# Technical Assistance Closure Report Template

**Objective of the technical assistance (TA) Closure Report:**

- To communicate publicly in one document a summary of progress made and lessons learned during the TA towards the anticipated impact (sections 1-4).
- To document qualitative and quantitative data collected during TA, for use in donor and UN reporting (Annex 1).

**Steps for completing the TA closure report:**

1. The lead TA implementer submits the closure report at the end of the technical assistance as a final deliverable. The TA closure report will capture outputs, outcomes and impacts of all activities conducted under the TA. Please copy and summarise relevant material from previous TA outputs/deliverables and the Response Plan, as relevant.
2. A CTCN Manager will review and revise the closure report before final approval by the CTCN Deputy Director.

**Important note on public and internal use of the closure report**:
Once approved by the CTCN Deputy Director, the TA closure report will be a public document available on the CTCN website www.ctc-n.org. Selected content will be used for targeted communication activities. Annex 2 is for internal use only and will not be publicly available.

## Closure Report for CTCN Technical Assistance

### 1. Basic information

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| Title of response plan | **Technical Assistance Towards the Development of a Project Proposal for the Implementation of Climate Adaptation and Mitigation Technologies to Address Climate Challenges in Specific Sectors Based on Uganda's Technology Needs Assessment Outcomes.** |
| Technical assistance reference number | **2023000022** |
| Country / countries | **Republic of Uganda** |
| NDE organisation | Science, Technology, and Innovation Secretariat |
| NDE focal point | Dr. Samuel Okodi<br>Team Lead, Infrastructure and Innovation |
| NDE contact information | samuel.okodi@sti.go.ug<br>samuel_okodi@hotmail.com |
| Proponent focal point and organisation | Margaret Athieno Mwebesa<br>Commissioner, Climate Change Department/UNFCCC National Focal Point<br>Ministry of Water and Environment<br>Republic of Uganda<br>margathieno@gmail.com |
| Designer of the response plan | Sandra Adeyemi Freitas<br>CEO<br>Sustainable Solutions for Africa (SSA) |

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| | 61 Rue de la Fraternité (195), Agbalepedogan<br>Lomé - Togo 08 BP 81 555 |
| Implementer(s) of technical assistance | Sustainable Solutions for Africa (SSA) and local consultants |
| Beneficiaries | Science, Technology, and Innovation Secretariat & Ministry of Water and Environment<br>Republic of Uganda |
| Sector(s) addressed | Agriculture, Water, Forestry, and Energy |
| Technologies supported | The TNA encompasses mitigation and adaptation technologies aligned with Uganda's Technology Action Plans.<br>- Crop breeding for climate change adaptation,<br>- Community-based irrigation systems<br>- Responsive agricultural extension,<br>- Rainwater harvesting,<br>- Surface runoff water harvesting,<br>- Promotion of Farmer Managed Natural Regeneration (FMNR) for forest landscape restoration,<br>- Promoting Forest based enterprises e.g. bee keeping/apiary; butterfly farming, fruit trees production; ecotourism,<br>- Rooftop solar PV systems,<br>- Bio-latrines for institutions (using biogas technology). |
| Implementation start date | 01/01/2024 |
| Implementation end date | 31/03/2025 |
| Total budget for implementation | 75,000 USD |
| Description of delivered outputs and products as well as the activities undertaken to achieve them. In doing so, review the log frame of the original response plan and refer to it as appropriate | **Output 1 – Development of response Plan, implementation planning and communication documents**<br>This output was achieved through the following activities:<br>Activity 1.1: Development of a comprehensive Response Plan<br>Activity 1.2: Formulation an implementation plan<br>Activity 1.3: Development of a Monitoring and Evaluation Plan<br>Activity 1.4: Organizing an inception meeting with key stakeholders to share plans and get feedback<br>Activity 1.5: Drafting the initial CTCN Impact Description<br>Activity 1.6: Completing the Closure and Data Collection Report<br>Deliverables:<br>1.1: Response plan<br>1.2: Implementation plan<br>1.3: Monitoring and evaluation plan<br>1.4: Inception meeting report<br>1.5: Initial impact description<br>1.6: Closure and data collection report<br>**Output 2: A conceptual framework leading to the project proposal for leveraging finance from entities under the financial mechanism of the UNFCCC giving** |

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| | **due consideration to identifying key considerations for Improving quantity and quality of agricultural produce and services including enhancement of food security.**<br>This output was achieved through the following activities:<br>Activity 2.1: Organizing the kick-off workshop with key stakeholders.<br>Activity 2.2: Drafting the conceptual framework for the project proposal<br>Activity 2.3: Drafting the comprehensive concept note with the project's objectives, expected outcomes, and strategic approach,<br>Activity 2.4: Development of the PPF<br>Deliverables:<br>2.1: Kick-off workshop report<br>2.2: Conceptual framework leading to the project proposal<br>2.3: Project concept note<br>2.4 Project Preparation Facility draft<br>**Output 3: Engage local counterparts in Uganda to facilitate the process of developing the proposal.**<br>This output was achieved through the following activities:<br>Activity 3.1: Creating the first draft of the project proposal<br>Activity 3.2: Consulting the Ministry of Water and Environment and other key stakeholders to obtain their input into the proposal.<br>Activity 3.3: Presenting the draft project proposal to the target communities to obtain their input on the proposal.<br>Deliverables:<br>3.1: Project proposal draft with inputs from key stakeholders outlined in the terms of reference<br>**Output 4: Validation of the project proposal**<br>Activity 4.1: Organizing a workshop of stakeholders to validate the project proposal.<br>Activity 4.2: Integrating input from the workshop for the development of a final proposal.<br>Deliverables:<br>4.1: Validation workshop report<br>4.2: Draft proposal with inputs from the workshop integrated<br>**Output 5: Submit the final project proposal to GCF**<br>Activity 5.1 Addressing feedback received from the GCF.<br>Activity 5.2 Submit to the GCF final proposal with comments addressed.<br>Activity 5.3: Final report<br>Deliverables:<br>4.2. Final draft of project proposal submitted to the GCF<br>4.2. Final report |
| Methodologies applied to produce outputs and products | The primary methodology used to develop the concept note and funding proposal as well as its annexes was research and literature reviews. This involved significant review of public literature published both by the Government of Uganda, international development |

