ADAPTATION FUND

CONCEPT NOTE PROPOSAL FOR SINGLE COUNTRY

PART I: PROJECT/PROGRAMME INFORMATION

Title of Project/Programme: Integrated Mountain Ecosystem Restoration and Climate Adaptation Project (**IMERCA**)

Country: United Republic of Tanzania

Thematic Focal Area: Ecosystem restoration and management

Type of Implementing Entity: National Implementing Entity (NIE)

Implementing Entity: National Environmental Management Council - NEMC

Executing Entities: NEMC and Local Government Authorities (Kilimanjaro, Mbeya, Mara)

Amount of Financing Requested: 13m USD (in U.S Dollars Equivalent)

Project Formulation Grant Request (available to NIEs only): Yes ☒ No ☐

Amount of Requested financing for PFG: 150,000 (in U.S Dollars Equivalent)

Letter of Endorsement (LOE) signed: Yes ☒ ☐ No ☐ ☐

NOTE: LOEs should be signed by the Designated Authority (DA). The signatory DA must be on file with the Adaptation Fund. To find the DA currently on file check this page: https://www.adaptation-fund.org/apply-funding/designated-authorities

Stage of Submission:

☐☐ This concept has been submitted before

☒ ☐ This is the first submission ever of the concept proposal

In case of a resubmission, please indicate the last submission date: Click or tap to enter a date.

Please note that concept note documents should not exceed 50 pages, including annexes.

Project/Programme Background and Context:

Provide brief information on the problem the proposed project/programme is aiming to solve. Outline the economic social, development and environmental context in which the project would operate.

Tanzania's mountainous regions, particularly in Mamba Miamba (Kilimanjaro), Mbeya Kawetere (Mbeya), and Butiama (Mara), are increasingly exposed to climate-induced landslides and environmental degradation. These problems are driven by erratic rainfall, deforestation, unsustainable farming on steep slopes, and escalating climate variability. The proposed project seeks to address this critical challenge by stabilizing slopes, restoring degraded ecosystems, and building community resilience through nature-based and ecosystem-based adaptation measures.

Economically and socially, the project targets rural communities whose livelihoods depend heavily on rain-fed agriculture and forest resources. These communities face chronic vulnerability to climate shocks, with landslides and erosion destroying homes, farms, and basic infrastructure, leading to food insecurity, reduced income, and increased poverty. Women, youth, and marginalized groups are disproportionately affected due to limited access to adaptive resources and decision-making platforms.

From a development perspective, the project operates within a context of limited institutional capacity to prevent and respond to climate hazards at the local level. It aligns with Tanzania's national climate and development priorities, including the National Environmental Policy (2021), the Disaster Management Act (2015), and the Updated Nationally Determined Contributions (2021), all of which emphasize decentralized and inclusive climate action.

Environmentally, the targeted districts host fragile ecosystems and biodiversity hotspots that are increasingly under threat from both climatic and human pressures. The degradation of vegetative cover not only accelerates erosion and landslide risks but also undermines natural water regulation and carbon storage functions. The proposed interventions aim to reverse these trends by restoring land cover, strengthening local early warning systems, and promoting sustainable livelihoods such as clean cooking solutions and climate-smart agriculture.

Project/Programme Objectives:

List the main objectives of the project/programme.

General Objective:

To enhance communities' resilience and adaptability to climate change induced hazards in mountain ecosystems through nature-based solutions and livelihoods diversification

Specific Objectives:

- To stabilize landslide-prone areas through nature-based solutions
- To restore degraded ecosystems to enhance ecosystem services.
- To strengthen community and institutional capacities to manage climate risks, including early hazard

alert systems.
- To diversify green local livelihoods, including uptake of clean cooking solutions.
- To integrate lessons and evidence into national and subnational adaptation policies.

Project/Programme Components and Financing:

Fill in the table presenting the relationships among project components, activities, expected concrete outputs, and the corresponding budgets. If necessary, please refer to the attached instructions for a detailed description of each term.

For the case of a programme, individual components are likely to refer to specific sub-sets of stakeholders, regions and/or sectors that can be addressed through a set of well defined interventions / projects.

Project/Programme Components	**Expected Concrete Outputs**	***Indicative activities***	**Expected Outcomes**	**Amount (US$)**
1. Mountain Ecosystem-Based Hazards Prevention	1.1: At least 1,500 ha stabilized through ecosystem nature-based solutions 1.2: At least 600 community members trained in slope stabilization techniques	1.1.1: Identify landslide-prone areas using GIS and local knowledge 1.1.2: Establish vegetative buffers, terraces, and check dams 1.1.3: Promote agroforestry systems on vulnerable slopes	Reduced risk of mountain ecosystem hazards and improved ecosystem resilience in mountainous and hilly areas	3,232,099.80
2. Restoration of Degraded Ecosystems	2.1: At least 2,000 ha of degraded land restored 2.2: At least 20 community nurseries established 2.3: At least 600 community members trained in restoration methods	2.1.1: Reforest degraded hillsides and riverbanks 2.1.2: Apply erosion control and gully rehabilitation 2.1.3: Train community groups/members in restoration practices	Enhanced ecosystem services (e.g., water regulation, soil retention) and biodiversity conservation	2,563,466.40
3. Community and	3.1: At least	3.1.1: Conduct	Improved	1,337,961.20

LGA Awareness and Capacity Building (including community-based hazard alert mechanisms)	30,000 community members reached 3.2: At least 30 functioning community-based hazard alert mechanisms established 3.3: At least 60 facilitators and local officials trained	awareness programs on climate risks 3.1.2: Establish and operationalize community hazard alert mechanisms 3.1.3: Strengthen local governance capacities for climate risk management	community and LGAs readiness for climate-induced disasters	
4. Livelihood Diversification (including Clean Cooking Solutions)	4.1: At least 1,000 households engaged in diversified climate-resilient livelihoods 4.2: At least 1,000 households adopt clean cooking solutions 4.3: At least 80 green MSMEs supported	4.1.1: Promote climate-resilient agriculture and agro-processing 4.1.2: Introduce and scale clean cooking technologies (LPG, biogas, improved cookstoves) 4.1.3: Support green entrepreneurship and value chains	Improved income stability and reduced reliance on climate-sensitive livelihoods, with co-benefits for health and deforestation	3,232,099.80
5. Knowledge Management, M&E, and Policy Integration	5.1: M&E system applied across all components 5.2: At least 5 policy briefs and 3 learning products published 5.3: At least 4 subnational policy integration workshops conducted 5.4: 3 centers for Environmental Information System established	5.1.1: Develop participatory M&E and learning system 5.1.2: Document and disseminate lessons 5.1.3: Conduct policy dialogues and integrate lessons into subnational/national plans	Strengthened institutional learning and integration of evidence-based adaptation into policy frameworks	1,225,505.80
6. Project Execution	6.1: Annual reports and audits submitted 6.2: Operational coordination units	6.1.1: Project management and coordination 6.1.2: Monitoring, audits, and legal	Efficient and transparent delivery of project activities with	1,216,748.77

	established 6.3: Compliance with fiduciary standards	compliance 6.1.3: Risk mitigation and adaptive planning	adaptive management	
7. Project/Programme Execution Cost	-	-	-	1,216,748.77
8. Total Project/Programme Cost	-	-	-	12,807,881.77
9. Project/Programme Cycle Management Fee (if applicable)	-	-	-	192,118.23
Amount of Financing Requested	-	-	-	13,000,000.00

Projected Calendar:

Indicate the dates of the following milestones for the proposed project/programme

Milestones	Expected Dates
Start of Project/Programme Implementation	1st July 2026
Mid-term Review (if planned)	30 December 2027
Project/Programme Closing	30 June 2030
Terminal Evaluation	July – December 2030

PART II: PROJECT / PROGRAMME JUSTIFICATION

A. Describe the project/programme components, particularly focusing on the concrete adaptation activities of the project, and how these activities contribute to climate resilience. For the case of a programme, show how the combination of individual projects will contribute to the overall increase in resilience.

Component 1: Ecosystem-Based Landslide Prevention.
This component addresses the increasing risk of landslides in mountainous and steep terrain due to more intense and erratic rainfall caused by climate change. By adopting ecosystem-based adaptation approaches, the project will stabilize critical slopes and reduce soil erosion, particularly in Kilimanjaro, Mbeya and Morogoro regions, thereby protecting both lives and livelihoods. Nature-based solutions offer cost-effective, sustainable methods for managing these climate-induced hazards, ensuring long-term land productivity and ecological integrity.

Output 1.1: At least 1,500 hectares of land stabilized through ecosystem-based, nature-based solutions:
The project will implement slope stabilization measures such as vegetative strips, agroforestry systems, contour bunds, and check dams. These interventions are designed to replicate natural processes that control runoff and soil movement, reducing the risk of landslides and enhancing resilience to heavy rainfall events. These measures significantly reduce the vulnerability of communities to landslides, protect infrastructure, and enhance long-term land and ecosystem stability.

Output 1.2: At least 600 community members in selected wards in the districts of Same in Kilimanjaro, Mbeya City in Mbeya and Butiama in Mara regions will be trained in slope stabilization techniques:
Community members will receive practical training in the planning, construction, and maintenance of slope stabilization structures. This capacity-building initiative will enable communities to lead and sustain ecosystem restoration efforts beyond the project's lifespan. The training equips communities with practical knowledge, promotes local ownership, and builds long-term capacity to implement adaptive landscape management practices.

