Concept Note

Enhancing Adaptive Capacity and Climate Resilience of Vulnerable Smallholder Farming Communities and Agro-pastoral Systems in Semi-Arid Areas of Tanzania Mainland and Zanzibar

Tanzania | IUCN

24 January 2019
Concept Note

Project/Programme Title: Enhancing Adaptive Capacity and Climate Resilience of Vulnerable Smallholder Farming Communities and Agro-pastoral Systems in Semi-Arid Areas of Tanzania Mainland and Zanzibar

Country(ies): United Republic of Tanzania

National Designated Authority(ies) (NDA): Vice President’s Office – Division of Environment


Date of first submission/ version number: TBD

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Notes

- The maximum number of pages should **not exceed 12 pages**, excluding annexes. Proposals exceeding the prescribed length will not be assessed within the indicative service standard time of 30 days.
- As per the Information Disclosure Policy, the concept note, and additional documents provided to the Secretariat can be disclosed unless marked by the Accredited Entity(ies) (or NDAs) as confidential.
- The relevant National Designated Authority (ies) will be informed by the Secretariat of the concept note upon receipt.
- NDA can also submit the concept note directly with or without an identified accredited entity at this stage. In this case, they can leave blank the section related to the accredited entity. The Secretariat will inform the accredited entity (ies) nominated by the NDA, if any.
- Accredited Entities and/or NDAs are encouraged to submit a Concept Note before making a request for project preparation support from the Project Preparation Facility (PPF).
- Further information on GCF concept note preparation can be found on GCF website [Funding Projects Fine Print](#).
### A. Project/Programme Summary (max. 1 page)

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#### A.3. Is the CN submitted in response to an RFP?
- Yes □ No X
- If yes, specify the RFP: ____________________________

#### A.4. Confidentiality
- □ Confidential  □ Not confidential

#### A.5. Indicate the result areas for the project/programme
- Mitigation: Reduced emissions from:
  - X Energy access and power generation
  - □ Low emission transport
  - □ Buildings, cities and industries and appliances
- Adaptation: Increased resilience of:
  - X Most vulnerable people and communities
  - X Health and well-being, and food and water security
  - □ Infrastructure and built environment
  - X Ecosystem and ecosystem services

#### A.6. Estimated mitigation impact (tCO2eq over lifespan)
- Not Applicable

#### A.7. Estimated adaptation impact (number of direct beneficiaries and % of population)
- 500,000 (25%)

#### A.8. Indicative total project cost (GCF + co-finance)
- Amount: USD 60 Million.

#### A.9. Indicative GCF funding requested
- Amount: USD 30 Million.

#### A.10. Mark the type of financial instrument requested for the GCF funding
- X Grant  □ Reimbursable grant  □ Guarantees  □ Equity
- □ Subordinated loan  □ Senior Loan  □ Other: specify___________________

#### A.11. Estimated duration of project/programme:
- a) disbursement period: 1 April 2020
- b) repayment period, if applicable: ____________________________

#### A.12. Estimated project/Programme lifespan
- 5 years

#### A.13. Is funding from the Project Preparation Facility requested?  
- Yes □ No □
- Other support received □ If so, by who: ____________________________

#### A.14. ESS category
- □ A or I-1
- □ B or I-2
- □ C or I-3

#### A.15. Is the CN aligned with your accreditation standard?
- Yes X No □

#### A.16. Has the CN been shared with the NDA?
- Yes X No □

#### A.17. AMA signed (if submitted by AE)
- Yes □ No □
- If no, specify the status of AMA negotiations and expected date of signing: ____________________________

#### A.18. Is the CN included in the Entity Work Programme?
- Yes X No □

#### A.19. Project/Programme rationale, objectives and approach of programme/project (max 100 words)
- The semi-arid regions (SAs) of Tanzania are experiencing more intense and frequent droughts and floods in many decades, yet they account for more than 90% of livestock production in the country. As a consequence a) rangelands are being degraded and b) livestock and crop farming, the mainstay of most of the vulnerable communities in the region is becoming less productive. The overall objective of this project is to enhance the adaptive capacity and climate resilience of the vulnerable smallholder farming communities in agro-pastoral farming system of semi-arid (SA) regions of Tanzania mainland and Zanzibar. The SA targeted regions are: seven regions of Tanzania.

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

2. See [here](https://example.com) for access to project preparation support request template and guidelines.

3. Refer to the Fund’s environmental and social safeguards ([Decision B.07/02](https://example.com)).
mainland (i.e. Arusha, Dodoma, Kilimanjaro, Manyara, Singida, Shinyanga and Tabora) and four regions in Zanzibar Island (Unguja Kaskazini, Unguja kusini, Pemba Kusini and Pemba Kaskazini). This will be achieved by enhancing the adaptive capacity and resilience to climate change of the key value chains to the regions’ economy. The value chains selected for climate proofing from production, post-harvest management, value addition and markets through to consumers are: crops (cereals, edible oils and legumes) and livestock (dual-purpose cattle and small stocks). The project has three components that are closely interconnected: a) Component 1: Landscape land use management planning to enhance sustainable multiple land use, b) Component 2: Building climate resilience of vulnerable smallholder farming communities in agro-pastoral farming system, and c) Component 3: Strengthening institutional capacity and cross-sectorial coordination at national and sub-national levels. Special consideration will be given to the vulnerable groups (especially women, youth and disabled) and in catalysing private sector investments. The Ministry of Agriculture (MoA) will coordinate the project and implementing partners to be involved in the implementation of specific project activities will be selected on the basis of their presence in the target areas and their capacities.

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

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

1. Tanzania ranks 116\(^{4}\) on the Global Climate Risk Index and 151 on the Human Development Index (HDI)\(^{5}\) and also considered a Least Developed Country (LDC) with over 70 percent of Tanzanians living below $2 per day. The country is already experiencing adverse impacts of climate change. Current climate variability and change resulting in extreme weather events already lead to major economic costs in Tanzania, estimated at USD$ 200 million per year for the agricultural sector alone.\(^{6}\) Every annual event has economic costs in excess of 1 percent of the gross domestic product (GDP), and occurs frequently, reducing long-term growth and affecting millions of people and their livelihoods. The net economic costs of addressing climate change impacts could be equivalent to a further 1 to 2 percent of GDP per year by 2030. Moreover, in the past two decades, the country has experienced rising temperatures with frequent and severe droughts. Since 1960, average annual temperatures increased by 1.0\(^{\circ}\)C and it is projected to reach 1.7\(^{\circ}\)C and 2.5\(^{\circ}\)C in the semi-arid areas (SAs), by 2030. Mean temperature and rainfall changes including increased variability of rainfall will have devastating effects on agriculture, food security and ecosystems.

