

Country	Liberia
Request ID#	2026000016
Title	Green Corridor and Ecosystem Restoration for Climate Resilience in Liberia's RIA Road
NDE	Christopher B. Kabah Director of Planning and Policy Environmental Protection Agency Republic of Liberia
Proponent	Roland Layfette Giddings Minister Ministry of Public Works Republic of Liberia (rlgiddings@mpw.gov.lr , rolayfette@gmail.com or gbeanquoigehnyea@gmail.com

Summary of the CTCN technical assistance

The summary should provide a brief description of the problem (barrier to climate technology deployment) and how the technical assistance will address it (summary of outputs and activities). Please also briefly indicate national actors involved and the anticipated timeline. Please note this summary will be used for public communication purposes, so it is important that it is well written. (maximum 1250 characters including spaces)

The RIA Road corridor connects Roberts International Airport to Monrovia and links Margibi, Grand Bassa, River Cess and Sinoe counties, but deforestation, urbanization and climate impacts (flooding, erosion, unpredictable rainfall) are degrading the green infrastructure that buffers this corridor and the communities along it. Liberia has limited GIS-based ecological assessment capacity, nascent climate-smart landscape design methods, and constrained local capacity to plan, design and maintain resilient, biodiverse green corridors.

This CTCN technical assistance, will support Liberia to:

- (i) conduct a GIS-based ecological and climate-risk assessment;
- (ii) design a climate-resilient green infrastructure framework (vegetative buffers, eco-engineered stormwater and erosion control) linking farm-to-market roads and wetlands restoration; and
- (iii) build capacity and pilot priority interventions with government agencies, municipalities and communities.

Agreement:

(If possible, please use electronic signatures in Microsoft Word file format)

National Designated Entity to the UNFCCC Technology Mechanism

Name: Christopher B. Kabah

Title: NDE-Liberia

Date: September 30, 2026

Signature:



Proponent (signature of the Proponent is optional)

Name:

Title:

Date:

Signature:

UNFCCC Climate Technology Centre and Network (CTCN)

Name: Ariesta Ningrum
Title: CTCN Director

Date: 07.10.2026

Signature: 

1. Background and context

Please provide a brief description of the background and context for the CTCN Response Plan. Please include national and sectoral information using recognized and publicly available sources. (maximum 2500 characters including spaces).

The RIA Road corridor is an essential green infrastructure asset that underpins Liberia's economic and environmental resilience. As the primary gateway connecting the Roberts International Airport to Monrovia and linking key counties, including Margibi, Grand Bassa, River Cess, Sinoe, and regions across the Southeastern and Central parts of the country, this corridor is crucial for national trade, regional mobility, and socio-economic stability.

Despite its importance, the corridor faces increasing environmental pressures, such as deforestation, urbanization, and the adverse impacts of climate change. Liberia is notably vulnerable to climate disruptions manifested through rising temperatures, unpredictable rainfall patterns, coastal erosion, and flooding, significantly threatening infrastructure, biodiversity, and local livelihoods (Government of Liberia, 2025). These climate-related challenges undermine the resilience of critical infrastructure and exacerbate social inequality, especially among vulnerable communities.

The Liberia NDC 3.0 emphasizes the importance of investing in climate-smart, nature-based solutions particularly green infrastructure like forests, wetlands, and urban green spaces as effective strategies for climate adaptation and mitigation (Government of Liberia, 2025). Forests and green corridors along the RIA Road serve as natural buffers against flooding, erosion, and temperature extremes, while supporting biodiversity conservation and carbon sequestration (FAO, 2023). The degradation of these ecosystems diminishes the capacity of green infrastructure to provide ecosystem services, increase resilience, and regulate local climates.

Socially, vulnerable communities adjacent to the corridor depend on the surrounding ecosystems for their livelihoods. Deforestation and environmental degradation threaten agricultural productivity, increase soil erosion, and heighten poverty levels (UNDP Liberia, 2020). Enhancing green infrastructure through strategic tree planting and ecosystem restoration along the corridor can generate employment, improve air quality, reduce urban heat islands, and foster resilient communities.

Aligned with Liberia's commitments under the NDC 3.0 and the ARREST Agenda, which prioritize climate-smart infrastructure, biodiversity conservation, and sustainable development, this project aims to establish a robust green infrastructure network along the RIA Road corridor. The initiative seeks to restore degraded ecosystems, strengthen climate resilience, promote biodiversity, and support socio-economic growth through strategic tree planting and ecosystem-based adaptation measures. This approach will ensure that Liberia's infrastructure and communities are better equipped to withstand climate impacts while contributing to national climate goals.

2. Problem statement

Founded on the national and sectoral context as detailed in the section above, please include a brief problem statement clarifying the main problems and barriers for climate change mitigation and/or adaptation in terms of climate technologies that the CTCN Response Plan will address and overcome. (maximum 1250 characters including spaces).

Several initiatives in Liberia have focused on addressing climate challenges through the promotion of green infrastructure and the development of green corridors. Historically, the government, supported by international partners such as UNDP, FAO, and other agencies, has established policies and projects aimed at ecosystem conservation and climate resilience. Notably, the Liberia National Forestry Reform Law (2006) seeks to conserve remaining forest resources, promote

sustainable management, and combat deforestation, thereby contributing to climate mitigation and biodiversity preservation.