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| | organizations, and researchers regarding climate vulnerabilities and impacts in the target sectors across Uganda including the Eastern region. Literature reviews included government policies such as the National Climate Change Policy, the National Irrigation Policy, the National Environment Act, etc. as well as Uganda's Technology Needs Assessment reports, Technology Action Plans for both adaptation and mitigation, and barrier analyses and enabling frameworks.<br><br>The TA also leveraged stakeholder consultation meetings and workshops to present the draft concept note and funding proposal aimed at gathering key stakeholder insights into the project design. These meetings/workshops welcomed various sector experts, key policy and decision makers, and civil society organizations who provided their expert and localized expertise to improve the concept note and project proposal. During the two workshops, the kick-off and validation workshops, participants were further invited to discuss how both the concept note and funding proposal, respectively, could be improved based key pre-selected guiding questions to which they responded. These were aimed at stimulating and contextualising feedback to be used to improve both deliverables.<br><br>Throughout the project, the stakeholder engagement approach was emphasized as the key strategy to ensure the concept note and funding proposal address key climate vulnerabilities in the target districts in Eastern Uganda and align with Uganda's climate adaptation/mitigation policies and development agenda. |
| Reference to knowledge resources | Reference to UNFCCC TEC knowledge products was made in the implementation of Outputs 2 and 3 of the TA:<br><br>**Enabling implementation at scale: TEC analysis of success stories from implemented Technology Action Plans.**<br><br>Relevant to Outputs 2 and 3, this publication presents challenges observed in post-TNA/TAP project development including the mismatch between TNA outcomes and requirements of funding entities and international donors and inadequate domestic capacity and operational continuity to turn TAPs into fundable project proposals play a critical role hampering the implementation of technology priorities.<br><br>This publication directly communicates to this TA as it is intended to translate Uganda's TNA outcomes and TAPs into action through a funding proposal to the Green Climate Fund – domestic challenges in TAP implementation are reflected in the proposal which in turn proposes strategies to overcome climate technology adoption challenges for climate resilience. |

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| Deviations | During the implementation of this TA, there were some deviations. Early on the implementation timeline, there were delays in engaging with national stakeholders including the National Designated Entity Focal Point which significantly delayed progress on the implementation timelines of Outputs 2 to 5. The inception meeting which was meant to be held in January 2024 was held on April 14 2024. Additionally, deadlines for holding the kick-off workshop, initially scheduled for February 2024, were extended to October 2-3, 2024, due to the same limited stakeholder involvement difficulties. This resulted in delays for all subsequent activities.<br><br>Recognizing the possibility of not completing the TA by the December 31, 2024, deadline, a No-Cost Extension was requested and granted by the CTCN in which the closure deadline for the TA was extended from December 31, 2024 to March 31, 2025. |
| Anticipated follow-up activities and next steps | Follow up activities under this TA include the follow-up with the Ministry of Water and Environment (GCF Accredited Entity) and the Ministry of Finance, Planning, and Economic Development (GCF National Designated Authority) to obtain a No-Objection Letter and internal approvals to formally submit the concept note and funding proposal to the Green Climate Fund.<br><br>Additionally, after GCF review, SSA will work with the Accredited Entity and NDA to address GCF's comments on the funding proposal before the final submission.<br><br>Once approved by the GCF, the activities developed in the CATLER-Uganda funding proposal by CTCN will need implementation and since the CTCN is anticipated to be a member of the Project Steering Committee, follow up implementation and technical guidance activities will be needed. |

## 2. Lessons learned

| | **Lessons learned** | **Recommendations** |
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| Lessons learned from the CTCN TA process | Effective stakeholder engagement and coordination were crucial but challenging- there was a need to align various stakeholders on the country driven TNA process and its results including the TAPs and their recommended actions. As the TA aimed to create a project proposal that can operationalize the TAPs, there were knowledge gaps among stakeholders of their existence, purpose, and | To facilitate greater stakeholder engagement and coordination for future TA processes, it is essential to implement a comprehensive stakeholder engagement strategy at the national level that could include the following:<br><br>- Early stakeholder mapping to identify all relevant actors including pertinent sector experts, government institutions, local authorities, etc. |

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| | potential benefits to the national climate adaptation and mitigation agenda.<br>Communication of these instruments among sector experts and government agencies coupled with local protocols for communication with local authorities required significant time.<br>This and the delay in responses from the NDE caused significant delays in delivery of outputs. | - Strengthening the capacity of the NDE through targeted training, dedicated staff, and logistical support to enhance responsiveness.<br>- Engaging local authorities early by adhering to communication protocols and integrating their input into planning stages to facilitate smooth field operations.<br>- Adaptive monitoring and learning mechanisms to identify and address communication or coordination challenges in real time. |
| Lessons learned related to climate technology transfer | Key barriers to the deployment and adoption of the prioritized technologies in the TAPs included limited stakeholder awareness of their socioeconomic and environmental benefits, inadequate local capacity for installation, operation, and maintenance, and high upfront costs coupled with the limited availability of affordable financing models especially among rural end-users which slows adoption. Additionally, rural communities in hard-to-reach areas are hesitant to adopt new technologies due to engrained traditional knowledge and practices as well as uncertain economic returns.<br><br>Local community engagement and building local capacities for technology awareness and use emerged as a critical factor the sustainability of climate technology adoption. Stakeholders emphasized a bottom-up engagement strategy where local communities are engaged on the best and most appropriate technologies that fit their socioeconomic circumstances to make adoption easier and more impactful. | Recommendations include community-based sensitization campaigns using local languages and participatory methods to increase awareness of the socioeconomic and environmental benefits of prioritized technologies, thereby reducing resistance rooted in traditional practices.<br><br>Strengthening technical and institutional capacities by investing in training programs for local technicians, farmer groups, and extension agents to ensure adequate capacity for installation, maintenance, and long-term use of technologies, thus reducing reliance on external expertise.<br><br>Developing and promoting tailored financing instruments such as microcredit schemes, pay-as-you-go models, community co-financing, pilot insurance products, and revolving community funds could help de-risk climate technology investments, overcome high upfront costs, and increase technology uptake among low-income users.<br><br>Institutionalize participatory planning processes where local communities and end-users are actively involved in identifying the most context-appropriate technologies, thereby reducing the risk of adoption failure due to misalignment with local needs. |