Component 2: Restoration of Degraded Ecosystems:
This component focuses on the rehabilitation of degraded ecosystems that have lost their functionality due to deforestation, overgrazing, and poor land use. Restoring these ecosystems improves water retention, increases soil fertility, enhances biodiversity, and provides ecosystem services that support climate-resilient livelihoods.

Output 2.1: At least 3,000 hectares of degraded land restored
Restoration activities will include afforestation, reforestation, gully reclamation, and erosion control measures in at least 1000 ha in each project site. These activities will improve ecological balance and support biodiversity conservation. Enhanced vegetation cover will increase soil water retention, reduce erosion, and improve microclimates that are vital for reducing climate risks like droughts and floods.

Output 2.2: At least 30 community tree and grass nurseries established

10 tree and grass nurseries in every site will provide climate-resilient seedlings for restoration work and offer sustainable livelihood opportunities for local communities. Tree nurseries ensure a continuous supply of seedlings, empower communities economically, and support widespread reforestation efforts.

Output 2.3: At least 600 community members trained in restoration methods
At least 200 local communities in every site will be trained in restoration techniques including seedling preparation, planting, and site maintenance. Empowered communities will lead restoration efforts, improving local stewardship of natural resources and fostering resilience at the grassroots level.

Component 3: Community and LGA Awareness and Capacity Building (Including community-based hazard alert mechanisms)
This component enhances institutional and community preparedness for climate-related hazards through awareness creation, training, and development of local hazard alert mechanisms.

Output 3.1: At least 30,000 people reached through awareness campaigns
The project will conduct climate risk communication campaigns using public forums, local media, and local institutions to raise awareness on climate adaptation practices. Informed communities are better prepared to adopt proactive measures, reducing their vulnerability to climate shocks.

Output 3.2: Functioning hazard alert mechanisms and systems established in target communities
The project will design and implement locally tailored early hazard alerting systems, linked to TMAs meteorological data and response structures. Timely alerts enable communities to prepare and act swiftly during climate-induced disasters, reducing loss of life and property.

Output 3.3: 60 trained facilitators and local officials
The project will build the capacity of facilitators and officials in climate risk communication and adaptive planning. The trained personnel will help institutionalize climate risk management in local governance, supporting long-term adaptive capacity.

Component 4: Livelihood Diversification (Including Clean Cooking Solutions)
This component promotes alternative livelihoods and sustainable technologies to reduce dependence on climate-sensitive practices and enhance household resilience.

Output 4.1: 1,000 households adopt clean cooking solutions
About 1000 households will be supported to transition to LPG, biogas, and improved cookstoves through access facilitation and awareness campaigns. Clean cooking

reduces deforestation and exposure to health risks while promoting environmental sustainability.

Output 4.2: 1,000 households engaged in diversified, climate-resilient livelihoods
The project will support households to adopt activities like climate-smart agriculture, beekeeping, and agro-processing. Diversified livelihoods reduce economic vulnerability and improve food and income security in the face of climate variability.

Output 4.3: 80 green micro-, small-, and medium-sized enterprises (MSMEs) supported
Green MSMEs will receive financial and technical support to deliver climate-smart products and services. MSMEs drive local innovation, create jobs, and strengthen economic systems that are responsive to climate risks.

Component 5: Knowledge Management, Monitoring & Evaluation, and Policy Integration
This component ensures systematic learning, adaptive project implementation, and integration of successful practices into policies and planning.

Output 5.1: Monitoring and Evaluation (M&E) system applied across all components
A participatory, results-based M&E system will be used to track progress, inform decision-making, and enable adaptive management.
Real-time learning enhances the project's responsiveness to changing climate dynamics and ensures effectiveness.

Output 5.2: A total of 10 policy briefs and 50 learning products published
The project will document lessons learned and produce materials for knowledge sharing among stakeholders. Knowledge dissemination promotes replication of successful models and informs climate policy formulation.

Output 5.3: Four subnational policy integration and feedback workshops conducted
Workshops will engage government institutions to align project approaches with development plans. Embedding adaptation measures into policy enhances institutional resilience and ensures long-term sustainability of outcomes.

B. Describe how the project/programme provides economic, social and environmental benefits, with particular reference to the most vulnerable communities, and vulnerable groups within communities, including gender considerations. Describe how the project/programme will avoid or mitigate negative impacts, in compliance with the Environmental and Social Policy and

Gender Policy of the Adaptation Fund.

Project Benefits and Safeguards

The project delivers significant economic, social, and environmental co-benefits across all components, especially targeting vulnerable communities and groups, including women, youth, and persons with disabilities. Through inclusive design, the project promotes gender equality and safeguards against potential negative impacts in alignment with the Environmental and Social Policy (ESP) of the Adaptation Fund.

Social Benefits: The project enhances local capacity through training, awareness, and institutional strengthening. It promotes inclusivity by prioritizing the participation of marginalized and vulnerable groups, including women and youth, in all activities.

Economic Benefits: By supporting clean energy solutions, green MSMEs, and diversified livelihoods, the project reduces poverty and increases household income resilience. It also strengthens the green economy by promoting green enterprises and nature-based jobs.

Environmental Benefits: Nature-based solutions restore degraded ecosystems, improve biodiversity, and mitigate climate hazards like landslides and floods. Clean energy adoption also reduces emissions and pressure on forest resources.

Safeguards and Risk Mitigation: The project will undertake a comprehensive Environmental and Social Risk Screening aligned with the Adaptation Fund ESP. All activities will be subject to environmental screening, with mitigation plans developed for any moderate risks. Community consultations and grievance redress mechanisms will be embedded into implementation. Gender-responsive planning will be employed, and a Gender Action Plan will ensure women's participation, access to benefits, and leadership in decision-making.

Table 3: Summary of Economic, Social, and Environmental benefits by Component

Components	Economic benefits	Social Benefits	Environmental Benefits
1. Ecosystem-Based Landslide Prevention	Reduced loss of land/infrastructure; job creation in slope restoration	Skills development for 600 people; community safety	Reduced erosion and runoff; improved slope stability
2. Restoration of Degraded Ecosystems	Income from tree nurseries and restored land use	Community empowerment; capacity building of 600 people	Improved soil fertility; enhanced biodiversity; carbon sequestration

3. Awareness and Capacity Building (LGAs & Communities	Indirect economic gains via disaster loss reduction	30,000+ people reached; community hazard mechanism; strengthened governance	Informed climate action; improved adaptive planning
4. Livelihood Diversification and Clean Cooking	Income diversification for 1,000 households; 80 green MSMEs supported	Improved health and gender equity via clean cooking; youth/women-led MSMEs	Reduced deforestation and emissions; energy sustainability
5. Knowledge Management, M&E, and Policy Integration	Enhanced resource targeting and scaling of adaptive practices	Knowledge sharing, inclusive policy engagement	Stronger policy frameworks, ecosystem protection integrated into planning

C. Describe or provide an analysis of the cost-effectiveness of the proposed project/programme.

The proposed project demonstrates strong cost-effectiveness by leveraging nature-based solutions, community-driven implementation, and multisectoral coordination to deliver high-impact climate adaptation outcomes at relatively low cost. By focusing on ecosystem restoration, slope stabilization, and clean energy technologies, the project avoids the higher expenses associated with hard infrastructure while achieving long-term protective benefits. Capacity building, early warning systems and community hazard alert mechanisms reduce future disaster response costs, while livelihood diversification reduces dependency on climate-vulnerable sectors, thus strengthening economic resilience. The integration of existing institutional frameworks and local structures further enhances efficiency, scalability, and sustainability, making this a financially sound investment in climate resilience for the most vulnerable populations.

The project is strategically designed to maximize benefits to vulnerable communities by selecting the most cost-effective interventions for enhancing resilience and adaptation to climate change. Using a combination of community-driven approaches and ecosystem-based solutions, the project prioritizes interventions based on cost-effectiveness and cost-benefit analyses, particularly those identified in the UNEP-GEF McKinsey Report as high-return climate adaptation strategies. For example, ecosystem-based landslide prevention offers low-cost slope stabilization compared to infrastructure-heavy alternatives, while restoration of degraded ecosystems delivers high economic and ecological returns through improved soil productivity, carbon sequestration, and watershed protection. Community awareness and community hazard alert mechanisms significantly reduce future disaster response and recovery costs, yielding high social

value at relatively low investment. Livelihood diversification and clean cooking solutions enhance income stability, reduce deforestation, and improve health outcomes, all of which lower long-term vulnerability and adaptation costs. Meanwhile, knowledge management and policy integration ensure that successful models are institutionalized, enhancing scalability without significant additional financial input. Collectively, the anticipated economic, social, and environmental benefits from implementing these components are projected to far outweigh the costs, helping to prevent climate-induced losses and build lasting resilience in the most at-risk populations.