The Integrated Coastal Zone Management (ICZM) plan, supported by UNDP, further exemplifies efforts to protect coastal ecosystems such as mangroves and wetlands, which act as natural green infrastructure buffers against flooding, storm surges, and erosion, bolstering resilience in vulnerable coastal areas. Liberia's NDC 3.0 underscores the importance of ecosystem-based approaches, including expanding green corridors and urban green spaces, which enhance climate resilience and biodiversity conservation.

One of the primary technology barriers hindering Liberia's efforts to develop and deploy effective green infrastructure along the RIA Road corridor is the lack of advanced tools and methodologies for comprehensive ecological assessment, planning, and design.

While existing policies and projects have laid a foundation for ecosystem restoration and conservation, **the absence of sophisticated GIS-based mapping, climate modeling, and landscape design tools** limits the ability to accurately identify priority areas, optimize green corridor layouts, and predict the long-term impacts of proposed interventions. This hampers the development of targeted, evidence-based solutions that can maximize the resilience and ecological benefits of green infrastructure, particularly in rapidly urbanizing and ecologically sensitive zones.

Furthermore, Liberia faces technology gaps in implementing innovative ecological engineering and urban greening techniques at scale. Many of the available green infrastructure technologies, such as eco-friendly stormwater management systems, native plant selection for climate adaptation, and sustainable wetlands restoration methods, require specialized knowledge and local adaptation.

The limited technical capacity within government agencies and local communities constrains the effective deployment and maintenance of these technologies, reducing the sustainability and scalability of green corridor projects. Additionally, there is insufficient access to affordable green infrastructure materials, such as native plant nurseries and eco-engineering supplies, which impedes large-scale implementation.

The CTCN technical assistance will play a critical role in bridging these technology gaps by providing access to specialized expertise, advanced climate and landscape modeling tools, and best practices from similar contexts globally. This support will further enable Liberia to conduct comprehensive assessments, develop innovative yet locally suitable green infrastructure solutions, and build capacity among local practitioners and stakeholders.

Through tailored technical guidance and the transfer of proven climate technology approaches, the CTCN assistance will facilitate the deployment of sustainable, cost-effective, and scalable green infrastructure systems that enhance resilience, beauty, and ecological integrity of the RIA Road corridor, ultimately strengthening Liberia's ability to meet its climate and sustainable development targets.

3. Logical Framework for the CTCN Technical Assistance:

(Guidance: Please note that multiple activities lead to one Output, and multiple Outputs lead to one Outcome. There can be several Outputs, but only one Outcome description capturing the CTCN technical assistance. Deliverables are the products or services to be delivered to the NDE/Proponent/CTCN based on the Activities and the Outputs.)

Objective: Please provide a one sentence description of the Objective of the technical assistance. The objective of the CTCN technical assistance reflects what the assistance aims to produce and impact.

To strengthen the climate resilience and ecological integrity of the RIA Road corridor by deploying climate-smart, nature-based green infrastructure that reduces its vulnerability to flooding, erosion and heat stress. This assistance aims to restore degraded ecosystems, create ecological corridors, and incorporate climate-resilient features such as native vegetation buffers and connected farm-to-market pathways, strengthening adaptive capacity, biodiversity conservation, and the resilience of local livelihoods.

Outcome: (Guidance: The Outcome articulates changes in the institutional and behavioural capacities for climate technology development or deployment. Activities and Outputs contribute to the Outcome, but the Outcome is not within the direct control of the CTCN activities). (maximum 400 characters including spaces)

Liberian government agencies, municipalities and communities apply climate-smart, nature-based green infrastructure planning and design methods to manage the RIA Road corridor, strengthening institutional capacity to replicate resilient, biodiversity-friendly infrastructure practices on other national corridors.

Anticipated Groups of Activities:

- Establishing a multi-stakeholder Project Steering Committee, with gender-balanced and youth-inclusive representation, to guide the design and implementation of the technical assistance from an in-person inception meeting onward.
- Conducting advanced ecological and land-use assessments using GIS and climate modeling tools to identify priority zones for climate-resilient green corridor development.
- Designing integrated landscape plans that include native vegetation planting, wetlands restoration, urban green spaces, and eco-engineered stormwater management systems to enhance resilience against flooding, erosion, and temperature extremes.
- Designing climate-resilient vegetative buffers and bioengineering measures along the corridor, such as roadside green belts and slope-stabilization plantings, to reduce erosion, flooding and heat exposure risks.
- Linking farm-to-market roads with the main corridor through sustainable, climate-resilient rural roads, green buffer zones, and agro-ecological corridors to reduce erosion and support climate-resilient agricultural livelihoods along the corridor.

Products anticipated:

- A stakeholder mapping report, Project Steering Committee terms of reference and inception meeting report.
- A comprehensive ecological and land-use assessment report, including GIS maps, climate impact projections, and priority zones for climate-resilient green corridor development.
- An integrated climate-resilient green infrastructure design framework, comprising vegetative buffer and eco-engineering designs, and erosion-control connections to farm-to-market routes.
- Technical manuals or guidelines on ecological restoration, urban greening, climate-smart stormwater management, and sustainable rural road linking strategies.
- Capacity development materials, including training modules and stakeholder engagement guides to ensure effective implementation and maintenance.