2. Agriculture is the mainstay of the Tanzanian economy contributing about 29.1 percent of the gross domestic product (GDP), provides 85 percent of exports and employs about 65 percent of the total labour force.\(^{7}\) Over 90 percent of economically active women in Tanzania engage in agricultural activities, producing about 70 percent of national food requirements.\(^{8}\) The SAs account for more than 90 percent of livestock production in the country.\(^{9}\) Livestock production is mostly extensive on natural pastures, with pastoralism and agro-pastoralism being the most predominant practices. The SAs are characterized by poor soil fertility, erosion, degradation and proneness to drought, especially Tanzania mainland regions of Arusha, Dodoma, Kilimanjaro, Manyara, Singida, Shinyanga and Tabora and in Zanzibar the regions of Unguja Kaskazini, Unguja kusini, Pemba Kusini and Pemba Kaskazini. The onset of human-induced climate change has only aggravated the situation putting more stress on the fragile environment. For example, in 2010, heavy rainfall in Morogoro and Dodoma regions affected over 50,000 people with over 28,000 totally displaced.

3. Over the centuries, communities have adopted approaches to help them cope with emerging harsh climatic conditions in SAs. For example, among the Sukuma people, the Ngitili system – a traditional fodder reserve management system for the dry seasons using enclosure systems wherein farmers enclose a piece of land with trees, grasses, shrubs and forbes to increase fodder production and supply of tree products is practiced was used as a coping mechanism.\(^{10}\) The Ngitili system is protected by by-laws enforced by the local guards and offenders pay penalties.\(^{11}\) However, with increasing frequency and magnitude of the extreme weather events especially droughts

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7 Tanzania Five Year Development Plan 2016/17-2021/2022.
8 United Republic of Tanzania (URT) 2015. Tanzania Climate Smart Agriculture Programme 2015-2025.
and floods, it is becoming very difficult for farming communities to cope with using these traditional practices. Due to these challenges, the SAs have very high poverty levels and are experiencing high rate of deforestation, land degradation and resource use conflicts.

4. According to the Second National Communications (SNC), Tanzania GHG emissions are estimated at an average of 171.73 of CO\textsubscript{2} equivalent and per capita of approximately 2.7 tons CO\textsubscript{2} equivalent and approximately 9.032 trillion tons of carbon stock. Tanzania is, therefore, a net carbon sink. The primary sectors contributing to GHGs are the agriculture, forestry and other land use (AFOLU), energy, waste, industry and transport in that order. Projections show a potential twofold increase in total emissions by 2030\textsuperscript{13} under a scenario of continuous population growth, increased deforestation, expansion of agricultural land and farming activities, free-range livestock keeping, continued use of biomass energy and the current development trajectory that the country is pursuing.

5. Agriculture is key to Tanzania’s economy and contributes immensely to poverty reduction, food security and livelihoods. Agriculture is one of the pillars for the achievement of the Tanzania Development Vision 2025 and Zanzibar Vision 2020. To support the realization of the Vision and address the attendant challenges such as low productivity of land, labour and capital; over-dependence on rain-fed agriculture; inadequate agricultural support services; poor rural infrastructure; inadequate agro-industries and poor linkages within the value chain of agricultural production and inadequate participation of the private sector, URT (the Government of Tanzania Mainland and Zanzibar have put in place several policies. Among the key policies include: the National Agriculture Policy (2013); Tanzania Agriculture and Food Security Investment Plan (2011 – 2021); The Southern Agricultural Growth Corridor of Tanzania (SAGCOT) (2010); Livestock Sector Development Strategy (2010); Tanzania Livestock Master Plan (2016); Agriculture Climate Resilience Plan (2014-2019); Agricultural Sector Development Programme Phase II (2018 – 2028); Tanzania Climate Smart Agriculture Programme (2015-2025)\textsuperscript{21}, Tanzania Climate Smart Agriculture Guideline and Profile (2017); Others include the Renewable Energy Strategy (2014); the National Forestry Policy (1998); and the National REDD+ Strategy and Action Plan (2013).\textsuperscript{25} The Zanzibar Climate Change Strategy (2014)\textsuperscript{26} and Zanzibar Climate Change Action Plan (2016-2021).\textsuperscript{27}

6. Notwithstanding various policies listed above, the two key policies that will guide this project are: a) Agricultural Sector Development Programme Phase II (ASDP II) (2018 – 2028), and b) Tanzania’s Nationally Determined Contributions (NDCs). Through the recently launched 10 years ASDP II, the Government of Tanzania (GoT) has committed itself to expand investment in the agriculture sector underpinned by climate change considerations. The ASDP II identified extreme temperatures and precipitation as the most common manifestation of climate change. It places emphasis on the development and transfer of appropriate technologies that would support farmers’ ability to adapt to the effects of climate change. It also recognizes the need to build the capacity of extension officers so that they are able to train and serve farmers on climate change adaptation strategies, including conservation agriculture, planting of climate change resilient crops, understanding better Tanzania’s agro ecological zones and other coping mechanisms. Some of the target actions envisaged under the ASDP II aimed at increasing farmers’ adaptive capacities, inter alia, include:

• Establishment of district commodity value chain platforms (DCP) which would be useful for dissemination of various climate change related information
• Linking farmers with agribusinesses to access inputs for sustainable productivity growth
• Supporting value chain stakeholders through Agricultural and Business Advisory Service (ABAS) providers and access an Agribusiness Investment Matching Grant (AIMG)

\textsuperscript{12} URT 2013. Second National Communications. United Nations Framework Convention on Climate Change (UNFCCC).
\textsuperscript{13} Yanda, P. 2010. The Economics of Climate Change in Tanzania: Importance of reducing emissions from deforestation and forest degradation. Institute for Resource Analysis, University of Dar es Salaam.
\textsuperscript{16} URT 2010. The Southern Agricultural Growth Corridor of Tanzania. United Republic of Tanzania.
\textsuperscript{21} URT 2015. Tanzania Climate Smart Agriculture Programme, 2015-2025. United Republic of Tanzania.
\textsuperscript{22} URT 2017. Tanzania Climate Smart Agriculture Guideline. United Republic of Tanzania.
\textsuperscript{24} URT 1998. The National Forest Policy. United Republic of Tanzania.
\textsuperscript{26} RGoZ 2014. The Zanzibar Climate Change Strategy (2014), Revolutionary Government of Zanzibar.
\textsuperscript{27} RGoZ 2016. The Zanzibar Climate Change Action Plan (2016-2021).
7. Tanzania’s Nationally Determined Contributions (NDCs) for the period up to 2030 is to put Tanzania on a climate resilient development pathway and has a target of 10-20% reduction in GHG emissions by 2030 relative to the business-as-usual (BAU) scenario of 138–153MT of CO₂ equivalent (MtCO₂e) gross emissions. The NDC puts a lot of emphasis on increasing adaptive capacity and building resilience. Key climate actions in the NDC that this Project will contribute to their achievement, include, *inter alia*, “(a) up-scaling the level of improvement of agricultural land and water management; b) increasing yields through *inter alia* climate smart agriculture; c) protecting smallholder farmers against climate related shocks, including through crop insurance; d) promoting development of livestock insurance strategies; e) promoting climate change resilient traditional and modern knowledge on sustainable pasture and range management systems; f) enhancing the use of renewable energy potential across the country (solar, wind, biomass); g) promoting use of energy efficient technologies and behaviour; h) investment in protection and conservation of water catchments including flood control and rainwater harvesting structures; i) development and exploitation of groundwater resources; and j) promoting sustainable land management systems and climate sensitive human settlement developments.”

