PROJECT DOCUMENT

SECTION 1: PROJECT IDENTIFICATION

1.1	**Project title:**	Supporting the implementation of integrated ecosystem management approach for landscape restoration and biodiversity conservation in Tanzania
1.2	**Project number:**	GFL/1383 PMS: 9524
1.3	**Project type:**	FSP
1.4	**Trust Fund:**	**GEF**
1.5	**Strategic objectives:**	
	GEF strategic long-term objective:	BD-4 Program 9; CCM-2 Program 4; LD-2 Program 3; LD-3 Program 4; SFM
	Strategic programme for GEF VI:	The Restoration Initiative (TRI)
1.6	**UNEP priority:**	Ecosystem Management
1.7	**Geographical scope:**	National, Tanzania
1.8	**Mode of execution:**	External
1.9	**Project executing organization:**	Vice Presidents Office, United Republic of Tanzania The National Environment Management Council Center for International Forestry Research
1.10	**Duration of project:**	60 months Commencing: June 2018 Technical completion: June 2023

1.11 Cost of project

	USD	%
Cost of GEF Trust Fund	**11,205,872**	**14.84**
Co- financing		
Cash		
Bioversity	150,000	0.20
CIFOR	115,000	0.15
VPO	9,326,200	12.35
Chunya District Council	259,000	0.34
Iringa District Council	204,000	0.27
Kasulu District Council	259,000	0.34
Kibondo District Council	259,000	0.34
Mbarali District Council	264,000	0.35
Mpanda District Council	159,000	0.21
Mpimbwe District Council	306,526	0.41
Wanging'ombe District Council	0	0.00
Sumbawanga District Council	185,000	0.25
Uvinza District Council	169,000	0.22
Sub-Total	***11,655,726***	***15.44***
In-kind		
Bioversity	925,000	1.23
CIFOR	826,668	1.10
VPO	16,089,000	21.31
Chunya District Council	3,741,000	4.96
Iringa District Council	3,890,000	5.15
Kasulu District Council	3,741,000	4.96
Kibondo District Council	3,741,000	4.96
Mbarali District Council	3,820,000	5.06
Mpanda District Council	3,841,000	5.09
Mpimbwe District Council	4,365,339	5.78
Wanging'ombe District Council	1,768	0.00
Sumbawanga District Council	3,815,000	5.05
Uvinza District Council	3,831,000	
Sub-Total	***52,627,775***	***69.72***
Project Total	**75,489,373**	**100**

1.12 Project summary

The project "Supporting the implementation of integrated Ecosystem Management Approach for Landscape Restoration and Biodiversity Conservation in Tanzania" is a national "child" project under a global project "The Restoration Initiative (TRI)". The global project is a partnership project involving the United Nations Environment Programme (UNEP), Food and Agriculture Organization of the United Nation (FAO), International Union for Conservation of Nature (IUCN) and ten partner countries (Cameroon, Central African Republic, China, Democratic Republic of Congo, Guinea-Bissau, Kenya, Myanmar, Pakistan, Sao Tome and Principe, and the United Republic of Tanzania). The project is geared at improving people's livelihoods through the restoration of priority degraded and deforested landscapes around the world by using Global Environment Facility Council (GEF) funding of US$54 million, approved on 8 June 2016. The main aim is to develop and disseminate best practices and tools in order to improve forest and landscape restoration (FLR) implementation and catalyse investment to bring benefits at scale.

The Tanzania child project has total cost of USD $11,205,872 as grants from GEF. The project was developed during the 6th replenishment of Global Environment Facility (GEF - 6) with a five years implementation period (June, 2018 – June, 2023). The project aims at restoring and maintaining the critical ecosystems of Great Ruaha, the Malagarasi and Lake Rukwa basins in order to secure flow of multiple ecosystem services and enhanced resilient economic development and livelihoods in the regions.

The overall objective of this project is to strengthen integrated natural resources management and restoration of degraded landscapes for building resilient socio-ecological systems in Tanzania. Specifically, the project will: (i) enhance national enabling environment and capacity of actors for sustainable landscape restoration (SLR) efforts and for commitment to SLR; (ii) improve landscape management through implementation of restoration plans and integrated landscape management practices in selected project sites; (iii) develop and share knowledge, disseminate good practices, and appropriate monitoring an devaluation (M&E) systems and financing arrangements that support adaptive management of SLR interventions and strategies. These outcomes are expected to be achieved through the provision of technical support to key public stakeholders responsible for sectoral policies, planning and enforcement, and to farming communities in the project areas to promote the adoption of SLR initiatives and innovative practices in conserving and mainstreaming biodiversity that are suitable for different land use categories. Field interventions of the project will be implemented in 16 wards selected from 11 districts and located in three basins of southern and western Tanzania: The Great Ruaha, Lake Rukwa and the Malagarasi basins.

The project will be implemented through three components:

1. **Policy and institutional frameworks to reduce landscape degradation**. The component aims to establish national landscape restoration governance and regulatory structure, and mainstream landscape restoration and sustainable land management into policies, regulations and strategies.
2. **Implementation of sustainable landscape restoration plans**. This component is designed to actively engage communities and local authorities in identifying and implementing feasible restoration options at landscape level.
3. **Monitoring and evaluation, knowledge management and resource mobilization**. The third component will put in place effective M&E and data management systems that would enable the project to gather gender disaggregated data, to disseminate lessons learned and facilitate learning and scaling up good practices, in addition to identifying financing opportunities for SLR.