- Pilot project documentation detailing design, construction, performance, and lessons learned, supporting future scaling-up efforts.
- A strategic Roadside Green Infrastructure and Corridor Resilience Framework, including maintenance plans, community involvement strategies, and sourcing of native plants and eco-friendly materials.
- Visualizations, case studies, and knowledge-sharing tools to promote ongoing replication and adaptation across Liberia.

This technical assistance will directly address Liberia's technological gaps in ecological assessment, landscape planning, and green infrastructure development, creating a climate-resilient and socio-economically beneficial corridor that supports climate adaptation, biodiversity, and community livelihoods.

[illegible]

Furthermore, a gender evaluation and gender action plan (GAP) will be prepared and followed throughout the technical assistance (a template will be provided). ¹													
This Activity A package covers the Implementing Partner's mobilisation, work planning, M&E design and gender action planning; the substantive stakeholder mapping and governance structure (Project Steering Committee membership and terms of reference) is established separately under Output 1.													
Activity B: Implementation A project steering committee will be formed, consisting of the implementing team (international and local consultants), the NDE, the project proponent(s), beneficiary(ies), and CTCN. The objective of this steering committee is for the implementing partner to report on progress, and to guide the implementation of the project at an elevated level. It is recommended that this steering committee is virtually meeting monthly. This mandatory monthly Project Steering Committee is the overarching governance and reporting mechanism between the Implementing Partner, NDE, Proponent and CTCN; its membership, terms of reference and in-person meeting schedule are established under Output 1, Activity 1.1.													
Activity C: End of implementation A Closure and Data Collection report completed at the end of the technical assistance (a template will be provided). Potential project-end communication and dissemination activities (such as knowledge sharing webinar, dialogue with financial institutions, press release) may be conducted in collaboration with the CTCN Secretariat, subject to appropriateness.													
Mandatory deliverables: Deliverable A: Detailed work plan; M&E plan; gender assessment and gender action plan	X												
Deliverable B: Project Steering Committee meeting reports	X					X							X
Deliverable C: Closure and Data Collection report; press release, webinar, dialogue with financial institutions.													X
Output 1: Stakeholder Mapping and Establishing a Project Steering Committee													
Activity 1.1: Identification of Stakeholders and Nomination of Project Steering Committee The IP will carry out the following four explicit steps under this activity:													

¹ Additional information is available under Section 10 of the response plan.

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

4 Resources required and itemized budget:

Please provide an indicative overview of the resources required and itemized budget required to implement the CTCN technical assistance, including for M&E-related activities, using the table below. Important to note that minimum 5% of the budget should explicitly target gender specific activities related to the technical assistance (please see section 10 for further information on gender). A maximum of 20% of the budget can be allocated to procurement (e.g. infrastructure purchase, technology piloting). Once the Response Plan is completed, a Response Implementation partner(s) will be selected by the Climate Technology Centre (CTC). A detailed activity-based budget for the CTCN assistance will be finalized by the CTCN and selected Implementer.

Activities and Outputs	Input: Human Resources <i>(Title, role, estimated number of days)</i>	Input: Travel² <i>(Purpose, national vs. international, number of days)</i>	Inputs: Meetings/events³ <i>(Meeting title, number of participants, number of days)</i>	Input: Equipment/Material <i>(Item, purpose, buy/rent, quantity)</i>	Estimated cost. <i>Please accumulate the costing (USD) at Activity and Output level and provide an estimated costing range for each activity and the total Response Plan</i>	
					Minimum	Maximum

² All budget values related to Daily Subsistence Allowance or logistical support for local participants shall remain as indicated.

³ All budget values related to the organization of meetings and events shall remain as indicated.

Mandatory Output: Project Management						
Mandatory Activities: A: Beginning of implementation; B: Implementation; C: End of implementation	Team Leader (IE): 5 days (Activity A); ~2 days/month for 12 months (Activity B); 5 days (Activity C) 5 days			N/A	8,800	9,680
Output 1: Stakeholder Mapping and Establishing a Project Steering Committee						
Activity 1.1: Stakeholder identification and PSC nomination	Team Leader/Landscape Ecologist (IE): 5 days; Gender and Social Inclusion Expert (NE): 2 days	National travel for stakeholder consultations	Stakeholder mapping consultations (~15 participants)	N/A	8,000	8,800
Activity 1.2: Inception meeting with the PSC	Team Leader/Landscape Ecologist (IE): 3 days	1 international mission for in-person inception meeting (5 days)	Inception meeting (~15 participants; DSA for local PSC members)	N/A	12,000	13,200
Output 2: Ecological and climate risk assessment completed						
Activity 2.1: GIS and climate risk assessment	GIS/Climate Modelling Specialist: 15 days; Landscape Ecologist: 10 days	1 international mission to Liberia (10 days) for field data collection		GIS software subscription; satellite/drone imagery	25,000	27,500