8. The main root causes and barriers that need to be addressed are:

- Poor land use management planning. Limited capacity of stakeholders and institutions to plan and manage ecosystems and rangelands in the perspective of climate change.
- Inadequate institutional capacity has limited the ability of farming communities to proactively deal with risks associated with negative impacts of climate change. This is exacerbated by poor interagency coordination and cross-sectorial synergies at the local level.
- Low access and uptake of climate information as a result of insufficient observation network and integration of observations makes it difficult to provide accurate information at high resolution in space and time that is tailored for farmers and to inform planning and decision making at all levels.
- Limited financial resources, market access and technical know-how to support adoption and scaling up of climate resilient technologies and practices. Most farmers continue to use their indigenous and conventional farming practices due to limited access to financing and technical know-how to deploy climate resilient technologies and practices. This has contributed to increased land degradation and loss of biodiversity resulting in low agricultural productivity and GHG emissions from the rangelands.
- Weak private sector engagement in supporting climate resilient initiatives.

9. In implementing the proposed interventions, the project adopts integrated value chains approach focusing on four selected agri-business commodities that predominantly underpin the local livelihoods system in the SA’s. The four selected value chains are i) edible oils, ii) legumes, iii) cereals and iv) livestock (including dual-purpose cattle and small stocks):

i) **Edible oils** – the project will focus on climate-proofing the sunflower value chain. This is premised on the fact that sunflower is one of the most important oilseed crops in Tanzania and has a greater potential for its growth and development. Current data shows that local production of both factory and home extracted oils contribute to about 40 percent of the national edible oil requirement, with imported oils occupying a significant portion of the remaining 60 percent. The cost of producing sunflower oil in Tanzania is lower than other oil seed crops (sesame, groundnuts), and the crop has the added advantage of superior performance in poorer soils and increased adaptability across various ecological zones such as those that obtain in the SA regions. The project will target 150,000 smallholder farmers as direct beneficiaries and link them with private sector across the value chain.

ii) **Pulses** – the project will focus on climate proofing pulses (beans, groundnuts, chickpea and cowpeas) value chain. Generally, pulses are considered as relatively sustainable (in social and environmental terms) and resilient to climate change. Currently, the pulse value chain is highly fragmented hence there is need to develop the value chain (from production through to the market). The project aims to develop a strong business model for the chickpea and cowpeas to ensure effective service delivery and sustainable purchasing agreements between exporters and farmer groups in SAs. The project will target 50,000 smallholder farmers . The entry point will be provision of drought tolerant seed varieties and through climate resilient contract farming.

iii) **Cereals** – the project will focus on climate proofing the sorghum value chain. Sorghum is the second most widely grown cereal grain crop in the agricultural economy in Tanzania and the second most important staple food after maize, benefiting about 80 percent of Tanzanians. Yet, virtually the entire sorghum production which is done mostly in the target regions is carried out on a subsistence basis. Currently, less than 2 percent of the harvest enters the farm market; the remainder is consumed on the farm. The average sorghum yield for Tanzania is estimated to be approximately 1000 kg ha⁻¹, too low to sustain an average farm family for 12
months. Currently, the area planted with sorghum fluctuates from one year to another due to low quality of landraces and changing climate. The project will target 250,000 smallholder farmers as direct beneficiaries through provision of drought tolerant and high yielding seed varieties and contract farming that would link them to the market.

iv) Livestock - the project will focus on climate proofing the livestock value chain and diversification into dual purpose cattle and small stocks targeting gender value chains. Tanzania has the third largest livestock population in the African continent comprising 25 million cattle, 98 percent of which are indigenous breeds. Production coefficients are low - the calving rate is 40 – 50 percent, off-take rate is 8 – 10 percent per annum and milk yield 400 litres per lactation and carcass weight 100 – 175 kg. For small stocks, the off take rate is 15-25 percent per annum. The sector is severely constrained by low livestock reproductive rates, high mortality and high disease prevalence as only 3 percent of the national cattle herd comprises improved dairy breeds. This is compounded by degradation of the rangelands which form the foundation of productive traditional and modern livestock production systems. The project targets to supporting restoration of 3 million hectares of degraded rangelands and commercial production of fodder. In general, livestock sector in Tanzania is not well developed in SAs. The project will target 50,000 agro-pastoralists farming communities adopting climate-adapted livestock breeds (dual purpose cattle and small stocks).

10. Underpinning these value chains will be an integration of agro-climate information, access to innovative financial services and climate risk management tools. For example, the project will scale up the SmartMoney and related mobile money platforms to reach a wide-base on the non-banked smallholder households and groups in the target region. In addition, the project will tap into the Private Agricultural Sector Support Trust (PASS) of Tanzania to leverage credit guarantees that will de-risk financial capital and production investment among small holder farmers in the SAs. Production intermediation will be leveraged through partnerships and contracts with established off-takers, agro-processors and businesses with established national and global market-shares in the target value chains.

11. In Tanzania, biomass sources constitute over 85 percent of energy sources in rural and urban household. Most of the wood energy including charcoal is derived from the SAs. To drive sustainable rural energy in the most climate vulnerable region of Tanzania, the project will aim at catalysing private sector investments in provision of clean and renewable energy cooking solutions. The project targets 20,000 beneficiaries to access efficient energy cooking stoves and solar household systems (SHS).