Through this project the Government of Tanzania and its partners are expecting to achieve the following targets:

- To establish and operationalize national landscape restoration governance and regulatory structures
- To mainstream SLR and sustainable land management into policies, regulations, strategies
- To put a total of 110,000 ha under SLR transition by restoring of 7,755ha of degraded forests through natural regeneration and 5000 ha through afforestation /reforestation; restoring 5000ha of critically

degraded land through conservation farming, terracing, contour farming and physical rehabilitation; put 10,000ha of land under climate smart agriculture – CSA (agrobiodiversity based solutions, soil fertility management, agroforestry and conservation agriculture, micro-irrigation schemes, construction of deep wells, construction of screen house); implementing sustainable livestock management options (pasture farming with demo plots, improved livestock breeds, contraction of cattle dips) in target landscapes; supporting alternative income generating activities for at least 100,000 households and implementing jointly identified and feasible SLR options (enrichment planting, removing invasive species) on 4000 ha in forested and managed landscapes and 87,245ha under complimentary land management practices (including fire control and controlled grazing).

- To reduce 4.7 million tCO_2 eq emissions in the project area through SLR and SLM activities
- To provide sufficient incentives to the Tanzanian government to make an official commitment to forest and landscape restoration as part of the Bonn Challenge and AFR 100.

As part of the TRI, the project will contribute to the Global Learning, Financing, and Partnerships project (GCP) and assist it to develop and disseminate best practices and tools, catalyze investment in restoration, expand the scope of countries and actors engaged in forest and landscape restoration, and realize benefits at scale.

TABLE OF CONTENTS

APPENDICES

ANNEXES

Annex 1. Agro-ecological Zones of Tanzania
Annex 2. Demographic and socio-economic characteristics of selected districts
Annex 3. Biophysical characteristics of the Great Ruaha, the Lake Rukwa and the Malagarasi water basins
Annex 4. Summarized description of national acts relevant to SLR
Annex 5. EX-ANTE tool analysis of mitigation potential at the district level for the study area
Annex 6. Baseline projects

ACRONYMS AND ABBREVIATIONS

AFR100	African Forest Landscape Restoration Initiative
ALAP	African Landscapes Action Plan
ARLI	African Resilient Landscapes Initiative
ASDP-II	Agricultural Sector Development Program
AU	African Union
CBD	Convention on Biological Diversity
CBOs	Community Based Organizations
CIFOR	Centre for International Forest Research
CITES	Convention on International Trade in Endangered Species
CSA	Climate Smart Agriculture
CSOs	Civil Society Organizations
DASs	District Administration Secretariats
DCs	District Councils
DoE	Division of Environment
EAC	East Africa Cooperation
EMA	Environmental Management Act
FAO	Food and Agriculture Organization of United Nations
FBD	Forest and Beekeeping Division
FLR	Forest Landscape Restoration
GDP	Global Domestic Products
GEF	Global Environmental Facility
GHGs	Greenhouse Gases
GLF	The Global Landscape Forum
GPFLR	Global Partnership on Forest Landscape Restoration
INRM	Integrated Natural Resource Management
IOR-ARC	Indian Ocean Rim-Association for Regional Cooperation
IUCN	International Union for Conservation of Nature
LGAs	Local Government Authorities
MALF	Ministry of Agriculture, Livestock and Fisheries
MAST	Mobile Application to Secure Tenure
MATI	Ministry of Agriculture Training Institute
MDAs	Ministries, Departments and Agencies
M&E	Monitoring and Evaluation
MEAs	Multilateral Environmental Agreements
MEM	Ministry of Energy and Minerals
MLHHS	Ministry of Land, Housing, and Human Settlements
MNRT	Ministry of Natural Resources and Tourism
MoLHHS	Ministry of Land Housing, and Settlements
MoWI	Ministry of Water and Irrigation
NCMC – SUA	National Carbon Monitoring Centre, Sokoine University of Agriculture
NDC	Nationally Determined Contribution
NEAC	National Environmental Advisory Committee
NEMC	National Environmental Management Council
NGOs	Non-Governmental Organizations
NLUPC	National Land Use Planning Commission
PMO-RALG	President's Office - Regional Administration and Local Government
PORALG	President's Office-Regional Administration and Local Government
PPG	Project Preparation Grant
PPP	Public-private partnership

PSC	Project Steering Committee
RAS	Regional Administration Secretariat
RCs	Regional Councils
REDD+	Reducing Emissions from Deforestation and Degradation
ROAM	Restoration Opportunities Assessments Methods
RWSSP	Rural Water Supply and Sanitation Program
SADC	Southern Africa Development Community
SDGs	Sustainable Development Goals
SAGCOT	Southern Agricultural Growth Corridor of Tanzania
SLM	Sustainable Land Management
SLR	Sustainable Landscape Restoration
SRMP	Sustainable Rangeland Management Project
SRMP-3	Sustainable Rangeland Management Programme phase 3
TAC	Technical Advisory Committee
TAFORI	Tanzania Forestry Research Institute
TALITA	Tanzanian Livestock Training Agency
TALIRI	Tanzanian Livestock Research Institute
TANAPA	Tanzania National Parks
TLMI	Tanzania's Livestock Modernization Initiative
TMA	Tanzania Meteorological Agency
TRI	The Restoration Initiative
UN	United Nations
UNFCCC	United Nations Framework Convention on Climate Change
UNDAP	United Nations Development Assistance Programme
UNCCD	United Nations Convention on Combat Desertification
VECs	Village Environmental Committees
VNRCs	Village Natural Resource Committees
VPO	Vice President's Office
WCS	Wildlife Conservation Society
WDCs	Ward Development Councils
WRI	World Resources Institute
WSDP-II	Water Sector Development Program
WWF	World Wide Fund for Nature

SECTION 2: BACKGROUND AND SITUATION ANALYSIS (BASELINE COURSE OF ACTION)

2.1. Background and context

145. Tanzania is located south of the equator, between latitudes 1° and 12°S, and longitudes 29°and 41°E. It is constituted by Tanzania Mainland and the island of Zanzibar, with a total land area of 945,087 km^2, and 59,050 km^2 of inland water bodies and part of the Indian Ocean.