Activity 2.2: Land-use and tenure mapping	Landscape Ecologist: 8 days; local GIS/land-use consultant: 10 days	National travel for site visits along the corridor	1 consultation with the Liberia Land Authority	N/A	10,000	11,000
Activity 2.3: Assessment report and validation	GIS/Climate Modelling Specialist: 5 days; Team Leader: 3 days	N/A	1 validation workshop with EPA, FDA and municipalities (~20 participants)	N/A	8,000	8,800
Output 3: Climate-resilient green infrastructure design framework developed						
Activity 3.1: Design of green corridor and stormwater management	Landscape/Urban Design and Eco-Engineering Expert: 20 days; Forestry Specialist: 8 days	1 international mission to Liberia (10 days)	N/A	Design/modelling software	20,000	22,000
Activity 3.2: Climate-resilient buffer and farm-to-market linkage design	Landscape/Urban Design Expert: 10 days; Forestry Specialist: 5 days	National travel for site verification	1 stakeholder design review workshop (~15 participants)	N/A	12,000	13,200
Output 4: National capacity strengthened						
Activity 4.1: Capacity-building workshops	Team Leader: 5 days; Gender Expert (NE): 5 days; Forestry Specialist (NE): 5 days	1 international mission for workshops (5 days)	3 capacity-building workshops (~30 participants each; DSA for local participants)	Training materials	25,000	27,500
Output 5: Priority green infrastructure interventions piloted						

Activity 5.1: Site selection, baseline assessment and participatory design	Team Leader/Landscape Ecologist: 5 days; Forestry Specialist: 3 days; Gender and Social Inclusion Expert: 4 days	National travel for site visits to Paynesville, Margibi and Harbel	3 co-design/community consultations (~20 participants each)	N/A	12,000	13,200
Activity 5.2: Implementation of pilot green infrastructure measures	Landscape/Eco-Engineering Expert: 10 days; Forestry Specialist: 10 days	1 international mission for pilot implementation supervision (10 days)	N/A	Native plant seedlings and eco-engineering materials for pilot sites including tree planting along the project corridor (within 20% procurement cap)	35,000	38,500
Output 6: Priority green infrastructure, flood and waste management						
Activity 6.1: Implementation and demonstration of nature-based drainage relief measures	Landscape/Eco-Engineering Expert: 5 days; Hydrologist (NE): 5 days; Forestry Specialist: 3 days; Gender and Social Inclusion Expert: 3 days	National travel for site visits to Paynesville, Margibi and Harbel	3 co-design/community consultations (~20 participants each)	Materials for bioswales, infiltration trenches and permeable green channels (soil, gravel, mulch, plants)	14,000	15,400
Activity 6.2: Capacity-building campaign on green infrastructure maintenance and waste management	Team Leader/Environmental Specialist: 5 days; Forestry Specialist: 3 days; Gender and	National travel for site visits to Paynesville, Margibi and Harbel	Community and municipal staff training sessions (~20 participants each)	Training and maintenance manual materials (incorporated into TA manual)	5,000	5500

	Social Inclusion Expert: 3 days					
Activity 6.3: Performance monitoring, stakeholder feedback and handover (Output 5 and 6 sites)	Landscape/Eco-Engineering Expert: 5 days; Gender and Social Inclusion Expert: 5 days	National travel for monitoring visits and pilot site handovers	1 mid-point stakeholder review workshop (~20 participants) and handover meetings at each pilot site	N/A	10,000	11,000
Estimated range of costing for the entire Response Plan					USD 204, 800	USD 225,280

Note: at least 5% of the indicative budget (Gender and Social Inclusion Expert days and gender-responsive consultations under Activities 1.1, 4.1, 5.1 and 5.3) is allocated to gender mainstreaming, and procurement of materials/equipment (native plant seedlings, eco-engineering supplies for pilot implementation under Activity 5.2, GIS/design software) remains under 20% of the total indicative budget, consistent with CTCN budget guidance. Maximum budget figures reflect a 10% contingency above the minimum indicative cost for each activity.

5 Profile and experience of experts.

Based on the required Human Resources identified in section 4 (Resources required and itemized budget) please provide a description of the required profile of all involved experts for the implementation of the CTCN Response Plan.

Experts required	Brief description of required profile
<i>Please use the same titles for all experts as applied in section 4.</i>	<i>Please provide a short description of expertise and experience needed (education, sectors of expertise, years of experience, country experience, language requirements, etc.).</i>
Team Leader / Landscape Ecologist	Advanced degree in landscape ecology, environmental science or related field; 10+ years' experience in nature-based infrastructure or ecological restoration projects; Prior experience in West Africa preferred; Fluent in English.
GIS and Climate Modelling Specialist	Degree in GIS, remote sensing or environmental engineering; 7+ years' experience in ecological/land-use assessment and climate risk mapping; Experience with tropical/coastal contexts; fluent in English.
Landscape/Urban Design and Eco-Engineering Expert	Degree in landscape architecture, urban planning or civil/eco-engineering; 7+ years' experience designing green corridors, stormwater management or road-side greening; fluent in English.
Forestry and Native Plant Specialist	Degree in forestry or botany; 5+ years' experience in native species selection,

	Nursery management and forest restoration in West Africa; Fluent in English.
Gender Expert	Degree in gender studies, social sciences or related field; 5+ years' experience conducting gender assessments and developing GAAPs for infrastructure or environmental projects; Experience in Liberia or West Africa preferred; Fluent in English.