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

12. The project aims at catalyzing systemic change that will result in enhanced adaptive capacity and climate resilience of the vulnerable farming communities and agro-pastoral systems of SAs in Tanzania mainland and Zanzibar. The project will be implemented in seven (7) regions of Tanzania mainland and four (4) regions in Zanzibar. The integrative approach of the project builds on the existing programmes on: a) Oil seeds, pulses and cereal value chain project: improving producer association and markets of the mentioned value chains ; b) More milk project: improving milk production and marketing through dairy market hubs; c) Agriculture value chain development programme, and, d) The Southern Agricultural Growth Corridor of Tanzania (SAGCOT) Programme (SP) Private sector engagement model. This will be achieved through three distinct and closely interlinked components. Component 1; focuses on climate resilient landscape management planning that aims to address drivers of poor land use, land degradation and deforestation in the agricultural landscapes that contribute to the deteriorating integrity and health of the rangelands and as source of GHG emissions. Component 2; focuses on climate proofing selected agricultural value chains while harnessing synergies between adaptation and mitigation. This component also integrates the private sector through innovative business models. Climate services will provide essential information that will inform planning (Component 1), investments and decision-making (Component 2) thus helping minimize the adverse effects of climate change on the investments. Component 3 focuses on strengthening institutional capacities and interagency collaboration necessary for mainstreaming climate change considerations into planning and budgets thus ensuring sustainability of the interventions beyond a project life cycle. The Project consists of three distinct but closely interlinked components as follows:

(a) Component 1: Climate resilient landscapes management planning. Tanzania’s SAs are geographically and ecologically important ecosystems - home to significant human and wildlife populations and provide important ecosystem functions. The SAs face dynamic climatic and non-climatic risks. These risks, separately and in interaction, make communities living in these regions highly vulnerable. These vulnerabilities and risks are deeply embedded within the existing social and biophysical conditions of the socio-ecological systems; serve as critical barriers to effective, widespread and sustained adaptation. Land use changes are significantly impacting SAs, resulting in loss of biodiversity, negative effects on livelihoods and a reduction in the resilience of communities to climate-related hazards. The onset of human-induced climate change has only aggravated the situation, putting more stress on the fragile environment that has limited natural resources. It is therefore essential to guide further development and use of SAs in the context of climate change towards vulnerability reduction and climate resilience hence the need for systematic and sound landscape management planning for
SAs. For such landscape management planning to be successful, it will be underpinned by climate risk profiling.

The specific activities under this component will include:

i) Develop climate risk profiles for the 11 regions
ii) Facilitate integrated landscape management planning process
iii) Initiate implementation of the adopted integrated landscape management plans in the 11 regions
iv) Establish a robust tracking mechanism for implementation of the landscape management plans

(b) **Component 2: Climate-proofing selected agricultural value chains.** Crop production and livestock keeping are the major agricultural activities in SAs. Most of the farmers operate at the subsistence level with productivity on the decline. Besides other multiple stressors, land degradation, droughts and floods are the primary threats to agricultural productivity in the SAs. Climate projections show that by 2050, climate change and variability will stress crop yields in Tanzania by 3.6 percent, 8.9 percent and 28.6 percent for maize, sorghum and rice, respectively. FAO emphasises that rain-fed agriculture as practiced in SAs will be more susceptible to any further variation in climate. Although farmers have over the years managed to withstand the harsh environment and severe climate for decades, the current magnitude and intensity of climate change have badly affected their economies, eroding the natural resource base and aggravating poverty, food insecurity and constraining development in SAs. Tanzania agricultural policy aims at increasing food security levels in the country through increased productivity. In response to climate change, the policy has emphasized the use of a suite of climate resilient adaptation measures such as drought tolerant seed varieties, tillage systems for land and water conservation and improved livestock breeds and small stocks among others. The ASDP II aims to enable farmers to have better access to and use agricultural knowledge, technologies and markets in a changing climate necessitating integrated value chain approach. Most of the agricultural value chains in the SAs are highly fragmented and undeveloped. To climate proof the selected value chains (sunflower, beans, chickpea, cowpeas, sorghum and livestock, including dual-purpose cattle and small stocks). Thus, availability of accurate climate information that will improve farmers’ decision making on choice of sound adaptation strategies.

The specific activities and investments under this component will include:

i) Promotion of adoption of drought tolerant seed varieties of sunflower, sorghum and chickpea and cowpeas
ii) Improvement of genetic potential of local breeds and proper animal husbandry
iii) Foster the adoption of integrated minimum tillage systems
iv) Scaling up the adoption of dual purpose cattle and small stocks through a gender lens
v) Establishment of innovative milk and milk products marketing systems.
vi) Restoration of rangeland and commercial fodder production
vii) Create and strengthen sustainable linkages and incentives between farmers and private sector across the target value chains building on the SACGOT model (Inclusive green growth)

 Expansion of hydro-metrological networks across SAs
ix) Deployment of climate information systems & agro-advisory services including early warning systems and veterinary services
x) Increase access to sustainable household energy solutions such as efficient energy cooking stoves and solar household systems (SHS)
xii) Increase water harvesting.

(c) **Component 3: Strengthening institutional capacities and interagency collaboration.** In Tanzanian context, climate change issues are addressed in various sectorial policies with multiple actors. Each of these policies tends to be implemented in isolation oblivious of what other agencies are doing. This has led to duplication of efforts and wastage of resources. Sometimes the actors send out conflicting messages thus confusing the beneficiaries. There is widespread consensus that there is need for improved communication and collaboration between the various MDAs, and between MDAs and non-state actors involved in supporting climate action in SAs. From the policy perspective, a national mechanism for coordination can facilitate inter-agency collaboration between MDAs who may not regularly exchange information and implement activities jointly. Such cross-sectorial coordination is essential to ensure a clear division of roles and responsibilities and identify areas for collaboration in the implementation of national strategies and plans in the context of climate change at the sub-national level. For effective adaptation to take place, there has to be recognition of, and response to, multiple governance regimes – including the need for governance to engage with relevant actors and institutions especially at the sub-national level, links between planning and execution and engagements in both bottom-up and top-down planning and the decision making. This approach will enhance collaborative learning and decision making.

The specific activities under this component will include:

i) Enhance cross-sectorial collaboration for coherent climate response
ii) Strengthen multi-stakeholder coordination platform that brings together all relevant actors – Tanzania Climate Smart Agriculture Alliance (TCSAA).

iii) Develop a knowledge management system for experience sharing and learning.

iv) Build institutional capacity of regional secretariat and Local Government Authorities in the target areas to be able to plan, implement and manage climate change adaptation measures.

v) Build capacity of farmer associations/traditional and village councils to plan, implement and manage climate related activities.


13. The project logical framework is depicted in Annex 2. The project rationale is to address the climate risks that have contributed to increased land degradation and reduction of crop and livestock productivity in SAs. The approach aims at climate-proofing the targeted value chains and enhancing linkages between the farmer with the government and private sector for sustainability. This will be done in an integrated manner through the three components described above.

14. All the proposed activities are in line with the national priorities as set out in the various policy documents described in B1 above. The AE will ensure compliance with all the regulations issued by the relevant regulatory authorities such as the National Environment Management Council (NEMC) - on matters relating to environmental impact assessments and environmental audits; energy regulatory agency - on matters relating to renewable energy and clean energy technologies, requirements, standards and pricing; and water regulatory agency - on matters relating to water resources management.