146. The country presents a wide variety of physical features extending from a narrow coastal belt along the western Indian Ocean with sandy beaches to an extensive plateau with altitudes ranging from 1,000 to 2,000 m above sea level. The plateau is fringed by narrow belts of highlands, including Mount Meru (4,566 m), Mount Kilimanjaro (5,895 m) -the highest mountain in Africa-, and other mountain ranges such as Kipengere, Livingstone, Nguu, Pare, Udzungwa, Uluguru, and Usambara. Tanzania is also traversed by the Great Rift Valley system with two arms; the western arm in which Lake Nyasa, Tanganyika and Rukwa fall runs along the western part of the country, while the eastern arm crosses in the central part with Lake Eyasi, Manyara and Natron in it.

147. The climate in the country is diverse because of proximity to the ocean and inland lakes, the altitudinal range which governs temperature, and latitude. The northern part of the country including areas around Lake Victoria Basin, north-eastern highlands and the northern coast experience a bimodal rainfall regime, while the central, south and western areas have a prolonged unimodal rainfall regime that starts in November and continues to the end of April. In general, annual rainfall varies from 550 mm in the central part of the country to 3,690 mm in some parts of the south-western highlands. Most of the country receives less than 1,000 mm, except the highlands and parts of the extreme south and west where 1,400 mm to 2,000 mm are expected. Temperature varies according to the geographical location, topography and altitude. Along the coast and in the off-shore islands the average temperature ranges between 27°C and 29°C, while in central, northern and western Tanzania temperatures range between 20°C and 30°C. Temperatures are generally high between the months of December and March and lower during the months of June and July[1].

148. Tanzania has several fresh water bodies including Lake Nyasa, Lake Tanganyika (the longest and deepest in Africa) and Lake Victoria (the largest in Africa). The country has many rivers that drain into nine water basins (Lake Nyasa, Lake Rukwa, Lake Tanganyika, Lake Victoria, Pangani, Rufiji, Ruvuma, Wami-Ruvu, the internal drainage basin around Singida). The major rivers are Kagera, Malagarasi, Mara, Pangani, Ruaha, Rufiji and Ruvuma. Also, the country hosts terrestrial, coastal and marine and inland water ecosystems (dams and wetlands). Most rivers and some of the lakes are trans-boundary, shared with the seven countries that border Tanzania.

149. The country has 95.5 million hectares of land. About half of Tanzania's mainland area is considered arable, and about half of this is under cultivation[2]. About one third (33.2%) of the country's area is protected as forests, 22.0% as wildlife areas, while agriculture (including shifting cultivation which is a common practice in forests) takes up 29.9%. About 10.5% is grazing land while water body or swamp and other uses like settlements account for 0.7% and 2.2% respectively.

150. All land in Tanzania is considered public land, which the President holds as trustee for the people. Rights of occupancy are granted by the Commissioner for Lands, or they may be held through customs and tradition. Government retains significant power to reclassify and expropriate land, creating perceptions of insecurity at the

[1] United Republic of Tanzania. 2010. National Climate Change Strategy. Vice President's Office, Division of Environment, United Republic of Tanzania, Dar es Salaam.
[2] United Republic of Tanzania., 2015. Tanzania Climate Smart Agriculture Programme, 2015–2025. Ministry of Agriculture, Livestock and Forestry, United Republic of Tanzania, Dar es Salaam.

village level. The Land Policy (1995), the Land Act Cap 113 and Village Land Act Cap 114 set out the fundamental principles guiding land rights and management. The Land Act classifies land in three categories: (1) reserved land; (2) village land; and (3) general land. The land ownership classification is based on the land management responsibility as (i) ***Central government land,*** land administered by central government agencies such as Tanzanian Forest Service or parastatals such as Tanzania National Parks (TANAPA); (ii) ***Local government land,*** land administered by Local Government Authorities (LGAs) and includes forest reserves decentralized to LGAs in the 1970s; and (iii) ***Village land,*** land held and administered collectively by village residents under Customary law and Village Land Act Cap 114 [R.E. 2002] and includes communal land and land held by individuals.

151. Agriculture is the foundation of the Tanzanian economy accounting for 24% of the GDP, 30% of total exports and 65% of raw materials for Tanzanian industries. It accounts for about half of the national income, 75% of merchandise exports, provides employment for about 80% of Tanzanians and most of all, it fulfils 95% of the country's food needs. About 80% of production comes from subsistence farmers, cultivating farms of less than three hectares, relying on hand tools and rainfed production. To date, agricultural production gains have been based on expansion of the area cultivated rather than yield increases, and this expansion process has been the driver of deforestation, land degradation and biodiversity loss. Smallholder agriculture is labour intensive with little application of modern technologies and inputs and high vulnerability to weather shocks. Agriculture is thus a sector where significant productivity achievements can be made, while making production climate-resilient.