Table 4: Summary of Project Costs and Benefits by Component

Project Component	Project Cost	Tangible Adaptation benefits	Avoided losses	Alternative interventions and tradeoffs
1. Ecosystem-Based Landslide Prevention	3,232,099.80	Stabilized 1,500 ha of slopes: reduced erosion and landslide risks	Damage to infrastructure, farmland, and lives	Costlier engineering works (e.g., retaining walls); less ecological value and higher maintenance costs
2. 2. Restoration of Degraded Ecosystems	2,563,466.40	Restored 3,000 ha; improved water retention and soil fertility	Agricultural productivity decline; flooding	Intensive monoculture or hardscape reforestation; less biodiversity and higher inputs required
3. Awareness and Capacity Building	1,337,961.20	Over 30,000 community members reached; community hazard alert mechanisms established	Emergency response costs; loss of life	Reactive disaster response systems; delayed action and less preparedness
4. Livelihood Diversification and Clean Cooking	3,232,099.80	At least1,000 households adopt clean cooking; 80 MSMEs supported	Health costs, forest degradation, unstable incomes	Charcoal-based cooking and single-source livelihoods; lower resilience and high vulnerability

5. Knowledge Management, M&E, Policy Integration s	1,225,505.80	Evidence based scaling and policy uptake	**Duplications, inefficiencies and policy blind spost**	**Adhoc data collection and fragmented planning**

based measures for landslide prevention, which also generate jobs and improve ecological health. Component 2 provides wide-scale environmental rehabilitation that not only restores ecosystem functions but generates local income through tree nurseries, thereby averting losses from soil erosion and reduced agricultural output. Component 3 enhances community preparedness at a relatively low cost, significantly reducing potential losses from climate-induced disasters. Component 4 targets the root causes of vulnerability by increasing household resilience through diversified income streams and improved health, offering long-term socioeconomic and environmental payoffs. Component 5 strengthens institutional systems for learning and scaling adaptation, ensuring that benefits extend beyond the life of the project. In all cases, the cost of implementing the proposed interventions is substantially outweighed by the avoided losses and the durable benefits to vulnerable populations and ecosystems.

D. Describe how the project/programme is consistent with national or sub-national sustainable development strategies, including, where appropriate, national adaptation plan (NAP), national or sub-national development plans, poverty reduction strategies, national communications, or national adaptation programs of action, or other relevant instruments, where they exist.

This project is designed to align seamlessly with national, sub-national, regional, and international strategies and initiatives on climate change, sustainable development, and poverty reduction, ensuring that its activities contribute to Tanzania's long-term development goals and global climate commitments.

International and Regional Frameworks

In September 2015, the United Nations adopted the 2030 Agenda for Sustainable Development Goals (SDGs), with SDG 13 dedicated to climate action. This project directly supports SDG 13 by implementing ecosystem-based adaptation, livelihood diversification, and capacity-building measures to address climate-induced risks. Additionally, it aligns with other SDGs, including SDG 1 (No Poverty), SDG 7 (Affordable and Clean Energy), SDG 12 (Responsible Consumption and Production), SDG 15 (Life on Land), and SDG 17 (Partnerships for the Goals), through its focus on resilient livelihoods, clean cooking solutions, ecosystem restoration, and policy integration.

At the regional level, the project is consistent with the African Union Climate Change and Resilient Development Strategy and Action Plan (2022–2032), which aims to promote a

sustainable, prosperous, equitable, and climate-resilient Africa. By stabilizing landslide-prone areas, restoring degraded ecosystems, and promoting climate-resilient livelihoods, the project supports the strategy's objectives of building community and ecosystem resilience and fostering low-emission economic growth. It also aligns with the SADC Protocol on Environmental Management for Sustainable Development (2014), which calls for harmonized strategies to address climate change and environmental challenges across Southern African Development Community member states.

The project further supports the East African Community (EAC) climate change frameworks, including the EAC Climate Change Master Plan (2011–2031), the EAC Fifth Development Strategy (2016/17–2020/21), the EAC 2050 Vision, and the EAC Protocol on Environment and Natural Resources Management (2020). These frameworks emphasize regional coordination, adaptation, and mitigation actions. Specific project activities, such as ecosystem-based hazard prevention and community-led early warning systems, align with the Lake Victoria Basin Climate Change Adaptation Strategy and Action Plan (2018) and the EAC Disaster Risk Reduction and Management Strategy, enhancing regional resilience to climate-induced disasters.

National Frameworks

Tanzania's Nationally Determined Contribution (NDC), 2021

Tanzania's updated NDC, submitted to the UNFCCC in July 2021, commits to reducing greenhouse gas emissions by 30–35% relative to the business-as-usual scenario by 2030 and enhancing adaptive capacity across key sectors. The project aligns with the NDC's mitigation and adaptation priorities, including:

Mitigation: Promoting clean cooking solutions (Component 4) reduces reliance on charcoal, contributing to emissions reductions in the energy and forestry sectors, which are priority areas in the NDC. The project's focus on afforestation and ecosystem restoration (Components 1 and 2) supports the NDC's goal of reducing 138–153 million tons of CO_2 through sustainable land management.

Adaptation: The NDC emphasizes increased access to clean water, climate-resilient agriculture, and protection of coastal and mountain ecosystems. This project's activities, such as stabilizing 1,500 ha of landslide-prone areas (Component 1), restoring 2,000 ha of degraded land (Component 2), and establishing community-based hazard alert mechanisms (Component 3), directly support these goals. The NDC's focus on gender equity and vulnerable groups is reflected in the project's livelihood diversification efforts, which prioritize women, youth, and marginalized communities (Component 4).

Implementation: The NDC highlights the need for climate finance and technology transfer, estimated at USD 19.2 billion for implementation. The project's USD 13 million

budget, including investments in climate-smart technologies and capacity building, contributes to mobilizing resources for NDC implementation, as supported by the NDC Partnership's engagement in Tanzania since 2022.

Tanzania National Development Vision 2050

The Tanzania National Development Vision 2050, currently under development to replace the Tanzania Development Vision 2025, aims to elevate Tanzania to upper-middle-income status through sustainable development, environmental stewardship, and public-private partnerships. The project aligns with this vision by:

- Promoting sustainable development through ecosystem-based adaptation measures (Components 1 and 2), which enhance environmental resilience and protect biodiversity, critical for long-term economic stability.
- Supporting economic growth by diversifying livelihoods and fostering green micro, small, and medium enterprises (MSMEs) (Component 4), aligning with Vision 2050's emphasis on private-sector-led economic development.
- Integrating climate resilience into national and subnational policies (Component 5), ensuring that adaptation priorities are embedded in Tanzania's long-term development planning. The vision's focus on renewable energy and sustainable practices is supported by the project's clean cooking initiatives and ecosystem restoration efforts.

Third Five-Year Development Plan (FYDP III, 2021/22–2025/26)

The Third Five-Year Development Plan (FYDP III) prioritizes industrialization, human development, and climate resilience as key pillars for achieving sustainable economic growth. The project is consistent with FYDP III's objectives by:

- Supporting climate-resilient infrastructure through ecosystem-based hazard prevention (Component 1), which reduces risks to infrastructure from landslides and floods, aligning with FYDP III's focus on resilient development.
- Enhancing human capital through capacity building for 30,000 community members and 60 local officials (Component 3), contributing to FYDP III's goal of improving skills and institutional capacity.
- Promoting industrialization and green growth by supporting 80 green MSMEs and climate-smart agriculture (Component 4), aligning with FYDP III's emphasis on sustainable industrialization.
- Integrating climate considerations into sectoral planning (Component 5), supporting FYDP III's commitment to mainstreaming climate change across development sectors.

National Adaptation Programme of Action (NAPA), 2007

The Tanzania NAPA (2007) identifies 14 priority areas for adaptation, many of which are directly addressed by the project:

- Water efficiency and harvesting (NAPA priorities 1, 2, 3, 12): The project's restoration of degraded ecosystems (Component 2) improves water retention and supports community-based water management, enhancing resilience to drought.
- Afforestation and ecosystem restoration (NAPA priority 7): The project restores 2,000 ha of degraded land and promotes agroforestry (Components 1 and 2), aligning with NAPA's focus on reforestation with adaptive species.
- Community awareness and capacity building (NAPA priority 9): Training 30,000 community members and establishing 30 hazard alert mechanisms (Component 3) directly supports NAPA's emphasis on awareness and preparedness.
- Sustainable livelihoods and clean energy (NAPA priorities 5, 10): The project's promotion of clean cooking solutions and livelihood diversification for 1,000 households (Component 4) aligns with NAPA's goals of clean energy adoption and sustainable economic activities.
- Land use and tenure (NAPA priority 14): The project's policy integration efforts (Component 5) support sustainable land use planning, contributing to NAPA's focus on resilient human settlements.

National Climate Change Response Strategy (NCCR, 2021–2026)

- The NCCR (2021–2026) aims to enhance national resilience and promote low-emission development pathways. The project aligns with its objectives by:
- Enhancing research and capacity building: Training programs and M&E systems (Components 3 and 5) support the NCCR's focus on education, awareness, and evidence-based decision-making.
- Mobilizing finance and technology: The project's USD 13 million budget facilitates the transfer of climate-smart technologies, such as clean cooking solutions and ecosystem-based adaptation measures, aligning with the NCCR's emphasis on sustainable financing.
- Promoting climate-smart interventions: Activities like climate-resilient agriculture, agroforestry, and early warning systems (Components 1, 2, 3, and 4) directly support the NCCR's goals of fostering adaptive and mitigative actions across sectors.

Sub-National and Sectoral Integration

The project integrates with sub-national frameworks through Component 5, which includes policy dialogues and workshops to embed climate resilience into local development plans and bylaws. This aligns with the NDC's emphasis on participatory governance and the NCCR's focus on local-level capacity building. The project's collaboration with the Vice President's Office, National Climate Change Steering Committee, and Zanzibar Climate Change Steering Committee ensures alignment with institutional arrangements outlined in the NDC and NCCR.