6 Intended contribution to impact over time.

Please provide a brief description of the intended contribution to impact overtime of the outcome and outputs provided by this technical assistance on resilience to climate change and/or carbon abatement. To the extent possible, please quantify the intended impact contribution, for example by indicated estimated number of people potentially impacted over time, GDP contribution of the focus sector, carbon emissions by the focus sector, etc. This intended contribution to impact is what will happen if the objective (as articulated in section 3) is met. Please ensure relevant complementarity with text in sections 7 to 12. (maximum 1250 characters including spaces)

If the objective is achieved, vulnerable communities along the RIA Road corridor in Margibi, Grand Bassa, River Cess and Sinoe counties are expected to benefit from improved flood and erosion protection, enhanced biodiversity, and new green livelihood opportunities linked to nursery management and climate-resilient agroforestry. Restored forest and wetland buffers should increase carbon sequestration along the corridor and reduce climate-related damage and maintenance costs for the road asset.

Strengthened GIS-based ecological assessment and green corridor design capacity within the Ministry of Public Works, EPA and Forestry Development Authority is expected to be replicated on other priority road corridors and urban greening initiatives across Liberia, contributing over the medium to long term to the country's NDC 3.0 and ARREST Agenda targets on ecosystem-based adaptation and resilient infrastructure.

7 Relevance to NDCs and other national priorities

Please identify relevance and contribution from the technical assistance to the Nationally Intended Contributions (NDC) and other relevant national prioritized efforts (TNAs, TAPs, NAPs, NAMAs, etc.). (maximum 2500 characters including spaces)

This technical assistance is aligned with Liberia's NDC 3.0 Priority Area 1 on ecosystem-based adaptation and nature-based solutions (Section 4.2), supporting the protection and restoration of forests, wetlands and green corridors to enhance climate resilience and carbon sequestration. It contributes to the Low Emission Development Strategy (Appendix 2) by promoting sustainable land management and forest conservation, and to the National Adaptation Plan Action Area 2 (Section 5.1), which calls for climate-resilient infrastructure and ecosystem restoration in vulnerable regions.

The assistance also supports the Forestry Development Authority's Strategic Plan (2018-2030) on forest restoration and biodiversity conservation and responds directly to a technology gap identified through Liberia's Technology Needs Assessment (TNA) process: the lack of climate-smart ecosystem management tools. It advances the ARREST Agenda for Inclusive Development's Environmental Sustainability pillar, which calls for climate-resilient, nature-based infrastructure and the restoration of forests, wetlands and coastal zones.

8 Linkages to relevant parallel on-going activities:

Please identify relevant previous and ongoing public and private sector initiatives, projects or programmes that the CTCN assistance will specifically build on and contribute to. To the extent possible, please add practical and operational details on the linkages between existing activities and the CTCN assistance. (maximum 2500 characters including spaces)

The assistance builds on existing national efforts. The Liberia National Forestry Reform Law (2006) provides the legal basis for forest conservation that this assistance's ecological restoration activities will operate within. The Integrated Coastal Zone Management plan, supported by UNDP, protects coastal mangroves and wetlands; this assistance will extend nature-based buffer approaches inland along the RIA Road corridor rather than duplicate ICZM's coastal focus.

The assistance will coordinate with the Liberia Land Authority on land tenure and use planning to avoid conflicts with ongoing land administration reforms, and with the Forestry Development Authority on species selection and nursery sourcing so that planting activities build on FDA's existing propagation programmes. It will also link with any ongoing GCF readiness engagement led by the NDA, ensuring the design framework produced can inform future financing applications.

9 Anticipated follow up activities after this technical assistance is completed:

Please describe the expected future use of the outputs and deliveries produced by this technical assistance, after the CTCN implementation is completed, towards contributing to the anticipated impacts over time articulated in section 6. For example, what organizations or stakeholders will use the outputs of the technical assistance after it is completed, for what purpose, at what scale and scope the outputs and deliveries will be applied, when and what will be the next steps undertaken, etc. Please also describe the role of the NDE and project proponent(s) in post-implementation monitoring and reporting. (maximum 2500 characters including spaces)

After completion, the Ministry of Public Works is expected to use the design framework and technical manuals to plan and budget climate-resilient green infrastructure works for the RIA Road, and to apply the assessment methodology when designing future road corridors. The Paynesville, Margibi and Harbel city governments are expected to use the green infrastructure and community engagement guidance to implement and maintain climate-resilient green spaces within their jurisdictions.

The EPA and Forestry Development Authority are expected to use the ecological assessment tools and monitoring approach to track ecosystem restoration progress and inform future NDC reporting. The NDE, together with the Ministry of Public Works, will lead post-implementation monitoring, using the indicators from the M&E plan to track uptake of the design framework and the status of piloted interventions, and will report progress to the CTCN through the standard post-implementation tracking process.

10 Gender and co-benefits:

Each technical assistance must integrate gender mainstreaming activities and lead to gender and other co-benefits. At least 5% of the technical assistance budget need to be allocated to gender mainstreaming activities.