152. Land degradation, threatening both agrobiodiversity and forests, has become a major concern as it seriously impairs efforts to improve rural livelihoods and food security of millions of people in Tanzania. Tanzania is experiencing rapid rates of land degradation in almost all agro-ecological zones. The general trend of land degradation in Tanzania reveals that about 50% of the total land area is affected by land degradation. Highly degraded areas constitute about 16% of the total land area mostly occurring in arid and semiarid areas. In coastal zones, the status of land degradation includes continuous degradation of estuaries and lagoon wetlands, soil erosion, degradation of physical shoreline and coral reef and reduction of fish resources. In arid land zones, the status of land degradation includes reduced soil fertility and soil erosion, deforestation, and bush fires. In the Plateau zone, land degradation includes deforestation of the Miombo woodlands, reduction and threat of loss of biodiversity of fish and wildlife resources, degradation of wetlands and loss of soil fertility.

153. Land degradation reduces the ability of land to render ecosystem goods and services as well as its capacity to function for a long period of time. However, the magnitude, rates and negative impact on people's livelihood and environment have varied widely across the different agro-ecological zones of the country (Annex 1 provides summarized description of the major agro-ecological zones of Tanzania). The notable impact of land degradation on the social, cultural and economic aspects of communities includes decline or loss of agricultural productivity and food insecurity, water pollution, desertification, migrations and land conflicts, and loss of biodiversity. The total annual economic value of land lost due to degradation is estimated at USD 10.2 billion[3].

154. Within the agricultural sector, agrobiodiversity is an important component in terms of its contribution to sustainable production and productivity. Tanzania is rich in agrobiodiversity and genetic diversity, including nine cereals (barley, oats, maize, millets, rice, rye, sorghum, triticale, wheat), 10 legumes (Bambara nuts, chick peas, common bean, cowpea, green grams, groundnuts, hyacinth bean, lima bean, pigeon peas, soybean), 7 oil crops (castor, coconut, groundnuts, oil palm, sesame, soybean, sunflower), 6 roots and tuber crops (cassava, Irish potatoes, sweet potatoes, yams/cocoyams), 4 fiber crops (cotton, kenaf, kapok and sisal), 3 beverage crops (cocoa, coffee, and tea) and 4 other crops (cashew nut, pyrethrum, sugar cane, and tobacco). In addition, there are 79 indigenous plant species that produce edible fruits; 48 introduced fruit trees, 37 introduced vegetable crops and 40 indigenous vegetable crops. Agrobiodiversity is facing similar threats as land use, including: high consumer

[3]United Republic of Tanzania, 2014. National Action Program to Combat Desertification, 2014-2018, Vice President's Office, Division of Environment, United Republic of Tanzania, Dar es Salaam

preferences, introductions of improved varieties, biological use of industrial fertilizers, extensive use of agro-chemicals, deforestation, overgrazing, lack of land use plans, environmental and health concerns. Expansion of land areas under maize is reducing areas under other crops, and increased use of agro-chemicals affects non-target organisms through environmental pollution and through impacts on soil micro-organisms.

155. The country has a total of 35.3 million hectares of forests out of which 16 million hectares are reserve forests, 2 million hectares are forests in national parks and the remaining17.3 million hectares (49 percent of all forestland) are unprotected forests in general land. Forests comprise montane forests, lowland forests, plantations, mangroves, and open and closed woodlands[4]. Due to varying geomorphological features, the country is home to diverse vegetation types notably the savannah and bushy vegetation that are fringed by narrow belts of forested highlands, the Itigi thickets, the Massai steppes, the Miombo woodlands (covering a greater part of the land area), and the mangrove systems along the coast. These ecosystems are habitats for diverse types of flora and fauna. The main natural forest types are the Miombo woodlands and acacia savannahs and the humid montane forests whereas lowland and coastal forests cover smaller areas and are fragmented and dispersed[5]. Production forests are also expanding[6]. Plantation forests are mainly concentrated in the southern highlands. Mbeya, Morogoro Lindi, Katavi, Ruvuma, and Tabora are examples of regions with high wood volumes.

156. Forest cover is one of the highest in eastern and southern Africa. The contribution of forests to the national GDP is estimated to be between 2.3 percent and 10 percent. However, such estimated contributions hardly consider and attach monetary values to forest products and environmental services, especially considering that the forest sector acts as a carbon sink, absorbing emissions produced at national level, making Tanzania a net sink of Greenhouse Gases (GHGs).

157. Forests and tree-based agricultural systems contribute directly and indirectly to the livelihoods of Tanzanians. Wild foods are important for food and nutritional security while trees and forests provide products and ecosystem services to agriculture. Wild fruits and vegetables and bush meat are important source of micronutrients and protein respectively (when consumed) and cash income at the household level when marketed. Fuelwood is by far the most commonly used forest product, as it is used by about 96 percent of the households in Tanzania. Other products include wood for construction, thatch grass, honey and beeswax, edible plants, fodder, bush meat, medicine etc. The rapid expansion of large-scale industrial timber production systems in the country, especially in Iringa and Njombe regions, undermines the contributions of forests and tree-based agricultural systems to food and nutritional security of rural communities.

158. Understanding the dynamics of land degradation, its status and the areas that have been affected is important in the planning and implementation of sustainable landscape restoration (SLR) practices. However, there is limited reliable baseline information regarding the magnitude of the problem in the country. Recent reports indicate that the major drivers of land degradation are: population expansion (natural increase and migration), poverty, insecure land tenure systems, unsustainable farming practices, overgrazing which is common in arid and semiarid areas with large numbers of livestock, climate change and variability, political instability, deforestation and forest degradation, wildfires, rapid urbanization and inadequate land-use plans[7].