By addressing climate-induced risks through ecosystem-based adaptation, capacity building, and livelihood diversification, the project is fully consistent with Tanzania's NDC (2021), National Development Vision 2050, FYDP III (2021/22–2025/26), NAPA (2007),

and NCCR (2021–2026). It also supports regional frameworks like the EAC and African Union strategies and contributes to global commitments under the Paris Agreement and SDGs. This alignment ensures that the project advances Tanzania's sustainable development goals while enhancing resilience to climate change at local, national, and adaptation and mitigation.

E. Describe how the project/programme meets relevant national technical standards, where applicable, such as standards for environmental assessment, building codes, etc., and complies with the Environmental and Social Policy of the Adaptation Fund.

The proposed project is aligned with relevant national technical standards and meets requirements stipulated by Environmental Management Act (Cap.191 of 2004) and Environmental Impact Assessment (EIA) and Environmental Audit (EA) Regulations (G.N. No. 349 of 2005, amended I 2018). For example, the Environmental Management Act, 2004 promotes the protection of mountain ecosystems that are at threat to degradation due to human activities or natural courses. Other relevant legislation includes Forest Act, Wildlife Conservation Act, Plant Protection Act, Water Resources Management Act and Mining ACT. All these have a stake in safeguarding the mountain ecosystems from actions that would exacerbate the impacts of climate-induced disasters. The overall objective of this project is to protect mountain ecosystem and communities depending on them; therefore, it is in line with national technical standards, particularly for environmental assessment, and complies with the Environmental and Social Policy of the Adaptation Fund. Regarding the Adaptation Fund categorization, the project can be categorized as Category C, meaning that it does not have potential adverse impacts, and the small impacts from it can be easily mitigated through ESMP.

F. Describe if there is duplication of project/programme with other funding sources, if any. The proposed project and its interventions will avoid any duplication of actions and funding sources. During the conceptualization and design of this project, consultations were held with officers from relevant Local Government authorities including Mbeya City Council in Mbeya Region, Butiama District Council in Mara and Same District Council in Kilimanjaro Region, and it was confirmed that no similar interventions exist in the selected wards. More consultations will be conducted during proposal development to identify any similar projects in the project areas. This will ensured that there is no duplication of projects or funding sources.

However, there are some projects in other wards of BTC and BDC that were proposed, implemented, or are currently implementing some aspects of the project. In particular, the thriving project implemented by World Vision, which is coming to an end this year, may offer useful lessons to the proposed project, especially regarding tree planting and community engagement in project interventions.

Table 4 below shows some of the related climate change adaptation projects conducted in **Mbeya, Kilimanjaro, and Mara**.

G. If applicable, describe the learning and knowledge management component to capture and disseminate lessons learned.

This project includes a dedicated learning and knowledge management component (Component 5), which ensures that experiences, successes, and lessons learned from the implementation of climate adaptation measures in mountain ecosystems are effectively captured, shared, and used to inform future policy and practice. The learning and knowledge management strategy is designed to function at multiple levels, from community learning to national policy uptake, and will integrate climate science with local knowledge systems.

Participatory monitoring, evaluation, and learning (MEL) systems will be embedded across all components. These systems will generate evidence on what works in enhancing mountain ecosystem resilience through nature-based solutions, hazard prevention, and diversified livelihoods. Local communities will be trained to participate in data collection and reflection exercises, enabling them to draw insights from their own adaptive practices.

Learning products, including technical briefs, community storybooks, and policy recommendations, will be produced and disseminated through workshops, knowledge fairs, policy forums, and digital platforms. Furthermore, the establishment of two Centers for Environmental Information Systems in mountainous regions will serve as hubs for data access, environmental monitoring, and stakeholder engagement.

Lessons will also be documented and shared with other ongoing and planned national climate adaptation initiatives through coordination with the Designated National Authority (NDA), Sector Ministries and other government actors, as well as Civil Society Organizations, Non-Governmental Organizations and Private Sector. This integrated approach will ensure the replication and scaling of effective adaptation practices and technologies in other ecologically fragile mountainous zones of the country.

H. Describe the consultative process, including the list of stakeholders consulted, undertaken during project preparation, with particular reference to vulnerable groups, including gender considerations, in compliance with the Environmental and Social Policy and Gender Policy of the Adaptation Fund.

A robust and inclusive consultative process was conducted during the concept development phase to ensure that the project reflects the priorities and needs of vulnerable stakeholders residing in mountainous areas and dependent on mountain ecosystems. These areas have recently been impacted by climate-induced hazards such as mudslides, flash floods, and the degradation of ecosystem services. Initial

consultations were carried out between February and May 2025 in selected wards and districts across the Mbeya, Kilimanjaro and Morogoro regions, which were identified as high-risk zones.

The consultations involved a combination of field visits, community dialogues, focus group discussions, and key informant interviews. Participatory methods, including transect walks and mapping exercises, were used to identify critical issues such as degraded lands, early warning gaps, and socio-economic vulnerabilities. Special attention was given to collecting gender-disaggregated data and applying gender-sensitive facilitation techniques to ensure inclusive participation by women, youth, elders, and marginalized groups.

The outcomes of these consultations provided foundational input for designing each component of the project. They also guided the identification of potential green livelihood activities and clean energy solutions suitable for mountain environments. Additional stakeholder engagement will be undertaken during the full proposal development phase to ensure continued alignment with community needs and institutional priorities.

Stakeholders Consulted

Stakeholder Group	Roles and Contributions
Local Communities	Participated in identifying vulnerabilities, traditional knowledge on restoration practices, and provided input on livelihood needs and risk-prone zones. Specific groups consulted included women's groups, youth associations, and elders.
Ward and Village Leaders	Offered insights into historical land use, socio-economic challenges, and governance issues including enforcement of land-use regulations.
Local Government Authorities (LGAs)	Shared institutional capacity gaps in early warning systems, land use enforcement, and disaster preparedness. Supported mobilization of communities and technical staff for the consultation process.
Sector Ministries	Ministries such as Lands, Natural Resources and Tourism, Water, Agriculture, Livestock and Fisheries, and the Disaster Management Department under the Prime Minister's Office were engaged to ensure national policy alignment and technical input.
Vice President's Office (NDA to the Adaptation Fund)	Provided strategic guidance, national alignment, and coordination support throughout the consultation and planning processes.
Private Sector and	Consulted to assess opportunities and barriers for

Microfinance Institutions	linking mountain-based livelihoods to markets and promoting clean energy technologies.
Academic and Research Institutions	Provided technical input on ecosystem management, land use planning, and conservation strategies. Institutions such as Sokoine University of Agriculture (SUA) and Ardhi University were identified as potential partners.
Civil Society Organizations (CSOs)	Local NGOs and CBOs including the most active Tanzania Environmental Protection Organization (TAEPO), Climate African Network Tanzania (CANTz) and CARE International were engaged for their experience in community mobilization and ecosystem restoration work.

I. Provide justification for funding requested, focusing on the full cost of adaptation reasoning.

Mountain ecosystems in Tanzania are critical for environmental stability, regulating water flows, preventing soil erosion, supporting biodiversity, and sustaining agriculture and hydropower systems that underpin the livelihoods of highland communities. However, these ecosystems face escalating threats from climate-induced hazards, including mudslides, erratic rainfall, temperature variability, and prolonged dry spells. These climatic stresses, exacerbated by unsustainable land use practices such as deforestation and overgrazing, have significantly degraded ecosystem functionality, increasing the vulnerability of adjacent communities to climate change impacts. According to the IPCC (2014), mountain ecosystems are particularly sensitive to climate variability, with rising temperatures and altered precipitation patterns intensifying risks of landslides and floods [1]. Without urgent intervention, these challenges will lead to loss of lives, infrastructure damage, and further degradation of critical ecosystems, imposing substantial economic and social costs on local and national authorities.

The funding requested from the Adaptation Fund is essential to cover the full cost of transformative adaptation measures that address these vulnerabilities, which are currently beyond the fiscal capacity of local and national governments. The proposed interventions will deliver integrated, ecosystem-based solutions to enhance resilience in Tanzania's mountainous regions, aligning with national climate strategies such as the National Adaptation Plan (NAP) and the Nationally Determined Contributions (NDC) implementation roadmap. Below, each component outlines the baseline scenario without funding and the transformative outcomes enabled by Adaptation Fund support.

Component 1 – Mountain Ecosystem-Based Hazards Prevention (Baseline Without Funding)

In the absence of funding, steep mountain slopes will continue to degrade due to

uncontrolled runoff, deforestation, and unsustainable agricultural practices. This will exacerbate the frequency and severity of landslides and flash floods, which already threaten lives, infrastructure, and ecosystems. For instance, studies indicate that Tanzania's highland regions experience increasing landslide risks, with economic losses estimated at USD 50–100 million annually due to infrastructure damage and agricultural losses [2]. Without intervention, rural communities will face heightened food insecurity, loss of arable land, and reduced access to clean water, as unregulated runoff depletes water tables and increases soil erosion. The lack of protective measures will also strain government budgets, as recurrent disaster response and recovery efforts divert resources from development priorities such as education and health services.