15. IUCN is the world largest environmental union with over 1,300 memberships uniquely composed of both government and civil society organisations together with some 16,000 experts. IUCN as the AE provides a comparative advantage because of its membership structure - public, private and non-governmental organisations. IUCN has the knowledge and tools that enable human progress, economic development and nature conservation to take place together. IUCN’s support to countries on climate change and ecosystem resilience is shaped by three important global agreements: the Paris Agreement on Climate change, the Sendai Framework on Disaster Risk Reduction and the 2030 Agenda for Sustainable Development. IUCN works with countries to help them to adapt to impacts of climate change and foster climate resilience of the ecosystems while contributing to reducing greenhouse gases emissions. Moreover, IUCN’s experience in Tanzania and East Africa is extensive and includes support for SAGCOT to mainstream biodiversity into the agriculture, management of water and forest resources and has developed strong relationship and working partnership agreements with key GoT institutions.

16. Implementation structures have been designed considering the need to coordinate between the various sectors including agriculture, livestock, fisheries, land, water, VPO, natural resources management and energy, while enabling efficient and effective implementation. The Project Steering Committee (PSC), with the key function of project oversight and guidance, will consist of twelve institutions: Ministry of Agriculture (MoA) and Ministry of Agriculture Natural Resources Livestock and Fisheries (MANRLF) as Co-chairs, the Accredited Entity (IUCN), the Vice President’s Office (VPO) the NDA, Ministry of Livestock and Fisheries (MLF), Ministry of Water (MoW), Presidents Office - Regional Administration and Local Government (PO-RLAG), Tanzania Meteorological Agency (TMA), Tanzania Agriculture Research Institute (TARI), Tanzania Livestock Research Institute (TALIRI), Africa Climate Smart Agriculture Alliance (ACSAA) represented by World Vision and a private sector representative - to be identified.

17. The Ministry of Agriculture will be responsible for Project implementation oversight and overall supervision. Conversely, IUCN will be responsible for financial management to ensure that project milestones are completed as stipulated in the logical framework and that funds are managed to the required fiduciary standards. The MoA and MANRLF will be executing entities, while PO-RLAG, TMA, World Vision, CIAT and the private sector along with others to be identified during the proposal development will be implementing/technical partners. A project management unit (PMU) will be established. Among the functions of the PMU include, inter alia, (a) overall coordination and effective implementation of the Project; (b) joint planning and budgets for different components of the Project; (c) operational plans and tools for project implementation; (d) preparation of annual work plans; (e) mobilization of delivery partners and oversight of deliverables; (f) contracting of service providers; and (g) Project monitoring, evaluation and learning. Contractual agreements with the private sector and other implementing/technical partners will be reached following procurement rules of the AE and the Government of Tanzania.
Programme Management Structure

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<td>Ministry of Livestock &amp;</td>
</tr>
<tr>
<td>Fisheries (IP)</td>
</tr>
<tr>
<td></td>
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<tr>
<td>MANRFL (EE)</td>
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<tr>
<td></td>
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<tr>
<td>World Vision (IP)</td>
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<td></td>
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<td>CIAT (IP)</td>
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</tr>
</tbody>
</table>

18. Key financial and operational risks include:
- Low private sector investors interest
- Failure to realize the investment due to market change
- Business of investee fails due to third party failure (supplier, off-taker etc)
- Local currency depreciation reducing the returns from the investment
- Low consumer uptake of technologies and products as well as climate information
- High costs of distribution
- Lack of local technical skills
- Political risks
- Compliance (internal and external)

<table>
<thead>
<tr>
<th>Risk factor</th>
<th>Probability of occurring</th>
<th>Mitigation measure(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low private sector investors interest</td>
<td>Medium</td>
<td>• Engagement of private sector through the multi-stakeholder platform</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Constant review of the value chain</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Close co-operation with reputable and capable local financial institutions and service providers, including agro-dealers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Tailor made solutions to enable local banks to serve the agriculture sector - &quot;crowding in local service providers into the solution.&quot;</td>
</tr>
<tr>
<td>Failure to realize the investment due</td>
<td>Low</td>
<td>• Diversification of off-takers</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### B.3. Expected project results aligned with the GCF investment criteria (max. 3 pages)

19. The project directly contributes to the GCF’s strategic result areas for adaptation, namely: increased resilience of health, water and food security to the impact of climate change; livelihoods of the most vulnerable people and communities; and ecosystem and ecosystem services. On the mitigation front, the project will contribute to reducing/avoidance of emissions from energy access and power generation and forestry and rangelands. Interventions of the project will reach 1,500,000 farmers as direct beneficiaries and up to 5,000,000 people as indirect beneficiaries. The direct beneficiaries will be 47 percent women and 53 percent men taking into account the youth population.

#### Adaptation Benefits

20. The primary objective of this project is to enhance adaptive capacity and climate resilience of vulnerable smallholder farming communities and agro-pastoral systems in SA regions to climate change. The GCF financed activities under this project are expected to contribute directly to increasing the ability to respond to climate shocks by:

- a) **Climate**
resilient landscape management planning, b) Climate-proofing selected agricultural value chains, including providing access to drought resistant seed varieties and improved livestock breeds, strengthening value chains to allow access to inputs and markets, and improving farm water management practices, and c) Strengthening institutional capacities and interagency collaboration. A baseline will be established *ex ante* and will be assessed and reported during the duration of the project.

**Mitigation Benefits (Adaptation Co-benefits)**

One of the primary objectives of this project is to harness the synergies between adaptation and mitigation that would result in reduction or avoidance of GHG emissions from the agricultural systems especially through use of climate resilient technologies and practices, restoration of degraded rangelands, and a shift in cooking solutions from biomass to energy efficient cooking stoves and solar households systems (*building on MKopa business model*). The main GCF financed activities under this project are: a) adoption of climate resilient technologies such as tillage systems, agroforestry, and other sustainable land management practices, b) restoration of degraded agricultural landscapes and commercial production of fodder, c) catalyze private sector investment in energy efficient cooking stoves and SHS, and d) conversion of manure into biogas and other beneficial uses as a way of reducing GHG emissions from the livestock sector. Mitigation benefits (adaptation co-benefits) have been estimated and analyzed *ex-ante* and will be assessed and reported during the duration of the project using IPCC Guidelines.