**3. Illustration of the TA and photos**

*For communication purposes, please provide 2-4 Power Point slides, including illustrations or charts, describing barriers, opportunities, methodology, activities, outputs and achieved results. The illustrations must be copied into the TA Closure report but must also be delivered as power point files. Also, please provide at least five high-resolution pictures in jpg format, capturing technical assistance. The pictures should illustrate how the TA has impacted the lives of the beneficiaries in particular and the communities in general.*

This TA process included two national stakeholder consultation workshops that served as critical platforms for capacity building, stakeholder engagement, and strategic dialogue on the deployment of prioritized technologies through the development of the CATLER-Uganda GCF funding proposal. The workshops introduced participants to the Technology Needs Assessment and Technology Action Plans, emphasizing the socioeconomic and environmental benefits of the priority technology and their potential to result in significant climate resilience opportunities in the agriculture, water, forestry, and energy sectors in Eastern Uganda.

Participants engaged in facilitated discussions that identified barriers to climate technology adoption, such as limited awareness and technical capacity, financing challenges, and institutional coordination gaps, while also highlighting context-specific opportunities to overcome them. These workshops enabled knowledge exchange across government agencies, sector experts, and civil society organizations, building a shared understanding of climate-smart technologies and financing pathways. The insights generated have directly informed the TA outputs including the concept note, funding proposal, refined theory of change, and targeted recommendations to strengthen climate resilience and sustainable development in vulnerable communities.

**Tables of participant responses during breakout group discussions on strategizing for effective climate technology deployment in Eastern Uganda.**

During the kick-off workshop held on 2nd and 3rd October 2024 in Kampala - Uganda, one key session was a breakout group session where participants were split into three groups to discuss how the project concept note can strategize for effective deployment of TAP climate technologies in Eastern Uganda. Below are summaries of responses from these discussions:

***Table 1:*** *Group A - Scaling Climate-Smart Agriculture and Water Management Technologies.*

| Question | Summary of Responses |
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| **What are the most pressing challenges faced by farmers?** | Farmers face challenges such as landslides, floods, unpredictable weather, pests and diseases, land-use conflicts, droughts, land fragmentation, soil erosion, and poor crop yields. |
| **How can Climate Smart Agriculture address these?** | Solutions include water management, drought-tolerant crops, agroforestry, soil fertility improvement, enhanced extension services, post-harvest technologies, and alternative livelihoods. |

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| **What are the most effective climate-resilient crops?** | Maize, beans, cassava, rice, millet, groundnuts, Irish potatoes, bananas, and Arabica coffee are recommended as resilient crops for the region. |
| **How can water management systems be scaled?** | Strengthening cooperatives, government subsidies, and partnerships with the private sector and development partners are necessary for scaling irrigation and rainwater harvesting systems. |
| **What role can community engagement play?** | Community engagement enhances the sustainability of technologies, ownership, management, and social inclusion. It also taps into local indigenous knowledge for long-term success. |
| **How can local knowledge be integrated into solutions?** | Local knowledge can be integrated through community meetings, case studies, household interviews, and focus group discussions. |
| **What are best practices for involving women and youth?** | Best practices include providing incentives, increasing participation in decision-making, implementing inclusive policies, and promoting VSLAs for women and youth. |

***Table 2:*** *Group B - Integrating Renewable Energy Solutions into Rural Livelihoods.*

| Question | Summary of Responses |
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| **What renewable energy technologies are feasible?** | Solar and biomass (efficient cookstoves, briquettes, firewood) are the most feasible options for Eastern Uganda. Biogas may work on a case-by-case basis, and wind energy has potential if areas are properly mapped. |
| **How can these energy solutions improve productivity?** | Solar and wind energy can be used for agricultural processing, reducing post-harvest losses, increasing productivity (solar irrigation), and reducing air pollution and respiratory diseases. |
| **What are the barriers to deploying such technologies?** | Barriers include lack of wind energy mapping, cultural resistance, lack of expertise in operation and maintenance, financial constraints, and limited access to training and information. |
| **What strategies can ensure sustainability and affordability?** | Strategies include utilizing local knowledge, conducting baseline studies, community sensitization, and ensuring the technologies are locally available and affordable. Training and MoUs with local leaders are critical for long-term maintenance. |
| **How can the private sector and government collaborate?** | Collaboration can be achieved through joint proposal writing, government endorsement letters, workshops, and creating bankable projects for development partners. Tax |

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| | incentives are recommended for private sector involvement. |
| **How can PPPs ensure equitable access to renewable energy?** | Public-Private Partnerships (PPPs) should clearly define stakeholder roles and focus on collaboration in project management, financing, and implementation to ensure equitable access to renewable energy technologies. |

