicate with all concerned stakeholders to devise ways of overcoming any challenges.

Risk Description	Mitigation Strategy(ies)
Low participation or engagement from key stakeholders due to competing priorities or lack of interest.	Conduct a thorough stakeholder mapping to identify and prioritize key stakeholders. Develop a clear and detailed communication plan to keep stakeholders informed and engaged. Schedule regular meetings to share updates and use participatory approaches to involve stakeholders in decision-making processes, ensuring their input and buy-in.
Delays in disbursement of funding or budget overruns, affecting project timelines and activities.	Develop a detailed budget and financial plan with contingencies for unexpected expenses, establish a robust financial management system to track expenditures and manage funds efficiently, and maintain open communication with funding partners and stakeholders.
Unforeseen environmental conditions and impacts disrupting project activities.	Conduct a comprehensive environmental and social impact assessment (ESIA) to identify and address potential environmental threats, culminating in a management plan. Maintain flexibility in the implementation process to adapt to unexpected changes.
Resistance from local communities due to cultural beliefs, social norms, and lack of awareness about the benefits of climate technologies.	Engage with local leaders, civil society organizations, and development partners to build trust and support for the project. Create awareness through workshops, meetings, etc., about the tangible benefits of climate technologies ensuring respect for local knowledge and cultural sensitivity.

<p>Inaccurate or incomplete data could lead to poor decision-making and project outcomes.</p>	<p>To mitigate the risk of inaccurate or incomplete data, the project will implement robust data collection systems, employing standardized protocols and modern technologies like mobile data collection tools to ensure accuracy and ease of collection. Regular audits and validation exercises will be conducted to verify data accuracy and completeness. Engaging local communities will ensure culturally appropriate methods and improve data relevance, while community involvement in data collection will build trust and reflect ground realities.</p>

9. Kick-off Workshop Outcomes

9.1. Notes from the NDE Meeting

10. Way Forward

Summary of key points

Call to action for stakeholders and funding entities