**Key impact potential indicator**

<table>
<thead>
<tr>
<th>GCF core indicators</th>
<th>Expected tonnes of carbon dioxide equivalent (tCO₂eq) to be reduced or avoided (Mitigation only)</th>
<th>Annual</th>
<th>Lifetime</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Expected total number of direct and indirect beneficiaries, disaggregated by gender (reduced vulnerability or increased resilience); Number of beneficiaries relative to total population, disaggregated by gender (adaptation only)</td>
<td>1.7M tCO₂eq</td>
<td>12 mtCO₂eq</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1,500,000 beneficiaries (705,000 women; 795,000 men)</td>
<td>5,000,000 indirect beneficiaries including green jobs</td>
</tr>
<tr>
<td></td>
<td>Percentage (%)</td>
<td>10.2 % of the total population (47% women; 53% men) including youth</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other relevant indicators</th>
<th>Examples include:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>150,000 contract farmers access to drought tolerant sunflower seed varieties and inputs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>500,000 smallholder farmers access to climate resilient beans and chickpea and cowpea seed varieties and inputs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>250,000 contract farmers access to climate resilient sorghum seed varieties and inputs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>300,000 women and youth rearing climate resilient small stocks</td>
<td></td>
</tr>
<tr>
<td></td>
<td>150,000 farmers adopt improved dairy breeds</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1,050,000 pastoralists adopt improved livestock breeds</td>
<td></td>
</tr>
<tr>
<td></td>
<td>20,000 number of households with access to clean energy saving stoves and SHS</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2,000,000 farmers and pastoralists have access and use of climate information</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3,000,000 hectares of degraded land restored</td>
<td></td>
</tr>
<tr>
<td></td>
<td>11 biogas systems (one per region) established</td>
<td></td>
</tr>
</tbody>
</table>

The estimation of emissions for this project takes into account the, reduction and/or avoidance that result from the implementation of the various activities proposed under components 2 of the project. The GHG analysis considers a 2016 year period to align with the production cycle for restoration through native species and the lifecycle of the solar systems. This assumption is within IPCC recommendation for considering the timeframe between transitions from the existing state to reach a new equilibrium for measuring carbon stocks. *Ex-ACT* developed using the Guidelines for National Greenhouse Gas Inventories in conjunction with other methodologies and reviews of default coefficients for mitigation option as a base. Default values for mitigation options in the agriculture sector are mostly from Smith et al (2007). Other coefficients such as embodied GHG emissions for farm operations, inputs and transportation and irrigation systems implementation are from Lal (2004). The analysis considers only the above – and below – ground biomass carbon pools.28 The sources/removals of GHGs taken into account in the analysis are: Carbon dioxide (CO₂) removals from biomass growth; CO₂ emissions from use of agrochemicals, Methane (CH₄) from manure and Nitrous

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28 It is important to note that the CO₂ sequestration in biomass calculated in the analysis for above ground biomass for native species
oxide ($N_2O$) emissions from the use of fertilizers. The emissions avoided from the use of clean and efficient energy saving stoves was estimated based on the current fuel wood consumption in participating households (75 000) and the expected efficiency gains for the clean and efficient energy saving stoves that will be distributed by the project. It was assumed that the clean and efficient energy saving stoves can decrease fuel wood consumption by 25%. The potential fuel wood savings was calculated taking into account the fuel wood uses with current stoves and the new fuel wood use with clean and efficient energy saving stoves. The total fuel wood savings was then multiplied by the emissions for fuel wood consumption to calculate the avoided emissions.

**Paradigm shift**

22. The paradigm shift is envisaged in the following areas:

- Climate resilient landscape management planning informed by climate risk profiling forms the basis of development investments in SAs. This will ensure that future investments in SAs take into account climate change considerations.
- Adoption and scaling up of climate resilient technologies puts Tanzania's agricultural sector on a low carbon and climate resilient development pathway.
- The crowding in of private sector through integrated value chain approach will ensure that the current and future investments are climate-proofed and also catalyze increased private sector investments in the agricultural sector.
- Innovative climate risk management tools such as Insurance would help cushion the vulnerability of the agricultural sector.

**Sustainable development potential**

23. The Project aims to accelerate Tanzania's transitioning to climate resilient development pathway as a long term sustainable development strategy. In terms of SDGs, the project will be contributing to the following SDGs 1, 2, 3, 5, 6, 8, 13 and 15. More specifically, the following benefits will accrue:

**General**
- Project activities are closely aligned with SDGs, the country's inclusive growth economic blueprint and the ASDP II.

**Economic benefits**
- Development of rural livelihoods, green jobs and livelihood diversification.
- Creating climate resilient assets and value chains.
- Reduced losses and wastage especially post-harvest wastage which is close to 40 percent.
- Sustainable and diversified energy access that meets increasing energy demand and contributes to reduction/avoidance of emissions.

**Social benefits**
- Reducing the burden on households especially women and girls from sourcing biomass fuel by use of SHS.
- Safety of households especially women and girls from sourcing biomass fuel.
- Empowers women in farming through access to inputs and services.
- Targets women and youth through climate resilient small stocks.
- Increases the time available for education.
- Reducing resource use conflicts.

**Environmental benefits**
- Improved provision of ecosystem goods and services through Climate Resilient Landscape Management Plans (CRLMPs) and adoption and uptake of climate resilient technologies.
- Clean and efficient energy products help reduce health and safety risks.
- Cumulative positive impacts on climate through reduction in GHG emissions from the SAs.
- Sustainable use of natural resources by reducing dependence on biomass fuel and livelihood diversification.
- Improved climate projections and weather information, and strengthened climate information delivery services.
- Reliable EWS that could save lives and property.
- Enhance conservation and reduce loss of biodiversity

**Needs of recipients**

24. First, the Government will benefit from this project as it will contribute to increasing the resilience of the national economy by enhancing the adaptive capacity of the agriculture sector. Second, the project will contribute to the resilience of the stakeholders active in the SAs, in particular the agriculture sector and the value chains identified.
above. The project will respond to the needs of vulnerable communities but also the private sector by ensuring resilient planning is made in an inclusive way. The needs of the recipients revolve around increasing their adaptive capacity and fostering climate resilience to be able to respond to the adverse impacts of climate change. This stems from the fact that SAs are highly vulnerable to climate change and climate variability, yet they account for close to 80% of the country’s livestock production. High vulnerability of SA’s is due to a wide range of factors, including deteriorating social infrastructure, low adaptive capacity, overdependence on rain-fed agriculture, deforestation, overgrazing, inadequate land use planning and poor land use practices that have contributed to land degradation and soil erosion. This is exacerbated by increased frequency and magnitude of extreme weather events such as droughts and floods that have devastating effects on the wellbeing and livelihoods of small-holder farming communities living in the SA’s. The Project responds to the needs of the recipients through:

- Climate Resilient Landscape Management Planning (CRLMP) that will address poor land use practices, deforestation and soil erosion.
- Climate-proofing selected agricultural value chains that will be directed towards building resilience of the agricultural systems and hence addressing the challenges that relate to low investment and livelihood options in the SAs
- Strengthening institutional capacities and interagency collaboration

### Country ownership

25. This Project is aligned to the country’s national development priorities as espoused in the key policy and strategic documents including, Tanzania Development Vision 2025, National Agriculture Policy, Climate Change Strategy, Agriculture Climate Resilience Plan, Agriculture Sector Development Programme II and the NDC. These policies are complemented and underpinned by AU Agenda 2063, AU’s Malabo Declaration on Accelerated Agricultural Growth and Transformation for Shared Prosperity and Improved Livelihoods, Agenda 2030 on Sustainable Development and its associated SDGs and the Paris Agreement on Climate Change.