[4] NAFORMA, 2015. National Forest Resources Monitoring and Assessment of Tanzania Mainland. Main Results. Ministry of Natural Resources and Tourism, Tanzanian Forest Services Agency in Collaboration with Government of Finland and FAO. May 2015. Dar es Salaam.

[5] Kweka D, Carmenta R, Hyle M, Mustalahti I, Dokken T and Brockhaus M. 2015. The context of REDD+ in Tanzania: Drivers, agents and institutions. Occasional Paper 133. Bogor, Indonesia: CIFOR.

[6] Franks, P., Hou-Jones, X,. Fikreyesus, D., Sintayehu, M., Mamuye, S., Danso, E.Y., Meshack, C.K., McNicol, I. and Soesbergen, A.V. 2017. Reconciling forest conservation with food production in sub-Saharan Africa: case studies from Ethiopia, Ghana and Tanzania. IIED Research Report, London.

[7] Kirui, E.O.K. 2016. Economics of Land Degradation and Improvement in Tanzania and Malawi In: Nkonya et al. (eds.), Economics of Land Degradation and Improvement – A Global Assessment for Sustainable Development, PP; 609-649. DOI 10.1007/978-3-319-19168-3_20

159. Recognizing these challenges, the government of Tanzania is taking measures to rehabilitate degraded landscapes and to better adapt to and mitigate climate change. The proposed project will build on and complement existing initiatives by the government and its development partners. The project interventions will be implemented at two levels. At national level, the project will work with the central government of Tanzania to support the establishment and operationalization of Sustainable Landscape Restoration (SLR) governance and regulatory structures. At the ground level, the project will work in 11 districts located in the Great Ruaha, Lake Rukwa and Malagarasi basins (See Figure 1) to improve landscape management through implementation of restoration plans and enhance the adoption of innovative SLR practices.

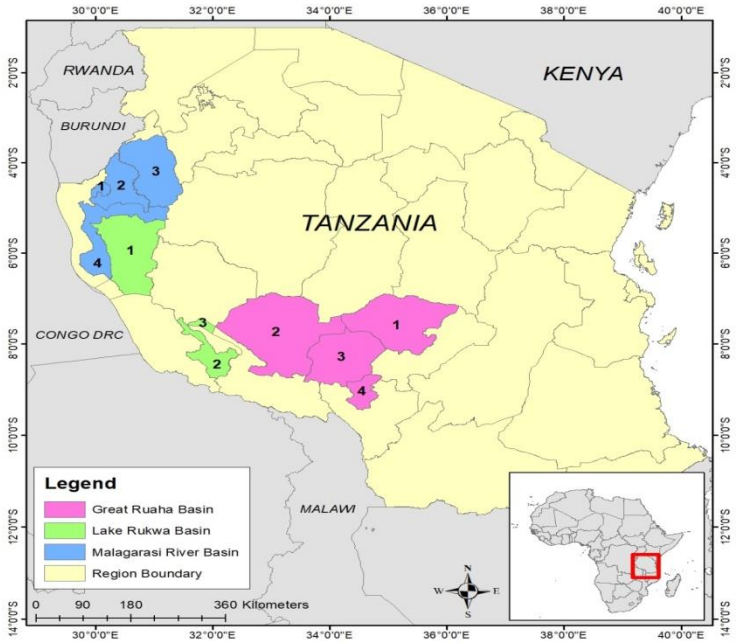


Figure 1. **The location of selected basins and districts in Tanzania.**

Source: Tanzania National Bureau of Statistics (2012). The names of the districts are 1. Kasulu Township Authority 2. Kasulu District 3. Kibondo District 4. Uvinza District in the Malagarasi River Basin; 1. Mpanda District 2. Sumbawanga District 3. Mpimbwe District in the Lake Rukwa Basin; and 1. Iringa District 2. Chunya District 3. Mbarali District 4. Wanging'ombe District in the Great Ruaha Basin.

2.2. Global significance

160. Tanzania is one of twelve mega-diverse countries in the world. The country is home to more than one third of the total plant species on the African continent and about one fifth of the continent's large mammal species. Tanzania ranks twelfth globally in terms of its bird species richness, and its fauna is the fourth-most species-rich in Africa[8]. The country hosts 6 out of the 25 world renowned biodiversity hotspots, Coastal and marine ecosystems occupy about 20% of total land including coastal forests, mangroves, coral reefs, sea grass beds, sandy beaches, rocky shores and numerous islets. Freshwater resources, lakes, rivers, springs, natural ponds,

[8] United Republic of Tanzania. 2015. National Biodiversity Strategy and Action Plan (NBSAP) 2015–2020. Vice President's Office, Division of Environment.

underground sources, wetlands as well as man-made reservoirs harbor important biodiversity and exhibit high endemism. The biodiversity wealth contributes significantly to the socio-cultural, economic and environmental goods and services to the country and humanity at large.

161. The selected ecosystem targeted by the proposed project is located in the Southern and Western part of Tanzania (See Figure 1). It is important in terms of biodiversity as it is the area where biodiversity resources from Southern Africa, East Africa and Central Africa meet. It is also an ecosystem characterized by the Miombo woodlands facing severe degradation. The ecosystem is divided into three basins namely the Great Ruaha (Iringa, Njombe and Mbeya), Lake Rukwa (Rukwa and Mbeya regions), and the Malagarasi River basin (Kigoma and Katavi areas) where each one of these basins are affected by different drivers of degradation.