With Funding for Component 1

Adaptation Fund resources will enable the implementation of nature-based and hybrid solutions to stabilize high-risk mountain slopes. These include agroforestry systems, vetiver grass buffers, terracing, and integrated watershed management across at least 10 priority sites in ecologically fragile mountainous regions. These interventions will serve as physical and ecological barriers, reducing landslide and flood risks by up to 60%, based on regional studies of similar measures [3]. For example, vetiver grass systems have been shown to reduce soil erosion by 70–90% in comparable highland environments [4]. Additionally, check dams and small-scale water harvesting structures will be constructed to recharge groundwater and enhance soil moisture, supporting an estimated 500 households per site for domestic and agricultural water needs (based on per capita water consumption of 50–150 liters/day). These measures will enhance ecosystem resilience, secure water availability, and reduce government expenditure on disaster relief, ultimately fostering climate-resilient communities.

Component 2 – Restoration of Degraded Ecosystems (Baseline Without Funding)

Without funding, degraded mountain catchments will continue to lose forest cover and biodiversity due to deforestation, overgrazing, and climate-induced stressors such as drought and erratic rainfall. Tanzania's mountain forests, which cover approximately 10% of the country's forest area, are being lost at a rate of 150,000 hectares annually, contributing to an estimated USD 1.2 billion in economic losses by 2030 if current trends persist [5]. This degradation reduces water retention, exacerbates soil erosion, and undermines ecosystem services critical for agriculture and hydropower. Vulnerable communities will face declining crop yields, increased poverty, and greater reliance on unsustainable practices, such as charcoal production, further accelerating environmental degradation.

With Funding for Component 2

Adaptation Fund resources will support the restoration of at least 2,000 hectares of degraded mountain catchments using ecologically sound methods, including reforestation with native species, agroforestry, and soil conservation techniques. At least

5 nurseries will be established in each target community to produce 20,000 locally adapted fruit and forest tree seedlings annually, prioritizing species such as indigenous pines, acacias, and fruit trees (e.g., mango, avocado) for food, fodder, and timber. These efforts will enhance forest cover, improve biodiversity corridors, and secure water provisioning services for an estimated 10,000 households. Community training through farmer field schools and exchange visits will build capacity for nursery management and sustainable land use, targeting at least 50 members per community. Publications, radio programs, and workshops will disseminate best practices, aligning with Tanzania's National Environmental Master Plan for Strategic Interventions (NEMSI). These interventions will reduce deforestation rates by 30–40% in target areas and enhance ecosystem resilience to climate shocks.

Component 3 – Community and LGA Capacity Building (Baseline Without Funding)
Mountain-based Local Government Authorities (LGAs) currently lack the technical expertise, coordination mechanisms, and early warning systems to manage climate risks effectively. Without investment, communities will remain unprepared for climate-induced disasters, leading to higher casualties, property damage, and economic losses. For example, a 2020 study estimated that inadequate disaster preparedness in Tanzania's highlands contributes to annual losses of USD 20–30 million in infrastructure and livelihoods [6]. The absence of community adaptation plans and alert systems further exacerbates vulnerability, leaving LGAs reliant on reactive, costly disaster response measures.

With Funding for Component 3
Adaptation Fund support will strengthen disaster preparedness and adaptive governance in 9 LGAs and 30 community groups across target mountain regions. Activities include tailored training on climate risk management, deployment of localized early warning systems (e.g., SMS-based alerts), participatory risk mapping, and the development of community adaptation plans. Training will reach at least 1,500 community members and LGA staff, fostering institutionalized climate governance. These measures will reduce disaster-related losses by an estimated 50%, based on regional case studies of similar interventions [7]. By empowering communities and LGAs, the project will reduce reliance on national disaster relief funds and enhance long-term resilience to climate variability.

Component 4 – Livelihood Diversification and Clean Energy Transition (Baseline Without Funding)
Mountain communities depend heavily on rain-fed agriculture and biomass-based energy, both highly vulnerable to climate variability. Without intervention, erratic rainfall and prolonged dry spells will reduce crop yields by up to 30%, as observed in similar highland regions [8]. Unsustainable biomass use, which accounts for 90% of household energy in rural Tanzania, drives deforestation at a rate of 370,000 hectares annually, contributing to greenhouse gas emissions and ecosystem degradation [9]. These

practices deepen poverty, increase food insecurity, and heighten health risks from indoor air pollution.

With Funding for Component 4

Adaptation Fund resources will promote climate-resilient livelihoods and clean energy transitions for 1,000 households. Interventions include establishing sustainable horticulture plots (e.g., vegetable gardens with drip irrigation), apiculture units for pollination and honey production, and agro-processing facilities to add value to local products. Additionally, clean cooking solutions, such as improved cookstoves, will be distributed to reduce biomass dependency by 50% in target households, mitigating deforestation and improving health outcomes. Training on sustainable farming and value chain development will engage 500 farmers per community, enhancing income resilience. These measures will diversify livelihoods, reduce environmental degradation, and align with Tanzania's NDC goals for sustainable development.

Component 5 – Knowledge Generation, Policy Integration, and Upscaling (Baseline Without Funding)

Without funding, adaptation knowledge in mountainous areas will remain fragmented and underutilized, limiting policy uptake and replication. The lack of systematic data collection and dissemination hinders evidence-based decision-making, leaving communities and policymakers ill-equipped to address climate risks. This gap perpetuates reactive approaches, increasing costs for disaster response and recovery.

With Funding for Component 5

Adaptation Fund resources will establish a comprehensive knowledge management framework to generate actionable evidence and promote upscaling. Activities include community participatory assessments, climate vulnerability tracking, and policy dialogues at regional and national levels. At least 10 workshops and 5 publications will document best practices, feeding into Tanzania's NAP, NDC roadmap, and NEMSI. Radio and TV campaigns will reach an estimated 50,000,000 stakeholders, enhancing awareness and adoption of adaptation strategies. By fostering knowledge sharing and policy integration, the project will enable replication across other mountain regions, maximizing long-term impact.

J. Describe how the sustainability of the project/programme outcomes has been taken into account when designing the project/programme.

The program design integrates sustainability in all the social, institutional, technical, financial, and environmental dimensions to reinforce community level long-term impacts in enhancing mountain communities' resilience in Tanzania. The project is well organized to integrate sustainability in all aspects and goals as described below:

Social Sustainability: The project is locally owned, inclusive, and community-based.

Activities such as community reforestation, early warning systems training, and clean cooking adoption directly engage vulnerable families, women, and youth. Over 20,000 individuals will be reached through awareness raising and practical learning (e.g., slope stabilization, restoration), forming the foundation for enduring community-based adaptation and social cohesion long after project completion.

Institutional Sustainability: The programme constructs the capacity of Local Government Authorities (LGAs) and community governance institutions through mainstreaming early warning systems, policy dialogue, and disaster preparedness into local planning. By being complemented with national plans and capacity development of above 60 local facilitators and officials, the programme allows for institutionalization of results in the mandate of institutions. Outputs like policy briefs, learning products, and integration workshops support replication and policy convergence at subnational and national levels.

Technical Sustainability: All the technology interventions, ranging from vegetative buffer-based slope stabilization and agroforestry to gully rehabilitation and clean cooking technologies, are low-tech and context-specific so as to allow simplicity of adoption and maintenance. The communities will be trained in these methods (over 1,000 people trained in restoration and slope techniques), enabling them to replicate and sustain interventions with minimal external assistance. The project also promotes green MSMEs, enabling local entrepreneurship and innovation in sustainable practices.

Financial Sustainability: The programme promotes income diversification through support to climate-resilient agriculture, agro-processing, and clean energy businesses. It funds 80 green MSMEs, and connects 1,000 households to clean cooking technologies and other sources of income. This not only raises financial resilience, but also eases the pressures on ecosystems. In addition, community nurseries and savings groups will drive local financial autonomy and reinvestment in adaptation measures.

Environmental Sustainability: Through restoration of over 3,000 hectares of land and slope stabilization using nature-based solutions, the program highlights the long-term environmental integrity of mountain ecosystems. Interventions mitigate erosion, enhance water regulation, and promote biodiversity, hence ensuring their sustainability in the long term. Nature-based solutions ensure interventions are symbiotic with local ecosystem processes and use less synthetic input, hence minimizing long-term environmental risks.

K. Provide an overview of the environmental and social impacts and risks identified as being relevant to the project/programme.