### Efficiency and effectiveness

26. The cost-benefit analysis shows that the project is economically viable as the proposed interventions are aligned to the priority actions under the ASDP II and as demonstrated by level of co-financing. A financial and sustainability analyses have been conducted and they show that the project will have significant benefits for rural households in the project areas. The project yields other benefits that could not be monetized, including (i) sound business models that empower vulnerable people across the selected value chains, (ii) strengthened institutional and human capacity to plan, implement and manage climate resilient landscape plans, and (iii) increased ownership and involvement of farmers and pastoralists whilst creating user groups to maintain project sustainability in the long run. Detailed feasibility study will be provided during the full proposal development.

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

27. The Concept Note was developed through a very consultative process with various stakeholders that included MDAs, NDA, private sector and CSOs being involved in a series of meetings. A multi-stakeholder coordinating platform, TCSAA, has been initiated as part of the project development process and this is proposed to continue to ensure broad stakeholder involvement in the implementation. It is envisaged that under the platform state and non-state actors will engage through thematic working groups in addressing specific areas of interest such as policy reforms, PPP arrangements, incentives and gender among others. TCSAA will provide a two-way feedback loop between the project and a wide range of stakeholders, from rural communities through CSOs, MDAs to businesses, development partners and other stakeholders. In addition, the AE’s Social, Environmental and Climate Assessment Procedures will detail operational procedures for ensuring effective stakeholder engagement, including a procedure to respond to alleged complaints from project-affected individuals and communities.

### C. Indicative Financing/Cost Information (max. 3 pages)

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

28. Total Project financing is $60 million of which $30 million is requested from the GCF. The breakdowns of Project cost estimates by Component and by major cost category are presented below.

<table>
<thead>
<tr>
<th>Components</th>
<th>Outputs</th>
<th>Activities</th>
<th>GCF Budget</th>
<th>Co-financing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Component 1. Climate resilient landscape management</td>
<td>1.1. Climate Resilient Landscape Management Plans</td>
<td>1.1.1 Develop climate risk profiles for the 11 regions</td>
<td>500,000</td>
<td>1,500,000</td>
</tr>
<tr>
<td>planning</td>
<td>1.1.2 Facilitate integrated landscape planning process through the seven steps</td>
<td>2,000,000</td>
<td>2,000,000</td>
<td></td>
</tr>
<tr>
<td>1.2 Implementation of the adopted Climate Resilient Landscape Management Plans</td>
<td>1.2.1 Identify and implement priority actions of the adopted Climate Resilient Landscape Management Plans across the in 11 regions</td>
<td>4,000,000</td>
<td>4,000,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.2.2 Establish a robust mechanism for tracking implementation of the adopted Climate Resilient Landscape Management Plans</td>
<td>100,000</td>
<td>100,000</td>
<td></td>
</tr>
<tr>
<td>SUB TOTAL</td>
<td></td>
<td>6,600,000</td>
<td>7,600,000</td>
<td></td>
</tr>
<tr>
<td>Component 2. Climate-proofing selected agricultural value chains</td>
<td>2.1 Crop productivity increased</td>
<td>2.1.1 Support adoption of drought tolerant seed varieties of sunflower, sorghum, beans, groundnuts, chickpea and cowpeas.</td>
<td>4,000,000</td>
<td>3,500,000</td>
</tr>
<tr>
<td></td>
<td>2.1.2 Support adoption of a suite of tillage systems and agroforestry</td>
<td>1,650,000</td>
<td>2,000,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.1.3 Create and strengthen sustainable linkages and incentives between farmers and private sector across the sunflower, sorghum, beans, chickpea and cowpeas value chains, including Smart-Money</td>
<td>50,000</td>
<td>50,000</td>
<td></td>
</tr>
<tr>
<td>2.2 Livestock productivity and diversification improved</td>
<td>2.2.1 Support improvement of livestock breeds and animal husbandry and the value chain</td>
<td>1,800,000</td>
<td>1,000,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.2.2 Support scaling up dairy farming and the dairy value chain</td>
<td>2,000,000</td>
<td>2,000,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.2.3 Support rearing of small stocks and its value chain (women and youth)</td>
<td>1,000,000</td>
<td>1,000,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.2.4 Create and strengthen sustainable linkages and incentives between farmers and private sector across livestock, dairy and small stocks value chains, including Smart-Money</td>
<td>50,000</td>
<td>30,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.2.5 Develop water points for livestock</td>
<td>1,101,249</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2.3 Degrated rangelands restored

<table>
<thead>
<tr>
<th>Description</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.3.1 Support restoration of 3 million rangelands building on the improved traditional Ngitili system</td>
<td>2,300,000</td>
<td>1,000,000</td>
</tr>
<tr>
<td>2.3.2 Commercial fodder production</td>
<td>500,000</td>
<td>500,000</td>
</tr>
<tr>
<td>2.3.3 Promote water harvesting</td>
<td>500,000</td>
<td>500,000</td>
</tr>
</tbody>
</table>

2.4 A robust Climate Information Service in place

<table>
<thead>
<tr>
<th>Description</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.4.1 Support purchase and installation of 100 automatic weather stations (AWS)</td>
<td>2,500,000</td>
<td>700,000</td>
</tr>
<tr>
<td>2.4.2 Capacity building of TMA on downscaling and production of seasonal and decadal forecasts</td>
<td>1,500,000</td>
<td>550,000</td>
</tr>
<tr>
<td>2.4.3 Deployment of climate information systems, agro-advisory services and early warning systems (EWS).</td>
<td>500,000</td>
<td>400,000</td>
</tr>
</tbody>
</table>

2.5 Clean and renewable energy solutions adopted

<table>
<thead>
<tr>
<th>Description</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5.1 Increase access to sustainable household energy solutions (energy efficient cooking stoves and SHS (MKopa business model), including establishment of 11 biogas systems (one per region).</td>
<td>1,500,000</td>
<td>4,500,000</td>
</tr>
</tbody>
</table>