Gender benefits embedded in the implementation and because of activities:	<i>A gender mainstreaming analysis is mandatory to include for all technical assistances. A gender expert will be assigned to carry out an assessment and evaluation regarding gender mainstreaming and will develop the gender assessment action plan (GAAP) (a template will be provided). The GAAP will be followed throughout the implementation of the TA.</i> <i>The GAAP will include but not limited to the following components:</i> <i>• Analysis of gender disparities (assess the situation of gender disparities in the context of the project, including socio-economic, cultural, and institutional factors. Identify areas where inequalities exist, etc.).</i> <i>• A monitoring tool to ensure 5 percent of the TA budget is allocated and used on gender mainstreaming activities.</i> <i>• Data collection (collect and analyze gender-disaggregated data to understand the specific needs and preferences of different genders).</i> <i>• Adaptive and gender-responsive design (evaluate the project design to ensure that it considers the distinct roles, responsibilities, and interests of all genders. Analyze how the project can empower women and all other marginalized gender groups while promoting gender equality).</i> <i>• Gender and innovation ecosystem (evaluate how the proposed technologies could promote women as entrepreneurs).</i> <i>• Gender budgeting (budget allocation to guide gender mainstreaming activities. Also ensure that gender-specific needs are adequately funded).</i> <i>In addition, please describe all support to gender aspects and women's equality embedded into the Response Plan (please include a reference to the actual gender mainstreaming-related activities and outputs as described in section 3).</i> <i>As described in Outputs 4 and 5 (Section 3), the technical assistance will ensure inclusive stakeholder engagement of women, men, youth and marginalized groups in planning and capacity-building workshops; collect gender-disaggregated data during the ecological and land-use assessments (Output 2); and support women and youth to engage in nursery management and agroforestry livelihoods linked to the green corridor. At least 5% of the technical assistance budget will be allocated to gender mainstreaming activities under the GAAP.</i>
Other co-benefits embedded in the implementation and intended as result of the activities:	<i>Please describe any other co-benefits embedded in the implementation and because of the CTCN technical assistance (please include a reference to the actual activities and outputs as described in section 3).</i> <i>As described in Section 3, the Technical Assistance will deliver biodiversity co-benefits through restored forest, wetland and green corridor ecosystems; economic co-benefits through green jobs in nursery management, planting and improved farm-to-market access; public health co-benefits through reduced heat exposure from expanded roadside tree canopy; and climate resilience co-benefits through reduced flood, erosion</i>

	and heat risk for communities along the corridor. Indigenous knowledge will be incorporated into ecological restoration design where relevant.
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11 Main in-country stakeholders in implementation of the technical assistance activities:

Using the table below, please list and describe the role of in-country stakeholders, participants and beneficiaries who will be involved in or directly consulted during implementation of the assistance.

Stakeholders	Role in implementation of the technical assistance
Ministry of Public Works (Proponent)	Monitor overall implementation and infrastructure design decisions; provides data; integrates the design framework into RIA Road investment planning.
Environmental Protection Agency (NDE)	Oversees monitoring and evaluation; ensures alignment with national climate policy and environmental standards; leads ecological and biodiversity aspects of the assessment and design.
Forestry Development Authority	Advises on native tree species selection, nursery sourcing, forest restoration and carbon sequestration aspects of the green corridor design.
Liberia Land Authority	Supports land-use planning and land allocation for green corridor interventions and helps prevent land-use conflicts.
Paynesville, Margibi and Harbel city governments	Act as local beneficiaries and implementers, ensure community participation, and support long-term maintenance of green infrastructure in their jurisdictions.
Ministry of Gender and Social Protection	Promotes gender integration and social inclusion in planning, capacity building and benefit-sharing throughout the technical assistance.

12 SDG Contributions:

Instructions: Please complete the grey section below for **a maximum of three SDGs** that will be advanced through this TA. A complete list of SDGs and their targets is available here:

<https://sustainabledevelopment.un.org/partnership/register/>.

Goal	Sustainable Development Goal	Direct contribution from CTCN TA (1 sentence for top 1-3 SDGs)
1	End poverty in all its forms everywhere	
2	End hunger, achieve food security and improved nutrition, and promote sustainable agriculture	
3	Ensure healthy lives and promote well-being for all ages	
4	Ensure inclusive and equitable quality education and promote life-long learning opportunities for all	
5	Achieve gender equality and empower all women and girls	
6	Ensure availability and sustainable management of water and sanitation for all	
7	Ensure access to affordable, reliable, sustainable, and modern energy for all (consider adding targets for 7)	

	7.1 - By 2030, ensure universal access to affordable, reliable and modern energy services	
	7.2 - By 2030, increase substantially the share of renewable energy in the global energy mix	
	7.3 - By 2030, double the global rate of improvement in energy efficiency	
	7.a - By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology	
	7.b - By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing States, and land-locked developing countries, in accordance with their respective programmes of support	
8	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	
9	Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	Restores the RIA Road corridor with resilient, nature-based green infrastructure that reduces flood, erosion and heat-related damage, strengthening sustainable transport infrastructure.
10	Reduce inequality within and among countries	
11	Make cities and human settlements inclusive, safe, resilient and sustainable	
12	Ensure sustainable consumption and production patterns	
13	Take urgent action to combat climate change and its impacts	<i>All TAs should indicate relevance to Goal 13 and at least one target below (13.1 to 13. b). Strengthens Liberia's resilience and adaptive capacity to flooding, erosion, and other climate hazards through ecosystem-based adaptation along a key national corridor.</i>
	13.1 - Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries	Restores forest and wetland buffers along the RIA Road corridor to strengthen adaptive capacity to flooding and erosion.
	13.2 - Integrate climate change measures into national policies, strategies and planning	
	13.3 - Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning	
	13.a - Implement the commitment undertaken by developed-country parties to the United Nations Framework Convention on Climate Change to a goal of mobilizing jointly \$100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful	

	mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization as soon as possible	
	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	
14	Conserve and sustainably use the oceans, seas and marine resources for sustainable development	
15	Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss	Restores degraded forest and wetland ecosystems and strengthens biodiversity conservation along the corridor.
16	Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels	
17	Strengthen the means of implementation and revitalize the global partnership for sustainable development	

13 Classification of technical assistance:

Please indicate primary type of technical assistance. Optional: If desired, indicate secondary type of technical assistance.