Checklist of environmental and social principles	No further assessment required for compliance	Potential impacts and risks – further assessment and management required for compliance
Compliance with the Law	-No further assessment required	-The project is for environmental conservation for wellbeing of the people living in mountain ecosystems hence it complies with the law
Access and Equity	-No further assessment required	-The project will not deny communities access to basic livelihood and necessary services. -The project will promote equitable sharing of resources in mountain ecosystems
Marginalized and Vulnerable Groups	-x	-Possible risk: Discrimination against marginalized and vulnerable groups -Possible impact: Project delay/failure -Further assessment is required to identify marginalized and vulnerable groups and their possible contributions towards success of the project. -Management required: Marginalized and vulnerable groups should be identified and engaged in the project phases
Human Rights	-No further assessment required	-The project will not have impact on human rights
Gender Equality and Women's Empowerment	-x	-Possible risk: Marginalization of women and undermining gender issues -Possible impact: Gender inequality and project

		delay/failure -Further assessment is required to determine the traditional way of life of communities with regard to women and gender issues. -Management required: Women engagement in early stages of project designing should be considered; their views/concerns be considered during the designing phase.
Core Labour Rights	-No further assessment required	The project will not have impact on core labor rights
Indigenous Peoples	-x	-Potential risk: project rejection by indigenous people -Potential impact: Project implementation delay/failure; increased mountain ecosystem degradation. -Further assessment is required to identify indigenous people and their possible influence and contributions towards success of the project -Management required: Identification and engagement of indigenous people during early stages of project designing; and incorporating their ideas/knowledge into project designs
Involuntary Resettlement	-No further assessment required	-The project will not involve resettlement
Protection of Natural Habitats	-x	-Potential risk: natural habitats encroachment -Potential impact: Habitat fragmentation, degradation and

		destruction; increased land slides -Further assessment is required to identify and map natural habitats at the project sites -Management required: natural habitats within mountain ecosystems should be protected from encroachment
Conservation of Biological Diversity	-x	-Potential risks include: introduction of invasive plant species during tree planting and agroforestry campaign; -Potential impacts: Displacement of natural biological diversity in project areas (Loss of natural biological diversity in a long run) -Further assessment is required to determine biodiversity of the project sites/areas and their conservation status. -Management required: Tree planting campaign should make use of indigenous plant species; and some of the degraded areas may be allowed to undergo natural regeneration.
Climate Change	-No further assessment required	-The project will involve planting of tree which will aid in minimizing climate change effects through carbon sequestration
Pollution Prevention and Resource Efficiency	-No further assessment required	-Potential risk: Pollution of downstream water from increased use of agrochemicals at upstream (mountainous areas)

		-Potential impact: Weed colonization in downstream water bodies endangering aquatic biodiversity -Management required: Use of organic farming should be encouraged in agroforestry However, the project will not make use of resources and will not promote use of chemicals; it is a pollution free project
Public Health	-No further assessment required	The project will not have any public health risks
Physical and Cultural Heritage	-x	-Possible risk: Undermining physical and cultural heritage at the project sites -Possible impact: Loss of physical and cultural heritage. -Further assessment is required to identify physical and cultural heritage at the sites -Management required: Physical and cultural heritage should be identified, mapped and preserved
Lands and Soil Conservation	-No further assessment required	-Potential risk: Depletion of soil nutrients because of invasive plant species; and soil erosion in new opened agroforestry land. -Potential impact: The project will promote land and soil conservation through ecosystem rehabilitation and agroforestry. -Management required: Proper selection of appropriate native plant species should be done; as well as eco farming

PART III: IMPLEMENTATION ARRANGEMENTS

A. Demonstrate how the project/programme aligns with the Results Framework of the Adaptation Fund

Project Objective(s)[1]	Project Objective Indicator(s)	Fund Outcome	Fund Outcome Indicator	Grant Amount (USD)
Goal: To enhance communities' resilience and adaptability to climate change induced hazards in mountain ecosystems through nature-based solutions and livelihoods diversification				
1. To stabilize landslide-prone areas through nature-based solutions	1.1: Number of hectares stabilized in mountainous areas to support climate resilience and reduce risks from climate-induced hazards (landslide, floods)	Outcome 4: Increased adaptive capacity within relevant development and natural resource sectors	4.1: Development sectors' services responsive to evolving needs from changing and variable climate	3,232,099.80
			4.2: Physical infrastructure improved to withstand climate change and variability-induced stress	
2. To restore degraded ecosystems to enhance ecosystem services.	2.1: Number of hectares of degraded mountain ecosystems rehabilitated and functioning to deliver key ecosystem services under conditions of climate change and variability	Outcome 5: Increased ecosystem resilience in response to climate change and variability-induced stress	5: Ecosystem services and natural assets maintained or improved under climate change and variability-induced stress	2,563,466.40
3. To strengthen community and institutional capacities to manage climate risks, including early warning systems.	3.1: Number and type of local institutions with enhanced technical and operational capacity to implement ecosystem-based adaptation and reduce climate - induced risks in mountainous areas	Outcome 2: Strengthened institutional capacity to reduce risks associated with climate-induced socioeconomic and environmental losses	Number and type of targeted institutions with increased capacity to minimize exposure to climate variability risks	1,337,961.20
			Number of people with reduced risk to extreme	

			weather events	
	3.2: Percentage of targeted mountain communities with increased awareness and practical knowledge of climate change risks and appropriate ecosystem-based adaptation measures	Outcome 3: Strengthened awareness and ownership of adaptation and climate risk reduction processes at local level	3.1: Percentage of targeted population aware of predicted adverse impacts of climate change, and of appropriate responses	
			3.2: Modification in behavior of targeted population	
4. To diversify green local livelihoods, including uptake of clean cooking solutions.	4.1: Percentage of targeted households in mountain areas with improved access to climate-resilient livelihood assets as a result of project interventions	Outcome 6: Diversified and strengthened livelihoods and sources of income for vulnerable people in targeted areas	6.1: Percentage of households and communities having more secure (increased) access to livelihood assets	3,232,099.80
			6.2: Percentage of targeted population with sustained climate-resilient livelihoods	
5. To integrate lessons and evidence into national and subnational adaptation policies.	5.1: Number of local and subnational development plans, bylaws, or sectoral strategies that integrate climate change adaptation priorities and ecosystem-based approaches as a result of project support	Outcome 7: Improved policies and regulations that promote and enforce resilience measures	7.1: Climate change priorities are integrated into national development strategy	1,225,505.80
Project Outcome(s)	**Project Outcome Indicator(s)**	**Fund Output**	**Fund Output Indicator**	**Grant Amount (USD)**
1. Reduced risk of mountain	1.1: Number and type of ecosystem-based	Output 4: Vulnerable	4.1.1: Number and type of health	3,232,099.80

ecosystem hazards and improved ecosystem resilience in mountainous and hilly areas	natural infrastructures established or enhanced to reduce climate-induced risks and support adaptation in mountainous areas	physical, natural, and social assets strengthened in response to climate change impacts, including variability	or social infrastructure developed or modified to respond to new conditions resulting from climate variability and change (by type)	
			4.1.2: Number of physical assets strengthened or constructed to withstand conditions resulting from climate variability and change (by asset types)	
2. Enhanced ecosystem services (e.g., water regulation, soil retention) and biodiversity conservation	2.1: Number and type of natural resources (e.g. forest cover, water catchment and soil quality) restored, protected or enhanced to increase resilience against climate variability and change in selected mountainous areas	Output 5: Vulnerable physical, natural, and social assets strengthened in response to climate change impacts, including variability	5.1: Number and type of natural resource assets created, maintained or improved to withstand conditions resulting from climate variability and change (by type of assets)	2,563,466.40
3. Improved community and LGAs readiness for climate-induced disasters	3.1: Number of staff from local institutions and service providers trained in climate risk management, ecosystem based adaptation and disaster response relevant to mountainous ecosystems	Output 2.1: Strengthened capacity of national and regional centres and networks to respond rapidly to extreme weather events	2.1.1: Number of staff trained to respond to, and mitigate impacts of, climate-related events	1,337,961.20
		Output 2.2: Targeted population groups covered by	2.1.2: Capacity of staff to respond to, and mitigate impacts of, climate-related	

		adequate risk reduction systems	events from targeted institutions increased	
			2.2.1: Percentage of population covered by adequate risk-reduction systems	
			2.2.2: Number of people affected by climate variability	
	3.2: Number and type of ecosystem based and community led risk reduction strategies (slope stabilization, early warning systems and hazard alert mechanisms, climate resilient land use practices) introduced and operationalized at local levels	Output 3: Targeted population groups participating in adaptation and risk reduction awareness activities	3.1.1: Number and type of risk reduction actions or strategies introduced at local level	
			3.1.2: Number of news outlets in the local press and media that have covered the topic	
4. Improved income stability and reduced reliance on climate-sensitive livelihoods, with co-benefits for health and deforestation	4.1: Number and type of physical and knowledge based adaptation assets (water harvesting system, climate smart agriculture, training materials, extension services, clean cooking solutions) developed/provided to enhance the climate resilience of community livelihood in selected mountainous areas	Output 6: Targeted individual and community livelihood strategies strengthened in relation to climate change impacts, including variability	6.1.1: Number and type of adaptation assets (physical as well as knowledge) created in support of individual- or community-livelihood strategies	3,232,099.80
			6.1.2: Type of income sources for households generated under climate change scenario	
5. Strengthened institutional learning and integration of evidence-based	5.1: Number and type of local or sector specific policies, plans, bylaws introduced or revised	Output 7: Improved integration of climate-resilience	7.1: Number, type, and sector of policies introduced or adjusted to	1,225,505.80

adaptation into policy frameworks	to integrate climate risks reduction and ecosystem based adaptation in selected mountainous areas	strategies into country development plans	address climate change risks	
			7.2: Number or targeted development strategies with incorporated climate change priorities enforced	

[1] The AF utilized OECD/DAC terminology for its results framework. Project proponents may use different terminology but the overall principle should still apply

PART IV: ENDORSEMENT BY GOVERNMENT AND CERTIFICATION BY THE IMPLEMENTING ENTITY

A. **Record of endorsement on behalf of the government**[2] *Provide the name and position of the government official and indicate date of endorsement. If this is a regional project/programme, list the endorsing officials all the participating countries. The endorsement letter(s) should be attached as an annex to the project/programme proposal. Please attach the endorsement letter(s) with this template; add as many participating governments if a regional project/programme:*

Prof. Peter Lawrance Makenga Msoffe, Deputy Permanent Secretary, Vice President's Office	Date*: August, 8th, 2025*

B. **Implementing Entity certification** *Provide the name and signature of the Implementing Entity Coordinator and the date of signature. Provide also the project/programme contact person's name, telephone number and email address*

I certify that this proposal has been prepared in accordance with guidelines provided by the Adaptation Fund Board, and prevailing National Development and Adaptation Plans National Environmental Policy (20210; National Climate Change Response Strategy (2021-2026); Nationally Determined Contributions (2021-2030); National Adaptation Program of Action (2007); National Environmental Master Plan for Strategic Interventions (2022-2032); Tanzania Development Vision 2025-2050) and subject to the approval by the Adaptation Fund Board, commit to implementing the project/programme in compliance with the Environmental and Social Policy and the Gender Policy of the Adaptation Fund and on the understanding that the Implementing Entity will be fully (legally and financially) responsible for the implementation of this project/programme.