***Table 3:*** *Group C - Enhancing Climate Resilience through Forestry and Ecosystem-Based Adaptation.*

| Question | Summary of Responses |
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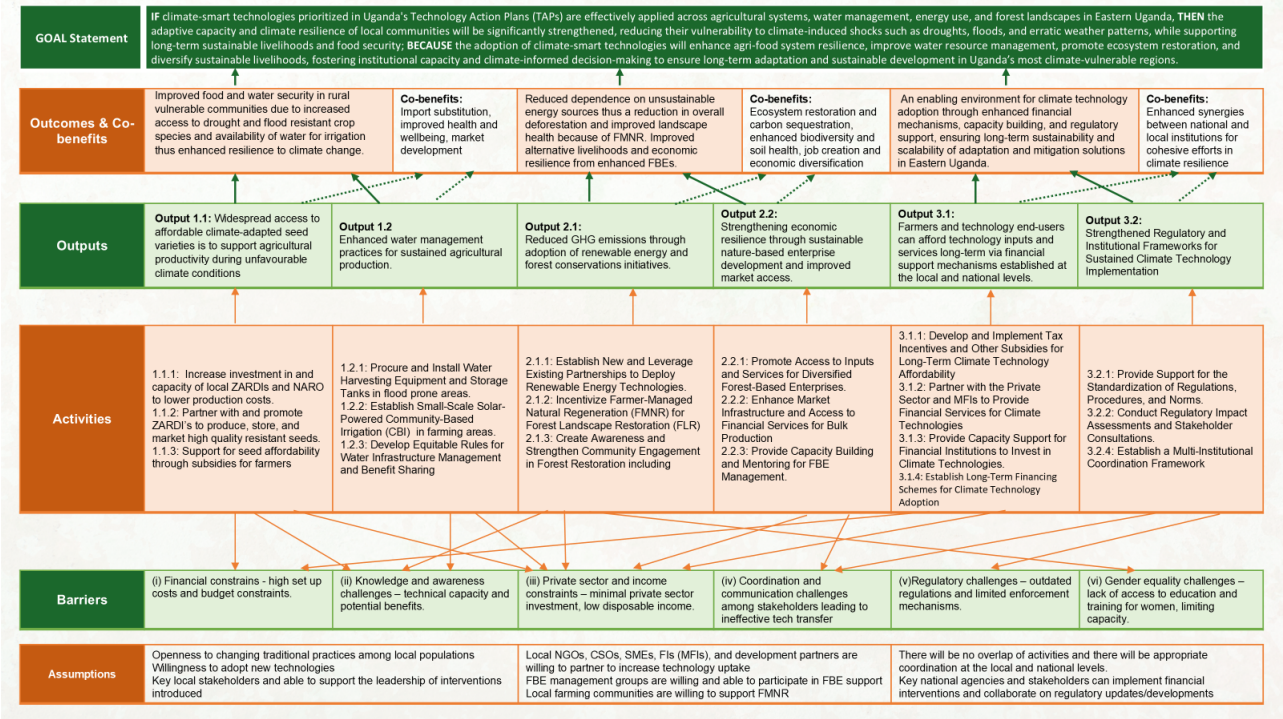
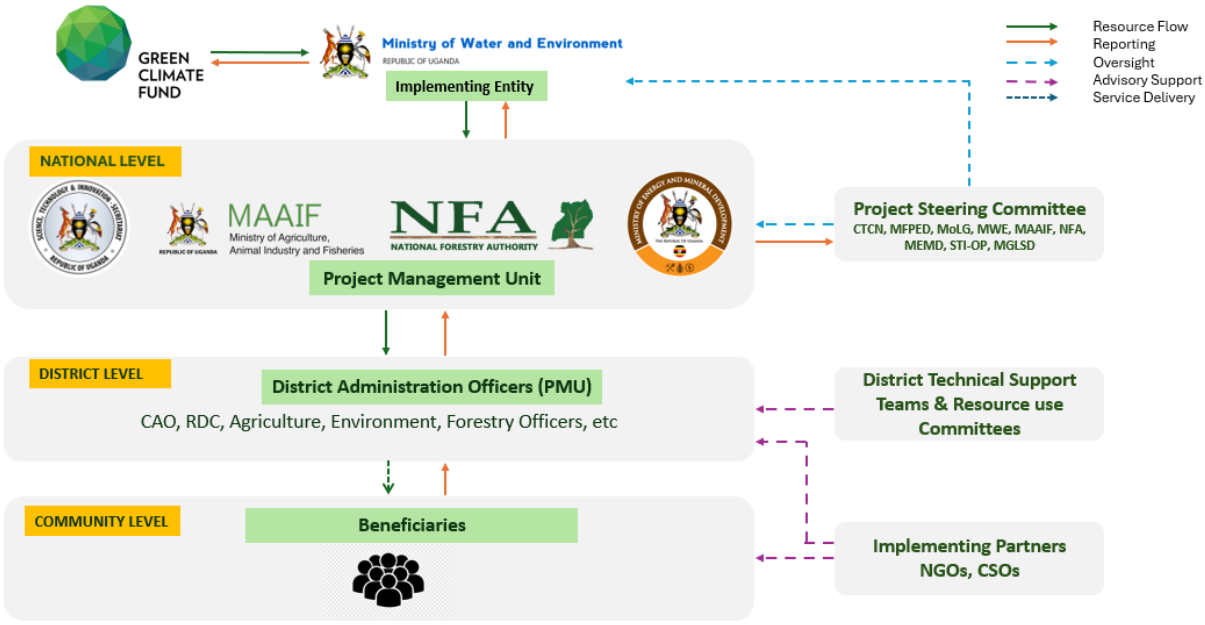
| **What role can communities play in forest protection?** | Communities can monitor forests, report illegal activities, participate in tree planting and ecological monitoring, and sustainably harvest forest products. |
| **How can degraded forests be restored?** | Restoration strategies include natural regeneration, agroforestry, enrichment planting, woodlot establishment, afforestation programs, and riparian restoration along rivers and streams. |
| **How can natural systems reduce climate vulnerabilities?** | Wetlands store excess water to mitigate floods, while forest roots stabilize soil to prevent landslides. Forests also sequester carbon, reducing the impact of climate extremes. |
| **How can forest conservation create income opportunities?** | Conservation efforts can generate income through timber sales, honey production, seedling sales, herbal medicine production, and ecotourism. |
| **What incentives are needed for ecosystem-based adaptation (EBA)?** | Incentives include providing improved planting materials, training in sustainable practices, recognizing outstanding performers, offering grants/loans, and involving local leaders and technical experts in implementation. |
| **How can EBA solutions improve food security and disaster resilience?** | EBA solutions like agroforestry and conservation agriculture improve soil and water conservation, stabilize riverbanks, and provide additional resources such as fuelwood and fodder, which boost farm productivity and resilience. |