Please tick off the relevant boxes below	Primary	Secondary
☒ 1. Decision-making tools and/or information provision	☐	☒
☐ 2. Sectoral roadmaps and strategies	☐	☐
☐ 3. Recommendations for law, policy and regulations	☐	☐
☐ 4. Financing facilitation	☐	☐
☐ 5. Private sector engagement and market creation	☐	☐
☐ 6. Research and development of technologies	☐	☐
☐ 7. Feasibility of technology options	☐	☐
☒ 8. Piloting and deployment of technologies in local conditions	☒	☐
☐ 9. Technology identification and prioritisation	☐	☐

Please note that all CTCN technical assistance contributes to strengthening the capacity of in country actors.

14 Monitoring and Evaluation process

Upon contracting of the implementing partners to implement this Response Plan, the lead implementer will produce a monitoring and evaluation plan for the technical assistance. The monitoring and evaluation plan must include specific, measurable, achievable, relevant, and time-bound indicators that will be used to monitor and evaluate the timeliness and appropriateness of the implementation. The CTCN Technology Manager responsible for the technical assistance will monitor the timeliness and appropriateness of the Response Plan implementation. Upon completion of all activities and outputs, evaluation forms will be completed by the (i) NDE about overall satisfaction level with the technical assistance service provided; and (ii) the Lead Implementer about the knowledge and learning gained through delivery of technical assistance. Furthermore, the NDE together with the project proponent(s)

will complete a periodic post-implementation form to track the impact of the activities beyond the technical assistance end date.

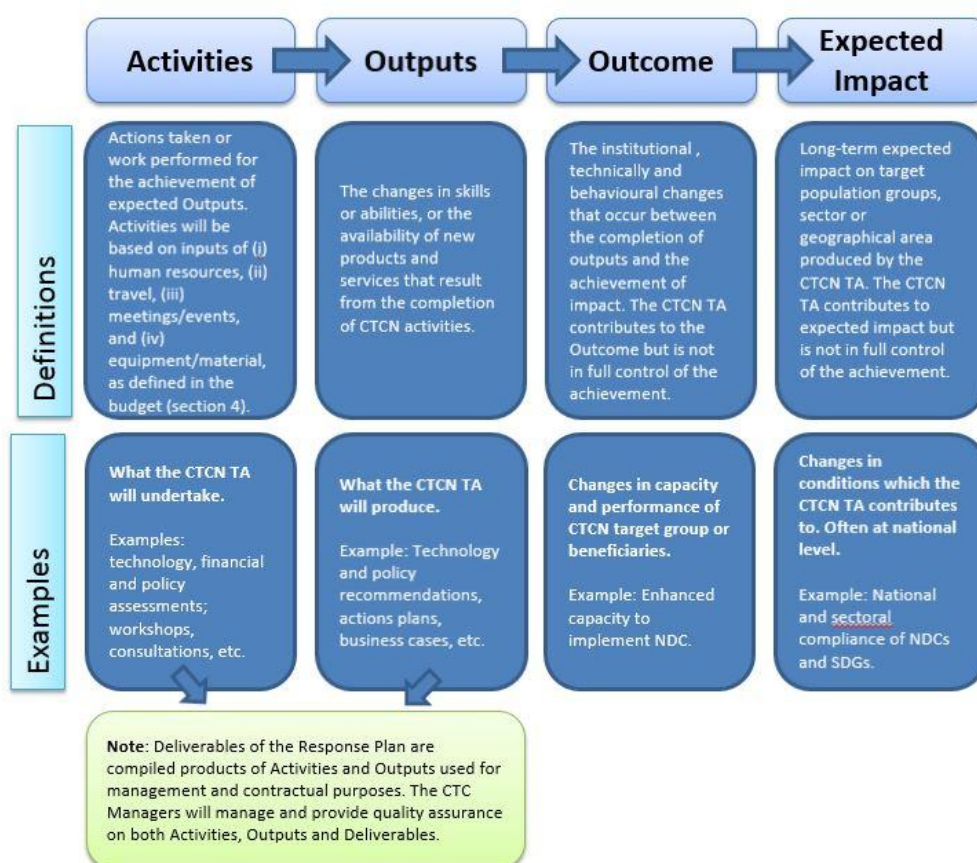
Annex 1: Guidance note for designing a Response Plan (to be deleted when submitting the Response Plan)

1. Objective of the Response Plan

The Response Plan is developed by CTCN specialists in response to a country request for technical assistance. It constitutes the Terms of Reference of the CTCN technical assistance that will be provided to the country, and it provides the formulation of and subsequent basis for the monitoring and evaluation of the Response Plan implementation, as well as its expected outcomes and anticipated impacts.