[6] Each Party shall designate and communicate to the secretariat the authority that will endorse on behalf of the national government the projects and programmes proposed by the implementing entities.

<table>
<tr><td colspan="2">Fredrick F. Mulinda

 

Implementing Entity Coordinator</td></tr>
<tr><td>Date: August, 1st, 2025</td><td>Tel. and email: +255 753 240 517
nieaf@nemc.or.tz
/kasigazi.koku@gmail.com</td></tr>
<tr><td colspan="2">Project Contact Person: Paul Kalokola</td></tr>
<tr><td colspan="2">Tel. And Email: +255 784 448 356 / paul.kalokola@nemc.or.tz</td></tr>
</table>

Annex 1: Government endorsement

THE UNITED REPUBLIC OF TANZANIA
VICE PRESIDENT'S OFFICE

Telegrams: "MAKAMU"
Telephone: +255 026 2329006
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Email: ps@vpo.go.tz
In reply, please quote

Government City,
Mtumba Area,
Vice President Street,
P.O. Box. 2502,
40406 DODOMA.

Our Ref. No: CBA.78/90/03

08th August, 2025

The Adaptation Fund Board
c/o Adaptation Fund Board Secretariat
Email: Secretariat@Adaptation-Fund.org
Fax: 202 522 3240/5

SUBJECT: ENDORSEMENT FOR INTEGRATED MOUNTAIN ECOSYSTEM RESTORATION AND CLIMATE ADAPTATION PROJECT (IMERCA)

Please refer to the above subject.

2. In my capacity as the designated authority for the Adaptation Fund in Tanzania, I confirm that the above national grant proposal is in accordance with the government's national priorities in implementing adaptation activities to reduce adverse impacts of, and risks, posed by climate change in Tanzania.

3. Accordingly, I am pleased to endorse the above grant proposal with support from the Adaptation Fund. If approved, the project will be implemented and executed by National Environment Management Council.

4. Thank you for your continued support.

Prof. Peter L.M. Msolfe
NATIONAL DESIGNATED AUTHORITY- DEPUTY PERMANENT SECRETARY

Annex 2: Project Formulation Grant Request

Project Formulation Grant (PFG)

Submission Date: August 6, 2025
Adaptation Fund Project ID: [To be assigned]
Country/ies: Tanzania
Title of Project/Programme: Integrated Mountain Ecosystem Restoration and Climate Adaptation Project (IMERCA)
Type of IE (NIE/RIE/MIE): NIE
Implementing Entity: National Environment Management Council (NEMC)
Executing Entity/ies: National Environment Management Council (NEMC)

A. Project Preparation Timeframe

Start date of PFG:	December 1, 2025
Completion date of PFG:	June 30, 2026

B. Proposed Project Preparation Activities ($)

List of Proposed Project Preparation Activities	Output of the PFG Activities	US$ Amount	Budget Note
Ecosystem and climate impact assessments	Baseline data on mountain ecosystems and climate risks	50,000	Costs for field surveys, remote sensing, and expert analysis
Community engagement workshops	Stakeholder input for restoration and adaptation strategies	40,000	Includes logistics, facilitation, and materials for community meetings
Development of project monitoring framework	Indicators and monitoring plan for project outcomes	30,000	Technical expertise for designing robust monitoring systems
Drafting full project proposal	Comprehensive proposal for country cap modality	30,000	Staff time, technical expertise, and stakeholder coordination for proposal development
Total Project Formulation Grant		**150,000**	

Description and Justifications for PFG Activities:

- **Ecosystem and climate impact assessments ($50,000):** Conducting extensive field surveys and remote sensing to assess the state of mountain ecosystems and their vulnerability to climate

change. This is essential to design targeted restoration and adaptation interventions under the country cap modality.

- **Community engagement workshops ($40,000):** Engaging local communities through multiple workshops to ensure their priorities shape the project, fostering ownership and sustainability. Costs cover facilitation, travel, and materials for inclusive engagement.
- **Development of project monitoring framework ($30,000):** Establishing detailed indicators and a comprehensive monitoring plan to track restoration and adaptation outcomes, ensuring alignment with Adaptation Fund requirements.
- **Drafting full project proposal ($30,000):** Developing a comprehensive proposal that meets the country cap modality criteria, incorporating stakeholder inputs, technical assessments, and iterative revisions.

C. Implementing Entity

This request has been prepared in accordance with the Adaptation Fund Board's procedures and meets the Adaptation Fund's criteria for project identification and formulation.

Implementing Entity Coordinator, IE Name	Signature	Date (Month, day, year)	Project Contact Person	Telephone	Email Address
Fredrick F. Mulinda		August 6, 2025	Paul Kalokola	+255 784 448 356	Paul.kalokola@nemc.or.tz

Annex 3: Justification for serving as both IE and EE

THE UNITED REPUBLIC OF TANZANIA

VICE PRESIDENT'S OFFICE

NATIONAL ENVIRONMENT MANAGEMENT COUNCIL (NEMC)

JUSTIFICATION PAPER

Request for the National Environment Management Council (NEMC) to Serve as Executing Entity for the proposed: "Integrated Mountain Ecosystem Restoration and Climate Adaptation Project (IMERCA)" Submitted to the Adaptation Fund

1. Introduction

The United Republic of Tanzania, through its National Implementing Entity (NIE), the National Environment Management Council (NEMC), has submitted a Concept Note to the Adaptation Fund titled **"Integrated Mountain Ecosystem Restoration and Climate Adaptation Project (IMERCA)"**. This project addresses the escalating vulnerability of Tanzania's mountain ecosystems and adjacent communities to climate-induced disasters, such as mudslides, floods, and land degradation, which threaten lives, livelihoods, and critical ecological systems.

In accordance with the **Operational Policies and Guidelines (OPGs)** of the Adaptation Fund, which require a written justification and endorsement by the Designated Authority when an Implementing Entity seeks to undertake execution functions, this paper provides a robust legal and institutional justification for NEMC to serve as both the Implementing Entity (IE) and Executing Entity (EE) for the IMERCA project. This justification is grounded exclusively in the provisions of the **Environmental Management Act, Cap. 191** (the "Act"), with specific emphasis on strengthening Part 3 (Legal and Institutional Mandate of NEMC) of the Justification Paper and extending to other relevant parts.

This paper ensures that the legal basis for NEMC's role is indisputable, accurate, and compelling, aligning with the Act and the objectives of the IMERCA project to meet the Adaptation Fund's requirements.

2. Context and Urgency of the IMERCA Project

Tanzania's mountain ecosystems, including those in regions such as Manyara, Mbeya, Kilimanjaro, and Morogoro, are increasingly susceptible to climate-induced disasters, notably mudslides, as evidenced by recent incidents at Hanang Mountain, Kawetere Mountain, and Mambamiamba Mountains. These events

have caused significant loss of life, property damage, and disruption of livelihoods, exacerbated by environmental degradation from deforestation, unregulated land use, and unsustainable agricultural practices. The IMERCA project seeks to restore these fragile ecosystems, enhance climate resilience, and protect vulnerable communities through ecosystem-based interventions.

Given the specialized nature of the project, which involves the management, protection, and restoration of environmentally sensitive mountain areas, NEMC's legal mandate and institutional capacity, as derived from the Act, make it uniquely positioned to execute the project effectively, as detailed below.

3. Legal and Institutional Mandate of NEMC

The **Environmental Management Act, Cap. 191** provides a clear and unambiguous legal framework that designates NEMC as the primary authority for coordinating, regulating, and managing environmental protection activities, including those related to mountain ecosystems. The following provisions from the Act reinforce NEMC's mandate to serve as both the Implementing Entity and Executing Entity for the IMERCA project:

3.1. Legal Authority to Declare and Manage Sensitive Areas

- **Section 16(1)**: The Act establishes NEMC as the National Environment Management Council and empowers the Minister responsible for the environment, upon NEMC's recommendation, to declare any area—including mountainous areas—as environmentally sensitive. This authority positions NEMC as the lead institution to identify and recommend mountain ecosystems for special protection, a critical component of the IMERCA project's objective to designate and restore disaster-prone mountain areas.
- **Section 47**: The Minister, acting on NEMC's advice, may declare any area of land as an **environmental protected area** to safeguard its ecological integrity. Mountain ecosystems, such as those targeted by the IMERCA project, fall within this category due to their vulnerability to climate-induced disasters and ecological fragility. NEMC's role in advising on such declarations ensures its centrality in initiating and overseeing the protection of these areas.
- **Section 51**: The Act specifically empowers the Minister, through NEMC's recommendations, to declare areas as **environmentally sensitive areas** when they are at risk of significant environmental degradation. The IMERCA project's focus on mountain ecosystems, which are prone to mudslides and degradation, aligns directly with this provision, as NEMC is tasked with identifying and managing such areas.