162. The three basins where this project will be implemented, **the Great Ruaha, the Lake Rukwa** and **the Malagarasi** basins border with some important protected areas, including Ruaha National Park for the Great Ruaha River Basin, the Katavi National Park and the associated game reserves of Rukwa and Lukwati in the Lake Rukwa Basin, Mahale and Gombe National Parks and Moyowosi Game reserve in Malagarazi River Basin. In addition, all three selected basins are home to a large number of forest reserves.

163. The **Malagarasi** is the second longest river in the country, at 475 Km and with a basin area of 130,000 km^2. The basin has the largest watershed of all rivers flowing into Lake Tanganyika. The Malagarasi river receives water from various tributaries; Moyowosi River being the principal tributary, others include Nikongo, Ugalla, Gombe, Ruchugi, Lumpungu and Nguya Rivers. The Malagarasi river basin is in forested areas that are defined as being of "Miombo Woodland" type. Miombo is a colloquial term used to describe central and eastern African woodland dominated by trees closely related to genera Brachystegia (or msasa, small shrubby African tree having compound leaves and racemes of small fragrant green flowers), Julbernardia (or mtondo) and Isoberlinia. The basin has high levels of biodiversity linked to high diversity of habitats, including uplands woodland, bush land thickets, bushy-grassland and wetland vegetation which includes grass land and swamps as well as wild animals including buffalo, chimpanzee, elephants, giraffe, statunga, lions, zebra, antelope, leopard and bird species. Its natural characteristics are of great socio-economic importance such as source of food, timber, fuel and many of the non-wood products such as resources for eco-tourism, bee products, habitat for wildlife, and protection of water resources as well as environmental values. The Malagarasi River is important for the ecological functioning of the Mahale and Gombe National Parks and Lake Tanganyika which are rich in variety of animals, plant species and aquatic species such as fish which is important source of protein and income to people. In addition, the basin has several protected areas including two National Parks (1,630 Km2), one Game Reserve (11,000 Km2) and eleven Forest Reserves (3,870 Km2).

164. The **Great Ruaha Basin** has a total area of 85,554 Km^2 equivalents to 47% of the total area of Rufiji River basin. The Great Ruaha basin is endowed with a number of biodiversity resources including the Miombo and acacia woodland as well as wild animals including elephants, hippo, giraffe, and buffalo. The basin also includes a number of seasonal and permanent wetlands, some of them being the important bird areas with endemic species such as Ashy Starling and Yellow Collared Lovebird as well as large aggregates of wetland migratory bird species. The mountain woodland of the Kipengere and Livingstone mountains contains several endemic or altitudinal localized plant and animal species. The Great Ruaha River is important for the ecological functioning of the Ruaha National Park which is also well endowed with a variety of animals and plant species which serve as tourism attraction.

165. The **Lake Rukwa Basin** is an internal drainage basin located in the south-western part of Tanzania. The basin lies within the Rift Valley and it covers an area of about 88,000 Km^2 extending over parts of the districts including Sumbawanga Rural, in Rukwa Region; Mpanda Rural and Mpimbwe in Katavi Region. The basin has a number of National Parks, Game and Forest Reserves, and Game Controlled Areas. These are areas of high biodiversity values and their main purpose is conservation of habitats and wild animals, which constitute unique

naturally occurring biodiversity hotspot of Tanzania and are of global significance. The basin is home of the Katavi National Park, the third largest park in Tanzania possessing very critical endemic species of flora and fauna, essential habitats to some of the rare and endemic species of primates such as the Sanje Mangabey (*Lophocebus kipunji*). The Park is the core of the western Tanzanian wildlife circuit and part of the Katavi-Rukwa-Lukwati ecosystem, an important local and National Conservation Area. The Katavi Park, together with the Rukwa and Lukwati Game Reserves and the surrounding hunting blocks, constitutes one of the biggest and richest wildlife areas in Tanzania. The lake also hosts significant fish biodiversity some of which are endemic to the basin.

166. The forests of the basin are among the top ten important bird conservation areas in Africa, whereby endemic species like the Kufous Winged Sunbird find their refuge. Uncontrolled human activities in most forests and woodlands have threatened existence of valuable timber species like Mvule (*Milicia excelsa*) and Mninga (*Pterocarpus angolensis*),

2.3 Threat, root causes and barrier analysis

Threats and Root causes

167. The country is experiencing rapid rates of deforestation and land degradation in all agroecological zones leading to reduced ability of the land to render sufficient ecosystem goods and services. Tanzania has lost at least one third of its important ecosystems and biodiversity in the past few decades. The country's forest cover has declined by almost 38 per cent whereas 18% of the country's mangrove forest was lost between 1980 and 2005. Deforestation is occurring in both reserved and unreserved forests but is highest in unreserved forests[9]. The annual rate of deforestation is estimated at alarming 0.4 million hectares (0.9 per cent). At this rate, the country would lose most of its forests in the next 50–80 years[10].

168. About 70% of Tanzania's population lives in rural areas and is engaged largely in subsistence farming and livestock keeping. Rural Tanzanians rely on natural resources and local crop genetic resources to satisfy basic needs, including fuel, food, water and income. Over exploitation of resources leads to reduced productivity and increasing vulnerability to climate related shocks. Slash and burn agriculture and wood collection for energy also contribute to extend the degradation to forests and woodlands, as well as the loss of biodiversity and wildlife habitats, increased risk of bush fires, and ecosystem shifts (for example from forests to woodlands or from woodlands to bushes and grasslands).

169. All landscapes targeted by the project, including forests, rangeland and agricultural components within them have been facing serious degradation and are not exempt from deforestation and land degradation. The combined effects of the loss of biodiversity and ecosystem services result in poor quality of land resources used by smallholder farmers. The damages to the state of land resources due to degradation not only lower productivity but also reduce the quantity of available productive land. In most cases, land degradation induces land shortages resulting in shortened fallow periods, increased continuous cultivation, and increased pressure on the immediate accessible land.