## Figure 1: Theory of change for the GCF concept note developed as a result of this TA

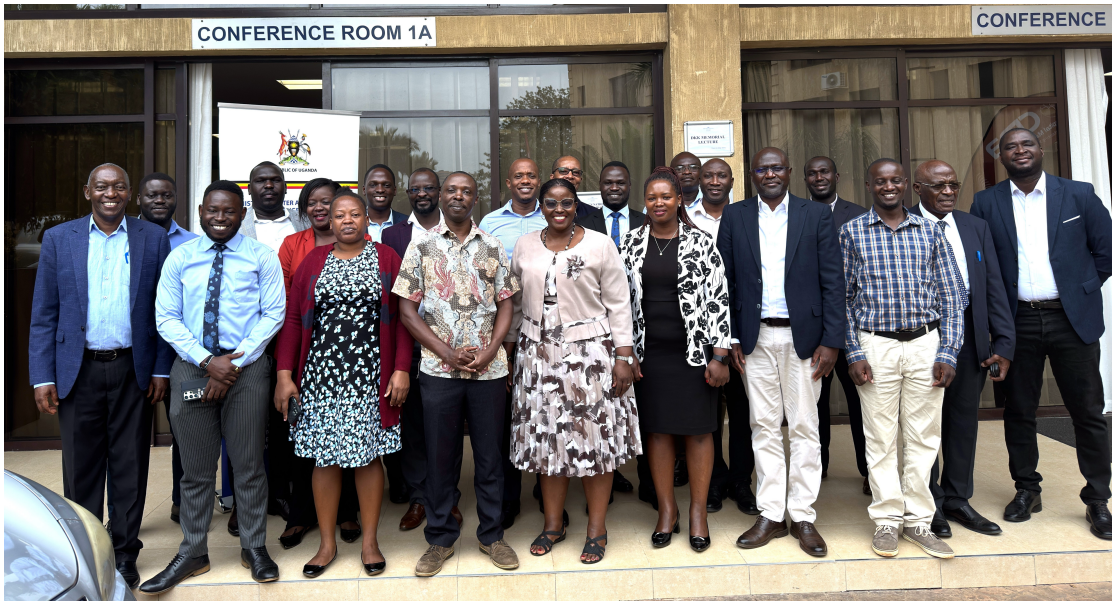



## Figure 2: Implementation arrangements of the GCF concept note developed as a result of this TA



## Pictures from this TA:

**Picture 1:** Group photo from the opening session at the kick-off workshop on the development of a bankable GCF proposal for the implementation of climate technologies in Eastern Uganda
2nd – 3rd October, 2024 in Kampala, Uganda




**Picture 2:** Group photo from the opening session at the validation workshop of the project proposal for the implementation of climate technologies in Eastern Uganda.
12th – 13th March 2025, Kampala, Uganda.

**Picture 3:** Breakout session Group 2 discussing Component 2 of the funding proposal which addresses community empowerment through sustainable enterprise development and environmental restoration. at the validation workshop in Kampala.
13th March 2025

**4. Impact Statement**

The information in the table below will be used to communicate results and anticipated impacts of this technical assistance publicly. Please copy information from impact statement developed in the M&E Plan and update as relevant.

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| **Challenge** | *Approx. 500 characters with spaces*<br>In its national effort to adapt to climate change, Uganda faces the challenge of limited capacity to develop appropriate and fundable project proposals to enable access to climate finance from the established financial mechanisms under the UNFCCC. This has resulted in a lack of sufficient funds to implement major national climate change mitigation/adaptation strategies such as climate smart technologies, selected from the Technology Action plan (TAP), in different parts of the country. |
| CTCN Assistance | *2 to 4 bullet points. Approximately 450 characters with spaces*<br>- To address the challenge, the CTCN has provided technical assistance for the development of a detailed fundable proposal to be submitted to the GCF to leverage climate finance to support the implementation of climate change adaptation and mitigation |

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| | technologies in the Ugandan identified in the TNA outcomes and TAPs.<br><br>- To develop a conceptual framework leading to a project proposal for leveraging finance from entities under the financial mechanism of the UNFCCC considering identify key considerations for Improving quantity and quality of agricultural produce and services including enhancement of food security |
| Anticipated impact | *Summarize the problem statement and desired impact. Describe how the TA is expected to lead to the desired impact. Include description of stakeholders, deliverables and timelines. As a minimum, please include at least one of the core impact indicators from the closure report Annex.*<br><br>Uganda's vulnerability to climate change is most pronounced in its eastern regions, where communities face recurring droughts, land degradation, deforestation, and unreliable access to water and energy—challenges that severely undermine food security, rural livelihoods, and environmental integrity. Despite having national policies and technology priorities outlined in the TNA and the TAPs, implementation remains constrained by limited institutional capacity, inadequate coordination among stakeholders, insufficient financing mechanisms, and inadequate technical knowledge at local levels. The result is a persistent gap between national climate ambitions and localized action, particularly in the deployment of scalable, community-driven adaptation and mitigation technologies.<br><br>This TA intends to bridge this gap by strengthening Uganda's ability to access and utilize international climate finance—particularly through the Green Climate Fund—to implement context-appropriate, gender-responsive, and low-emission technologies. Through the preparation of a fundable GCF project proposal, the TA aims to enable the large-scale deployment of prioritized climate technologies in the agriculture, energy, forestry, and water sectors, thereby improving community resilience to climate risks and impacts, restoring degraded ecosystems thus enhancing carbon sequestration, enhancing water and food security for rural vulnerable |