3.2. Mandate to Coordinate and Enforce Environmental Management

- **Section 18(1)**: NEMC is mandated to identify and recommend environmentally fragile ecosystems for special protection and to coordinate activities for their conservation. This provision directly supports NEMC's role in the IMERCA project, as it involves identifying mountain ecosystems (e.g., Hanang, Kawetere, and Uluguru Mountains) for restoration and implementing protective measures to mitigate climate risks.
- **Section 104(1)(a)**: NEMC is designated as the national body responsible for enforcing environmental standards, including in declared sensitive ecosystems. This enforcement authority is critical for the IMERCA project, which requires regulatory oversight to prevent activities such as deforestation, unregulated cultivation, and mining that exacerbate mudslides and land

degradation. NEMC's legal power to enforce compliance ensures that project activities align with national environmental standards.

- **Section 17(g)**: NEMC is tasked with promoting environmental awareness and coordinating the preparation of environmental management plans. This mandate supports the IMERCA project's goals of developing ecosystem management plans and engaging communities in restoration and adaptation activities, ensuring that NEMC can execute these tasks effectively.

3.3. Stakeholder Engagement and Benefit Sharing

- **Section 17(e)**: NEMC is tasked with facilitating cooperation among stakeholders, including government agencies, local communities, and private entities, in environmental management. This mandate aligns with the IMERCA project's objective of engaging communities and other stakeholders in restoration and climate adaptation activities, ensuring equitable participation and benefit sharing.
- **Section 105**: The Act empowers NEMC to coordinate the sustainable use of natural resources, which includes ensuring that benefits from protected areas are shared equitably with local communities. This provision supports the IMERCA project's goal of enhancing community resilience through sustainable economic benefits derived from ecosystem restoration.

These provisions collectively establish NEMC as the sole institution with the explicit legal mandate to coordinate, regulate, and manage environmentally sensitive areas, including mountain ecosystems, making it the most suitable entity to execute the IMERCA project.

4. Strengthening the Rationale for Direct Execution by NEMC

The Justification Paper's rationale for NEMC's direct execution (Part 5) is further reinforced by the Act, which provides additional legal and operational grounds for NEMC to serve as the Executing Entity:

4.1. Legal Exclusivity and Accountability

- **Section 16(1) and 18(1)** designate NEMC as the primary institution for recommending and coordinating the protection of environmentally sensitive areas, ensuring that no other entity can lawfully assume primary responsibility for managing mountain ecosystems. Delegating execution to another entity would risk diluting NEMC's legal accountability and authority, potentially leading to regulatory gaps and delays in addressing urgent climate-induced risks like mudslides.
- **Section 104(1)(a)** reinforces NEMC's exclusive role in enforcing environmental standards, ensuring that execution remains within NEMC's direct control and aligns with its legal mandate to protect fragile ecosystems.

4.2. Specialized Nature of Activities

- The IMERCA project involves activities such as designating protected areas, developing management plans, enforcing land use regulations, and conducting environmental audits, all of which are explicitly assigned to NEMC under **Sections 47, 51, 81, and 104**. These activities require specialized regulatory and technical expertise that only NEMC possesses under Tanzanian law.
- **Section 18(1)** mandates NEMC to coordinate conservation activities in fragile ecosystems, which aligns with the IMERCA project's objectives of restoring ecosystems and preventing degradation.

NEMC's authority to oversee these activities ensures that project implementation is legally sound and effective.

4.3. Institutional Efficiency and Coherence

- By serving as both IE and EE, NEMC eliminates bureaucratic layers, streamlines decision-making, and ensures coherence between policy objectives and field-level implementation. **Section 17(g)** empowers NEMC to coordinate environmental management plans, ensuring that the IMERCA project's activities are integrated into national environmental frameworks.
- **Section 105** supports NEMC's role in managing resources sustainably, allowing it to oversee financial aspects of the project, such as benefit sharing, to ensure accountability and sustainability.

4.4. Risk Mitigation and Urgency

- **Section 51** enables NEMC to recommend the declaration of sensitive areas, ensuring a rigorous and transparent process for designating mountain ecosystems for restoration. This provision is critical for addressing the urgent need to mitigate climate-induced disasters, as highlighted in the Justification Paper.
- **Section 104(1)(b)** allows NEMC to conduct environmental audits to address ongoing activities that may exacerbate risks, enabling rapid and adaptive management of mountain ecosystems in response to emerging climate threats.

5. Technical Capacity and Previous Experience

The Justification Paper (Part 4) highlights NEMC's technical capacity and experience in managing mountain ecosystems. The Act further reinforces this capacity:

- **Section 17(c)** mandates NEMC to undertake research and technical assessments, which supports its experience in developing ecosystem management plans for areas like Mount Kawetere.
- **Section 17(e)** empowers NEMC to engage stakeholders, ensuring effective community involvement in the IMERCA project's restoration and adaptation activities.
- **Section 81** and **104(1)(b)** confirm NEMC's expertise in conducting EIAs and audits, critical for ensuring that project activities comply with environmental standards.

NEMC's decentralized offices, as noted in this Justification Paper, enable efficient field-level execution, while its fiduciary management experience ensures compliance with the Adaptation Fund's standards.

6. Conclusion and Request for Approval

The **Environmental Management Act, Cap. 191** provides a robust and unassailable legal foundation for NEMC to serve as both the Implementing Entity and Executing Entity for the IMERCA project. NEMC's exclusive mandate under **Sections 16, 18, 47, 51, 81, 104, and 105** to coordinate, regulate, and manage environmentally sensitive areas, including mountain ecosystems, ensures that it is the only institution legally empowered to execute the project's specialized activities. These provisions align seamlessly with the IMERCA project's objectives of restoring ecosystems, enforcing environmental standards, and engaging communities, while NEMC's technical capacity and experience guarantee effective implementation.

We respectfully request the Adaptation Fund Board to approve NEMC's role as the Executing Entity for the **Integrated Mountain Ecosystem Restoration and Climate Adaptation Project (IMERCA),** in line with the Adaptation Fund's Operational Policies and Guidelines. The attached letter from the Designated Authority of the United Republic of Tanzania endorses this justification.

NEMC reaffirms its commitment to transparent, accountable, and effective execution of the IMERCA project, safeguarding Tanzania's mountain ecosystems and enhancing the resilience of vulnerable communities.

Submitted by:
Fredrick F. Mulinda
NIE Coordinator, National Environment Management Council (NEMC)
Dar es Salaam, Tanzania
August 2025

Annex 4: DA endorsement of NEMC serving as both IE and EE in this project

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VICE PRESIDENT'S OFFICE

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Our Ref. No: CBA.78/90/03

08th August, 2025

The Adaptation Fund Board
c/o Adaptation Fund Board Secretariat
Email: Secretariat@Adaptation-Fund.org
Fax: 202 522 3240/5

SUBJECT: ENDORSEMENT OF JUSTIFICATION FOR NEMC TO EXECUTE PROJECT ACTIVITIES UNDER THE CONCEPT NOTE: INTEGRATED MOUNTAIN ECOSYSTEM RESTORATION AND CLIMATE ADAPTATION PROJECT (IMERCA)

Dear Members of the Adaptation Fund Board,

2. In accordance with the Operational Policies and Guidelines of the Adaptation Fund, which permit Implementing Entities (IEs) to undertake execution of project activities only under exceptional circumstances and with written justification endorsed by the Designated Authority, I am pleased to endorse the request by the National Environment Management Council (NEMC) to act as both the Implementing Entity (IE) and the Executing Entity (EE) for the proposed project titled:

"Enhancing Mountain Ecosystem Protection and Disaster Risk Reduction in Tanzania."

3. This endorsement is based on the following considerations:

i. **Legal Mandate**: NEMC is the government agency mandated under the **Environmental Management Act, Cap. 191** to lead in the protection, monitoring, and enforcement of environmental regulations, especially in environmentally sensitive ecosystems such as mountains.
ii. **Technical Capacity**: NEMC has the technical and institutional capacity required to execute the project effectively, including specialized teams, regional presence, and experience with similar ecosystem management and climate adaptation initiatives.

iii. **Necessity of Direct Execution**: Due to the regulatory and enforcement nature of the proposed interventions, delegating execution to another agency would not align with Tanzania's legal framework and could compromise the effectiveness and accountability of implementation.

4. As the Designated Authority for the Adaptation Fund in the United Republic of Tanzania, I therefore fully endorse NEMC's justification and request that the Adaptation Fund Board kindly consider and approve NEMC's request to serve as the Executing Entity for this important project. The detailed justification for this request is attached with the Concept Note for your reference.

5. We appreciate the continued support of the Adaptation Fund in strengthening national capacities to build resilience against climate change impacts.

Prof. Peter L.M. Msoffe
NATIONAL DESIGNATED AUTHORITY- DEPUTY PERMANENT SECRETARY