**SUB TOTAL**

<table>
<thead>
<tr>
<th>Component 3. Strengthening institutional capacities and interagency collaboration</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1 Multi-sectorial and stakeholder collaboration strengthened</td>
<td>500,000</td>
<td>500,000</td>
</tr>
<tr>
<td>3.1.1 Enhance cross-sectoral collaboration for coherent climate response</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.1.2 Strengthen multi-stakeholder coordination platform (TCSAA)</td>
<td>1,000,000</td>
<td>1,000,000</td>
</tr>
<tr>
<td>3.1.3 Develop and maintain a knowledge management system for experience sharing and learning</td>
<td>500,000</td>
<td>500,000</td>
</tr>
<tr>
<td>3.2 Institutional capacity of Sub-national agencies and community institutions strengthened</td>
<td>1,000,000</td>
<td>1,000,000</td>
</tr>
<tr>
<td>3.2.1 Build institutional capacity of 11 regional secretariats and their relevant Local Government Authorities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.2.2 Build capacity of farmer associations/ traditional and village councils</td>
<td>500,000</td>
<td>508,751</td>
</tr>
<tr>
<td>3.3 CAADP Biannual Review Report prepared</td>
<td>50,000</td>
<td>60,000</td>
</tr>
<tr>
<td>3.3.1 Preparation of the CAADP biannual review report on the Africa Agriculture Transformation Score Card (AATS)</td>
<td></td>
<td></td>
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</tbody>
</table>

**SUB TOTAL**

<table>
<thead>
<tr>
<th></th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SUB TOTAL</strong></td>
<td>19,850,000</td>
<td>18,831,249</td>
</tr>
</tbody>
</table>
### Component/Output | Indicative cost (USD) | GCF financing | Co-financing |
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Amount (USD)</td>
<td>Financial Instrument</td>
</tr>
<tr>
<td>Component 1. Climate resilient landscape management planning</td>
<td>14,200,000</td>
<td>6,600,000</td>
<td>Grant</td>
</tr>
<tr>
<td>Component 2. Climate-proofing selected agricultural value chains</td>
<td>38,681,249</td>
<td>19,850,000</td>
<td>Grant</td>
</tr>
<tr>
<td>Component 3. Strengthening institutional capacities and interagency collaboration</td>
<td>7,118,751</td>
<td>3,550,000</td>
<td>Grant</td>
</tr>
<tr>
<td>Indicative total cost (USD)</td>
<td>60,000,000</td>
<td>30,000,000</td>
<td>30,000,000</td>
</tr>
</tbody>
</table>

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

29. Tanzania is a LDC with low adaptive capacity to respond to the adverse impacts of climate change. This is exacerbated by the fact that there has been less focus on SAs due to high risks in terms of ecology and the form of livelihoods of the communities residing there (i.e.: pastoralism and agro-pastoralism). Consequently, the SAs are less attractive for the private sector to invest. It is against this background that the GCF’s involvement is of paramount importance. The support from GCF is critical in catalysing and unlocking private sector resources and assists Tanzania in transforming the SAs and in addressing the vulnerabilities of the smallholder farming communities residing in those areas. With the support from GCF and other partners, it will be possible to remove current barriers and accelerate Tanzania’s quest to increase the adaptive capacity of the agriculture sector, in particular some key value chains for the national economy, and including smallholder farming communities in SAs.

30. The GCF finance would both address the capital shortfall needed to support adaptation actions in SAs and enable affordable access financing by covering first movers’ additional costs, removing barriers hindering investments and promote a sustainable, replicable model for financing. This will, in turn, catalyse private sector investments in adaptation to scale. The GCF finance is critical for the following reasons:
- Mitigate the climate risk on key value chains and agriculture sectors.
- Provide climate resilient governance techniques and resources, inclusive of all stakeholders.
- Provide climate resilient agriculture and water resources management techniques to smallholder farmers and stakeholders in selected value chains in SAs.
- Support early small and medium enterprises (SMEs) that will make small-scale farming communities more resilient to climate change through access to better inputs, appropriate finance, and secure off-take.
- Provide relevant climate information for planning and monitoring purposes.
- Enhance integration of climate information in development planning and decision making.

31. The level of concessionality (grant financing) is justified as Tanzania is a LDC and that this project will be taking place in the most vulnerable landscapes of the country. The grant financing will enable to de-risk the agriculture sector in these areas from specific climate threats and this would not be done by other types of financing. It is
expected that this project will set the basis for catalysing investments in the region, specifically on the selected value chains in the long run.

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

32. The Project is aligned with the national priorities and in accordance with various agriculture and climate change policies and strategies both in mainland Tanzania and Zanzibar. Among the activities to be undertake entails mainstreaming these activities into the district planning and budgeting process. This will ensure that these activities are incorporated in the annual budget thus ensuring sustainability for those that require public funding. For Zanzibar already, the RGoZ allocates 6-8% of overall Government budget into climate related activities\(^\text{29}\) with anticipated increased allocation in future. The private sector driven activities such as the SHS, clean energy stoves etc, the business model adopted will ensure that they are profitable and can be sustained.

33. The project aim is to put Tanzanian agriculture sector on a climate resilient development pathway. The project has been structured in a way it establishes the institutional framework for climate resilient development in the sector and attracts the private sector. This will ensure activities sustainability in the region following the project closure.

34. Monitoring and evaluation systems will be put in place not only to track the project outputs and outcomes, but also document important lessons learned, specifically on adoption of appropriate climate smart approach, technologies and practices. A community of practice will be established to share lessons learned from the use of climate information services and renewable energy in catalysing transformation in agricultural systems. Monitoring arrangements will comply with the relevant GCF policies (MAF, AMA, etc). Implementation of each of the components will be closely monitored by IUCN, PMU and the PSC. IUCN will conduct due diligence and monitor programme risks and prepare mitigation measures throughout the Project lifecycle. In addition, IUCN will provide to the GCF a) semi-annual activity performance reports on the status of GCF funded activities throughout the relevant reporting period, and b) final evaluation reports at the end of the implementation period of the Project:

- Semi-annual Performance Reports, including the disbursements made during the relevant period, the implementation status of the Funded Activity and the monitoring of results and impacts of such Funded Activity.
- Upon completion, a final report prepared by the independent evaluator setting out the results and impacts achieved, as well as their sustainability, scalability and lessons learned, during the relevant period.

35. Evaluation arrangements will comply with the relevant GCF policies (MAF, AMA, etc), namely, both independent mid-term and final evaluation will be carried out.

D. Supporting documents submitted (OPTIONAL)

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

Self-awareness check boxes

Are you aware that the full Funding Proposal and Annexes will require these documents? Yes ☐  No ☐

- Feasibility Study
- Environmental and social impact assessment or environmental and social management framework
- Stakeholder consultations at national and project level implementation including with indigenous people if relevant
- Gender assessment and action plan
- Operations and maintenance plan if relevant

• Loan or grant operation manual as appropriate
• Co-financing commitment letters

Are you aware that a funding proposal from an accredited entity without a signed AMA will be reviewed but not sent to the Board for consideration? Yes ☐ No ☐
Annex 1: Map showing the geographic location of the Project