170. **Population growth and agricultural expansion.** The population in Tanzania is predicted to grow to 59.8M in 2025 from 44.9M in 2012 and 36.1M in 2002. This will increase the demand for food resulting in more habitat loss and pressure on biodiversity in natural ecosystems, causing more deforestation and land degradation. Rapid population growth leads to rise in demand on land, wood and food, putting additional pressure on ecosystems. Agricultural expansion is generally considered to be the main underlying driver of deforestation, and

[9] NAFORMA, 2015 - National Forest Resources Monitoring and Assessment of Tanzania Mainland. Main Results. Ministry of Natural Resources and Tourism, Tanzanian Forest Services Agency.
[10] FCPF, 2014. Forest Carbon Partnership. Annual Report.

firewood collection and charcoal making as major causes of forest degradation[11]. Much of the increase of agricultural production over the last two decades has come from area expansion. FAOSTAT (2016) reported that between 1994 and 2014 domestic cereal production increased by 74 percent, but this was achieved more by increasing area cultivated (149 percent increase in the production area) and to a certain extent through increasing productivity (46 percent increase in crop yields).

171. **Weak link and coordination within and across sectors.** The existing formal inter-sectoral coordination for forest landscape restoration (FLR) as well as integrated system for natural resource management and planning are inadequate. Thus, inadequate coordination between different government agencies involved in SLR persists. This needs to be addressed to facilitate harmonization and synergy between sectors and policy processes are needed within and across economic sectors.

172. **Inappropriate extension approaches and tools.** Farming practices in Tanzania are variable. They are shaped by many factors, among them the existing variable agro-ecological characteristics as well as socio-cultural aspects associated with the over120 ethnic societies[12]. Under such circumstances it is not easy to select the most appropriate intervention for a specific area especially if short-term results are expected. It is also important to avoid confusion among the farmers by introducing multiple and parallel projects/interventions using different approaches and terminologies. So often different organizations implement programs differently (in most cases with similar broader goals of poverty reduction) to similar farmers using different approaches. Worse still is that the programs may last for a few years and the same organizations or different ones come in to work with the same farmers before the previous project has become successful. It is therefore critical for the various sector policies to be developed and implemented in such a way that conflicting interventions are avoided.

173. **Gaps and overlaps in legislation, policies and plans.** There are a number of gaps in legislation, policies and plans leading in some cases to conflicting interests between and among sectoral central government agencies and local government structures with regard to decision-making. The role of line-ministries and local government authorities in jointly implementing SLR at landscape level is unclear. Likewise, frequent changes in the responsibilities and structures of various sector ministries have not been followed by revision in the respective sectoral legal framework.

174. **Lack of clear policy direction to facilitate innovative and sustainable financing of SLR.** There is a growing awareness and concern that deforestation has contributed to soil erosion, loss of agricultural productivity, loss of wetlands, and fuel wood and water scarcity. Through improved policies leading to sustainable management of land and forests, smallholder farmers can provide valuable services, such as carbon sequestration, water flow, or biodiversity protection. Buyers of such services can include international actors, such as countries or utilities seeking to offset carbon emissions, local entities, such as hydropower facilities dependent on reliable water flows, tourist operators' dependent on biodiversity, and Non-Governmental Organizations. Thus, innovative financing policies such as payments for environmental services, fees on forests and wildlife income, etc. could be used to support national SLR initiatives if a supportive policy were in place.

175. **Biomass energy demand.** The lack of alternative and reliable sources of energy for cooking and lighting in Tanzania puts tremendous pressure on forest resources through heavy reliance on biomass for energy mostly from charcoal and firewood. This type of energy accounts for about 90% of all energy sources in the country, whereby charcoal is mostly used in the urban areas whereas fire wood is commonly used in the rural areas. It is estimated that the per capita consumption of fuelwood in Tanzania is one cubic meter per annum, representing about 50 million cubic meters of wood consumed annually just for energy purposes. Traditional charcoal

[11] Kessy, J.F., Nsokko, E., Kaswamila, A., and Kimaro, F. 2016. Analysis of drivers and agents of deforestation and forest degradation in Masito forests, Kigoma, Tanzania. International Journal of Asian Social Science 6(2). 93–107 https://ideas.repec.org/a/asi/ijoass/2016p93-107.html

[12] CCAP Partners Consultancy Report. 2013. Documentation of The Lessons and The Best Practices for Climate Smart Small-Scale Agriculture

production has led to severe deforestation around the larger cities, causing environmental stress and land degradation. The amount of charcoal consumed is expected to further rise in the coming years due to the rapid population growth and urbanization.

176. **Climate change and extreme weather events.** Tanzania is vulnerable to increased climate variability. More frequent extreme weather events (e.g. droughts, sporadic and heavy precipitations leading to floods and severe soil erosion) and temperature fluctuations affect crop and livestock production. Climate change projections indicate that the frequency and severity of extreme weather events will continue to escalate. The impacts of climate change are being felt in most parts of Tanzania in the form of increased temperatures, seasonal shifts in rainfall patterns, particularly in highland areas, severe and recurring droughts and floods with devastating effects to most vulnerable sectors (including agriculture, forestry, and fisheries),These changes and their adverse consequences are projected to escalate in the near and longer terms, with negative impacts on the economy, health and safety, and food and water security.