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| | communities, and reducing anthropogenic greenhouse gas emissions from key production sectors. |
| Co-benefits: Achieved or anticipated co-benefits from the TA | *Instruction: Please indicate expected co-benefits as described in the response plan and in the relevant deliverables*<br><br>This TA generated a number of significant co-benefits that strengthen Uganda's long-term climate resilience and institutional capacity.<br><br>The TA fostered strong alignment among key national and sub-national stakeholders—including government ministries, accredited entities, local government structures, and community-based organizations—through structured consultations and two multi-sectoral workshops. This engagement enabled a shared understanding of Uganda's TAPs, enhanced coordination across the water, agriculture, energy, and forestry sectors, and strengthened institutional collaboration for future climate finance mobilization. These efforts have laid the foundation for integrated implementation of adaptation and mitigation solutions under a unified national approach.<br><br>Additionally the TA produced critical knowledge outputs including the concept note and the project proposal along with its annexes, which now serve as practical tools for project design and resource mobilization for climate technology implementation. These deliverables represent valuable knowledge assets that not only advance Uganda's access to climate finance but also serve as replicable models for other proposals. The TA also contributed to domestic innovation systems by linking research institutions with climate technology deployment, such as supporting region-specific seed development and FMNR protocols. These linkages enhance Uganda's ability to generate and scale locally adapted solutions for climate resilience.<br><br>The deployment of prioritized climate-resilient technologies in Eastern Uganda through the CATLER-Uganda project is expected to generate a wide range of co-benefits spanning economic, social, and environmental dimensions. |

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| | Economically, the introduction of technologies in agriculture, forestry, and renewable energy is anticipated to drive diversification, stimulate rural enterprise development, and create green jobs—particularly benefiting women and youth. Socially, the project is designed to improve health outcomes by promoting cleaner technologies that reduce indoor air pollution, while investments in bio-latrines and improved cookstoves in schools will enhance hygiene and create a more supportive learning environment. Environmentally, the adoption of farmer-managed natural regeneration and sustainable water management practices will support biodiversity, restore degraded ecosystems, and reduce deforestation by decreasing dependence on traditional biomass fuels. Together, these co-benefits contribute to strengthened community resilience, improved livelihoods, and the achievement of Uganda's broader sustainable development and climate goals. |
| Gender aspects of the TA | *Instruction: Please indicate if technical assistance was supported by a gender analysis. Describe gender aspects identified and additional considerations taken to mainstream gender (e.g. equal participation in trainings, gathering of gender-disaggregated data, etc.).*<br><br>This TA was implemented with a strong gender-responsive approach to ensure that both men and women equitably access, participate in, and benefit from climate technology planning and deployment processes. Guided by a gender assessment and action plan developed during the TA, specific barriers affecting women in Eastern Uganda—such as unequal access to resources, information, and decision-making spaces—were identified and addressed throughout the TA activities. Women's perspectives and experiences were deliberately incorporated during stakeholder consultations and workshops to ensure that proposed technologies are responsive to gendered needs and contribute to broader goals of social inclusion and empowerment.<br><br>By enhancing women's access to information about climate technologies and their potential benefits, the TA aimed to empower women as active contributors to and beneficiaries of climate resilience solutions. Discussions during national workshops emphasized that expanding women's |

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| | participation in climate technology adoption can improve livelihoods, create green job opportunities, and strengthen household and community resilience. The TA also considered the gendered dynamics of local contexts, including time burdens and traditional roles, to safeguard women's rights and ensure that interventions do not inadvertently reinforce existing inequalities. |
| Anticipated contribution to NDC | *2 to 4 bullet points. Approximately 350 characters with spaces*<br><br>This TA led to the development of a project proposal that will contribute to Uganda's NDC in the following ways:<br><br>- Promote climate-resilient agriculture through climate-resilience crops, solar irrigation, and FMNR supporting the NDC target of reaching 2 million climate-smart farmers by 2030.<br>- Restore degraded landscapes through reforestation contributing to the NDC goal of restoring 2.5 million ha and achieving 82.7% of GHG mitigation from the AFOLU sector.<br>- Reduce reliance on biomass for energy by expanding off-grid solar solutions, aligning with the NDC aim to cut rural firewood and charcoal use.<br>- Build institutional and local capacity for sustained technology adoption which aligns with the NDC emphasis on embedding climate action in national and sub-national planning. |
| The narrative story | *Approximately 1200 characters with spaces*<br><br>*Please provide a brief description of the background and context for the technical assistance. Describe the main problems and barriers for climate change mitigation and/or adaptation in terms of climate technologies that the CTCN technical assistance will address*<br><br>Uganda has demonstrated a strong national commitment to addressing climate change through an evolving policy framework, including the Climate Change Act (2021) and the National Climate Change Policy, which emphasize technology development |