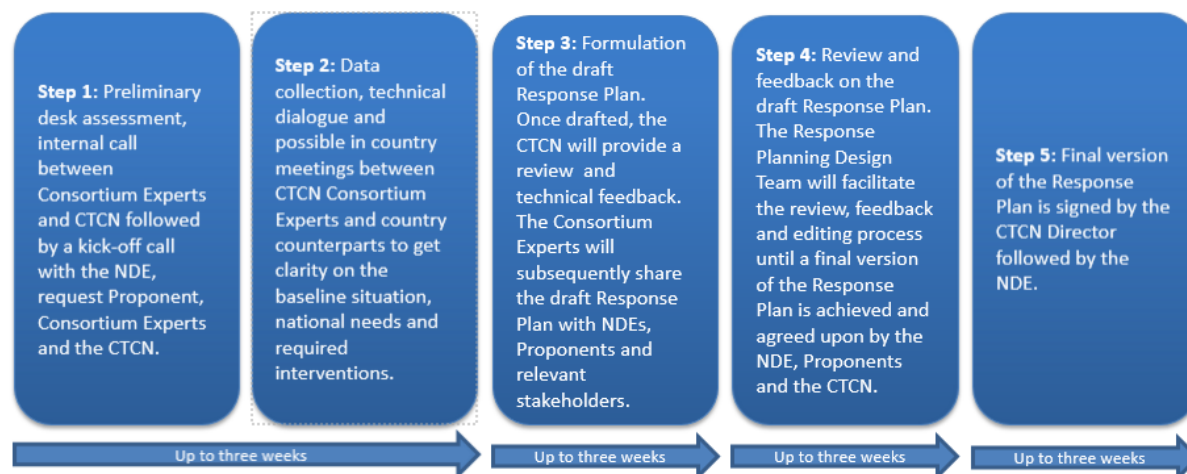
2. Results chain and Logical Framework Approach to be defined in the CTCN Response Plan

The result chain is the causal sequence that stipulates the necessary flow of actions and processes to achieve desired objectives and results – beginning with inputs, moving through activities and outputs, and culminating in individual outcomes. The outcome will contribute to the desired impact in the society. The Logical Framework Approach is an analytical process used to support objectives-oriented project planning and management. It provides a set of pre-defined concepts which are used as part of an iterative process to aid structured and systematic analysis and management of the CTCN technical assistance.



3. Process for designing the Response Plan

The Response Planning process should be completed over a period of up to 60 working days (12 weeks). Indicative steps and related timelines are laid out below:



4. Design Considerations

To maximize the impact of the technical assistance provided by the CTCN and provide an effective M&E process, the Response Plan should integrate as much as possible the considerations below:

Climate Technology focus: The Response Plan should have a clear focus on climate technologies, and identify activities that enable the identification, development, deployment, or diffusion of one or several specific technologies (including equipment, techniques, knowledge, and skills).

Barrier removal / Problem solving: The activities should contribute to address the specific problem statement identified in the Request. The barriers identified should be those hampering the identification, development, deployment, or diffusion of one or several climate technologies or climate actions. Therefore, it may be necessary to limit the CTCN Response Plan to a set of activities for technical assistance commonly agreed with the NDE (and Proponent when needed) compared to the original request submitted. The CTCN will liaise with NDEs and Proponent in case the scope of the technical assistance deviates from the original request.

Use of the CTCN assistance by stakeholders: The Response Plan should identify clearly how the products of the CTCN assistance will be used in the short term once support is delivered, by who and when, to ensure it will lead to specific impacts in the country. The activities should engage the stakeholders that will use the concrete results of the assistance to deploy the technologies, including from the private sector, the public sector, research institutions, etc.

Within the scope of CTCN resources: The cost of the technical assistance provided by the CTCN cannot exceed USD 300,000 per Response Plan. Therefore, it may be necessary to prioritize activities and limit the CTCN Response Plan to a set of priority activities commonly agreed with the Proponent and the NDE to remain under this value. Under section 4 of the Response Plan template, an indicative activity-based budget should be presented. The proposed budget is indicative and should present an estimated costing range per activity, output as well as a total costing range for the delivery of the Response Plan. Once the Response Plan is finalised and published for tendering, interested parties will provide competitive offer against the indicative budget.

CTCN activities and outputs should be linkable to monitoring and evaluation indicators: All proposed activities and outputs must be linkable to monitoring and evaluation indicators that are specific,

measurable, achievable, relevant, and time bound. The monitoring and evaluation process and corresponding indicators will be developed by the Lead Implementer as part of the work plan and will allow the CTCN technology Manager to monitor the timeliness and appropriateness of the implementation.

Synergies with existing efforts: The Response Plan should focus on activities that are not already being fully supported or that are in the process of being fully supported by another national, regional, or international organization. Synergies and complementarity also require that the CTCN assistance is not duplicating past activities. It is possible in the Response Plan to indicate co-financing from the government, the Proponent, or another stakeholder, which will maximize the effectiveness of the CTCN assistance.

Gender mainstreaming: The CTCN mission is to build or strengthen developing countries' capacities to identify technology needs, to facilitate the preparation and implementation of technology projects and strategies considering gender considerations. The Response Plan must therefore describe how gender considerations will be included and monitored within the proposed activities, and any gender co-benefits that will be gained because of implementing the CTCN technical assistance. For that purpose, a Gender Assessment and Action Plan (GAAP) template has been designed to be followed by the implementation partner.