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| | and transfer as critical levers for achieving low-carbon, climate-resilient development. Despite these efforts, the country remains highly vulnerable to climate shocks, particularly in the agriculture, water, and energy sectors, which significantly impact rural livelihoods and socioeconomic progress.<br><br>To address these vulnerabilities, Uganda conducted a Technology Needs Assessment (TNA) and developed Technology Action Plans (TAPs) to identify priority climate technologies and the barriers impeding their deployment. The TAPs prioritized 12 technologies across key sectors, including solar-powered irrigation systems, drought-resistant crop varieties, improved cookstoves, biogas, Farmer-Managed Natural Regeneration (FMNR), and forest landscape restoration. However, uptake of these technologies has been hindered by high upfront costs, limited access to tailored financing, insufficient technical and institutional capacity, and fragmented stakeholder coordination. Regulatory ambiguities, knowledge gaps, and weak private sector engagement further constrain large-scale adoption.<br><br>In response, the Government of Uganda, through its National Designated Entity (NDE), requested technical assistance from the CTCN to prepare a full project proposal for submission to the Green Climate Fund. This initiative, focused on Eastern Uganda, seeks to operationalize the TAPs by supporting the deployment of prioritized technologies that strengthen community resilience, promote sustainable livelihoods, and contribute to the country's Nationally Determined Contributions (NDCs). |
| Contribution to SDGs<br><br>A complete list of SDGs and their targets is available here: https://sustainabledevelopment.un.org/partnership/register/ | *To the extent possible, please describe contribution to approximately 3 SDGs, including SDG13, with a few sentences for each SDG concerned.*<br><br>**SDG 2: End hunger, achieve food security and improved nutrition, and promote sustainable agriculture**<br><br>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 |

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| | increased food security for the local communities in Eastern Uganda.<br><br>**SDG 5: Achieve gender equality and empower all women and girls**<br><br>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.<br><br>**SDG 13.b: Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing States, including focusing on women, youth and local and marginalized communities**<br><br>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 technologies. 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 in the country. |

**Annex 1 Technical assistance data collection**

Please add quantitative and qualitative values for the indicators selected in the M&E plan and monitored throughout the technical assistance in the tables below. Indicators which have been monitored in addition to the proposed indicators below may be added at the end of table A. Non-relevant indicators should be left blank.

## A. Output and outcome indicators

| **Indicator**<br><br>Please note indicators below highlighted as **anticipated** | **Quantitative value**<br>*Numerals only; disaggregates must sum to the total* | **Qualitative description**<br>*List the various elements corresponding to the quantitative value as well as timelines and responsible institutions* |
|---|---|---|
| Total number of events organized by proponents and implementing partners | 2 | 1) The national project kick-off workshop on the development of a project proposal for the implementation of climate technologies in Eastern Uganda prioritized in the TNA and TAPs.<br>2rd to 3rd October 2024 at Kabira Country Club in Kampala, Uganda.<br><br>2) The national project validation workshop for the project proposal aimed at implementing climate technologies in Eastern Uganda based on the TNA and TAPs<br>12th to 13th March 2025 at Protea Hotel in Kampala, Uganda. |
| Number of participants in events organized by proponents and implementing partners | 59 | 1) 29 participants<br>2) 30 participants |
| a) Number of men | 36 | 36 - Ugandan |
| b) Number of women | 23 | 23 - Ugandan |
| Number of climate technology RD&D related events | | |
| Number of participants in climate technology RD&D events | *List total number here* | |
| a) Number of men | | |
| b) Number of women | | |

| | | |
|---|---|---|
| Number of training organized by proponents and implementing partners | | |
| Number of participants in trainings organized by proponents and implementing partners | | |
| a) Number of men | | |
| b) Number of women | | |
| Total number of institutions trained | | |
| a) Governmental (national or subnational) | | - |
| b) Private sector (bank, corporation, etc.) | | *List the name of organisations trained here* |
| c) Nongovernmental (NGO, University, etc.) | | |
| Percentage of participants reporting satisfaction with CTCN training (from CTCN training feedback form) | | *Satisfied= 4+ on 5-pt scale* |
| Percentage of participants reporting increased knowledge, capacity and/or understanding as a result of CTCN training (from CTCN training feedback form) | | *Increased knowledge, capacity and/or understanding= 4+ on 5-pt scale* |
| a) Percentage of men | | |
| b) Percentage of women | | |
| Total number of deliverables produced during the assistance (excluding mission, progress and internal reports) | *5* | |
| a) Number of communication materials, including news releases, newsletters, articles, presentations, social media postings, etc. | | |
| b) Number of tools and technical documents strengthened, revised or developed | **13** | Conceptual framework<br>GCF concept note<br>GCF funding proposal<br>Pre-feasibility study<br>Gender assessment and action plan<br>Risk assessment and management plan<br>Economic and financial analysis<br>Term sheet<br>Timetable<br>Adaptation impact (direct & indirect beneficiaries)<br>Calculation of GHG emission reductions<br>Legal due diligence<br>Budget |
| c) Number of other information materials strengthened, revised or created (For example training and workshop reports, Power Points, exercise docs etc.) | **2** | 1) Kick-off workshop report<br>2) Validation workshop report |
| Total number of policies, strategies, plans, laws, agreements or regulations supported by the assistance | *List total number here* | |
| a) Adaptation related | | *List the type and name of documents supported* |
| b) Mitigation related | | *List the type and name of documents supported* |
| c) Both adaptation- and mitigation related | | *List the type and name of documents supported* |

| | | |
|---|---|---|
| **Anticipated** number of policies, strategies, plans, laws, agreements or regulations proposed, adopted or implemented as a result of the TA | *List total number here* | |
| a) Adaptation related | | *List the type of documents anticipated to be proposed, adopted or implemented* |
| b) Mitigation related | | *List the type of documents anticipated to be proposed, adopted or implemented* |
| c) Both adaptation- and mitigation related | | *List the type of documents anticipated to be proposed, adopted or implemented* |
| **Anticipated** number of technologies transferred or deployed as a result of CTCN support | At least 8 | *Instruction: List the type of technologies supported by this assistance. Technologies must be identified from the CTCN taxonomy of climate sectors and technologies (download in pdf format and choose from column C): https://www.ctc-n.org/resources/ctcn-taxonomy*<br><br>Solar pV<br>Energy supply from waste<br>Reforestation<br>Sustainable forest management<br>Restoration of degraded lands<br>Water pumping for irrigation<br>Crop varieties for enhanced carbon sequestration |
| **Anticipated** number of collaborations facilitated or enabled as a result of technical assistance | *List total number here* | |
| a) Number of South-South collaborations | | *List the names of the organisations (excluding the CTCN or TA implementers)* |
| b) Number of RD&D collaborations | | *List the names of the organisations (excluding the CTCN or TA implementers)* |
| c) Number of private sector collaborations | | *List the names of the organisations (excluding the CTCN or TA implementers)* |
| Number of countries with strengthened National System of Innovation as a result of CTCN support | | *List names of countries* |
| **Insert any additional indicators here** | | |

## B. Core impact indicators

Please fill in the tables for anticipated impacts of the CTCN assistance. Every technical assistance should contribute to at least one of the indicators below. For guidance on how to report on core indicators see the 'M&E Guidance Document for TA Implementers'.

| **Core indicator 1** | **Anticipated metric tons of $CO_2$ equivalent ($CO_2e$) emissions reduced or avoided as a result of CTCN TA**<br><br>*Please add your calculations in word or excel format as an Annex to this Closure Report, where applicable.* | |
|---|---|---|
| | Anticipated metric tons of $CO_2e$ reduced or avoided as a result of the TA **on annual basis** | Anticipated metric tons of $CO_2e$ reduced or avoided as a result of the TA **in total** |
| Quantitative value *(emissions reductions)* | *Total number (numerals only, no rounding or abbreviations)* | *Total number (numerals only, no rounding or abbreviations)* |
| Unit | $tCO_2e$ | $tCO_2e$ |
| **GHG assessment boundary (project emissions)**<br><br>Identify expected post-TA activities, associated effects and assess boundary for quantification of GHG emission reductions | | |
| **Baseline emissions**<br><br>Describe baseline scenario, baseline candidates, emission factors and emissions calculated | | |
| **Methodology**<br><br>Explain the method or process of verifying the indicator and how data was gathered | | |
| **Assumptions**<br>Describe assumptions made during calculation and quantification of GHG reductions | | |

| **Core indicator 2** | **Anticipated increased economic, health, well-being, infrastructure and built environment, and ecosystems resilience to climate change impacts as a result of technical assistance**<br><br>*Please provide a **qualitative** description of the anticipated impacts on the categories below* |
|---|---|
| **Infrastructure and built environment**<br>Anticipated increased infrastructure resilience (avoided/mitigated climate induced damages and strengthened physical assets) | |

| | |
|---|---|
| **Ecosystems and biodiversity**<br>Anticipated increased ecosystem resilience (areas with increased resistance to climate-induced disturbances and with improved recovery rates) | |
| **Economic**<br>Anticipated increased economic resilience (e.g. less reliance on vulnerable economic sectors or diversification of livelihood) | |
| **Health and wellbeing**<br>Anticipated increased health and wellbeing of target group (e.g. improved basic health, water and food security) | |

| **Core indicator 3** | **Anticipated number of direct and indirect beneficiaries as a result of the TA** | |
|---|---|---|
| | **Quantitative value** | **Means of verification** |
| Total beneficiaries | *Total number* | |
| Number of adaptation beneficiaries | | *Describe calculation methods and assumptions made* |
| Number of mitigation beneficiaries | | *Describe calculation methods and assumptions made* |
| Number of adaptation-and mitigation beneficiaries | 59 | *Describe calculation methods and assumptions made*<br><br>The anticipated number of beneficiaries from the TA on the development of a GCF proposal for the implementation of climate technologies in Eastern Uganda has been calculated based on participation record from two key workshops organized by SSA. These workshops, held on 2nd – 3rd October 2024 and 12th – 13th March 2025 involved direct interaction with participants registered for the events.<br><br>The method of counting and verification included registration data of in-person participants from both workshops which was collected at the venue.<br><br>The total number of beneficiaries from these events was 59 comprising of 36 men and 23 women. This breakdown is based on the demographic data provided at registration. The assumption made here is that all registered participants attended and benefited from the workshops in person without duplication in attendance counts. |

| | | |
|---|---|---|
| | | Lastly this count only reflects those that directly benefited during these events. Broader indirect impacts, such as knowledge sharing through knowledge products developed, are not included in this number but are expected to extend the reach of the TA. |

| **Core indicator 4** | **Anticipated amount of funding/investment leveraged (USD) as a result of TA (disaggregated by public, private, national, and international sources, as well as between anticipated/confirmed funding)** | | | |
|---|---|---|---|---|
| | **Quantitative value confirmed** *in USD* | **Quantitative value anticipated** *in USD* | **Qualitative description** *List the institutions, timelines, and description or title of the investment* | **Methods** *Describe methods used for quantification of funds leveraged* |
| Total funding | *Total number in USD (numerals only, no rounding or abbreviations)* | *Total number in USD (numerals only, no rounding or abbreviations)*<br><br>25,000,000 USD | The TA resulted in a project proposal to the Green Climate Fund titled "Climate Adaptation and Technology Leveraging for Enhanced Climate Resilience in Eastern Uganda" or 'CATLER-Uganda expected to be submitted soon after the conclusion of the TA. | |
| Anticipated amount of public funding mobilised from national/domestic sources | | **0** | | |
| Anticipated amount of public funding mobilised from international/ regional sources | | **25,000,000** | The funding proposal developed as a result of this TA is leveraging international public climate finance from the GCF through the Simplified Approval Process (SAP) access modality in which a maximum 25 million USD can be requested. | |
| Anticipated amount of private funding mobilised from national/domestic sources | | | | |

| | | | | |
|---|---|---|---|---|
| Anticipated amount of private funds mobilised from international/regional sources | | | | |

**Annex 2 (for internal use – to be filled in by the CTCN)**

**CTCN evaluation**

This section will be completed by the relevant CTCN Technology Manager.

- Evaluation of the timeliness of the TA implementation as measured against the timeline included in the response plan;
- Evaluation of TA quality as defined in the response plan;
- Overall performance of the Implementers;
- Overall engagement of the NDE and Proponent;
- Lessons learned on the CTCN process and steps taken by the CTCN to improve.