177. **Political Instability in Neighboring Countries.** This is particularly a problem in Malagarazi River Basin, one of the areas selected for on-the-ground interventions. The presence of refugees from neighboring countries (Burundi, Congo DRC and Rwanda) has placed considerable pressure on the ecosystem. All refugee camps, especially in Kibondo, Kasulu and Uvinza districts, are close to forests or game reserves. Since 1994, Tanzania has experienced this influx of refugees and areas around refugee camps are marked with massive deforestation for shelter and for farming, resulting in environmental degradation and loss of biodiversity. A major problem facing the forest resources is deforestation arising from human activities such as those related to agriculture (fires, shifting cultivation and overgrazing), uncontrolled tree felling to provide building materials (poles, posts and sawn wood), production of honey, beeswax and medicines, and provision of energy (firewood.

178. **Gender and Youth Mainstreaming.** In Tanzania, as in most of the African continent, women provide approximately 70 % of the agricultural labour[13]. However, they have little control over farm decision-making. Specific gender-based constraints to increased productivity of women farmers include insecurity of tenure and access to resources, low levels of literacy, limited resources to purchase inputs, and social restrictions on meeting with extension agents and accessing other sources of information. Women traders and other businesswomen face difficulties obtaining permits, financing and services, (Rubin et al., 2009[14]). Without direct benefits of their labour and with no say in decision making women and youth have no incentives for landscape restoration initiatives and most are engaged in off-farm casual labour that earns them direct benefit.

179. **Inadequate coordination of best landscape restoration practices.** There are various best practices in the country which are coming from sectors such as agriculture, forestry, water, livestock, fisheries, wildlife and energy in the aspects of Integrated Soil fertility management, conservation agriculture, rain water harvesting, and smallholder irrigation management, cross slope barriers, agro-forestry, pastoralism and rangeland management, sustainable forest management (SFM), and income generating activities (IGAs). However, support, monitoring and dissemination of these practices is limited and not adequately coordinated.

180. **Insufficient information about the role that agricultural and forest diversity plays in maintaining ecosystem services and sustainable production.** Maintaining the diversity of crop genetic resources is not given full value by agricultural and environmental agencies, leading for example to the replacement of traditional fruit tree varieties with other species. The value of local crop genetic diversity and forest species diversity to improve agricultural productivity and resilience is not fully recognized, causing the replacement of local crop and forest biodiversity with modern varieties. Farmers are further hindered from maintaining and increasing their farm land where traditional crop and indigenous trees are grown, because of a lack of availability and access to quality and sufficient quantity of seedlings of traditional genetic materials well adapted to specific environments.

[13] ASARECA, (2009.

[14] Rubin et al. (2009). Promoting Gender Equitable Opportunities in Agricultural Value Chains. Washington, D.C.: USAID

Barriers

181. Various reports have identified a number of barriers for planning and implementing sustainable landscape restoration and biodiversity conservation initiatives in Tanzania. These barriers fall into the following three major categories. The project is designed to help address these barriers through its major components and outcomes.

<u>Barrier 1.</u> Gaps in designing, implementing and harmonizing legal and policy instruments and inadequate cross-sectoral coordination

182. The process of drafting cross-sectoral policies (such as national five-year plans) is largely a collation of various sectoral targets. There is no mechanism in place for addressing conflicting sectoral goals. Different ministries promote their own mandates with no platform to consider how those mandates align with other sectors. This has led to a set of priorities and at times incompatible targets[15]. For example, in 2016 the Tanzanian Forest Service pledged to plant over 3 million hectares of trees in the next 17 years, while agriculture policies prioritise increasing food-crop production to meet domestic demands and increase exports. Lack of policy harmonization and integration and weak cross sectoral linkages have been identified as the major barriers in designing and implementing SLR initiatives. The challenges behind these are related to: weak link and coordination within and across sectors; gaps and overlaps in legislation, policies and plans; low level of awareness of key actors about national policies, laws, and plans; limitations in implementing conservation and forest policies and strategies; and sub-optimal engagement of communities. There is need for clear policy guidance to facilitate innovative and sustainable financing of SLR. The project will assist in supporting efforts in mapping trade-offs or conflicting sectoral targets and have them recognized, in establishing a SLR platform with a clear mandate and decision-making power for improved coordination, in identifying gaps and overlaps in legislation and have them acknowledged, and in supporting efforts to ensure financial resources and human capacity for implementation and a sustainable functioning SLR platform.

<u>Barriers 2.</u> Promotion of sector centered and simplistic agricultural intensification and limited knowledge of, and experiences in, designing and implementing SLR initiatives in critical landscapes, and on how to integrate biodiversity objectives in managed landscapes for better conservation and livelihood outcomes

183. Government and private sectors are promoting intensification practices that focus on mono-cropping of uniform varieties, and high use of agricultural chemicals. Such simplistic agricultural intensification and unsustainable land management practices result in increased soil erosion, salinization, desertification, and loss of soil structure and fertility, and most importantly loss of diversity of crop species and varieties. Simplification has proven to be unsuccessful in developing agriculture in highly heterogeneous marginal environments in Tanzania. They reduce the resilience of the agricultural production system to natural risks such as the incidence of pests and diseases, frosts, floods and dry spells that often results in major production losses. Horticultural production systems suffer from forest degradation due to the reduced population of pollinators, hosted in the surrounding forests and agro forests that are known to significantly help increase production.

184. Rarely do the agriculture and forestry sectors come together to reduce trade-offs and maximize and sustain socio-economic and environmental gains from sustainable intensification measures that enhance the role of crops, trees and forests on mosaic landscapes managed by smallholders. This loss of diversity is in turn diminishing farmers' capacity to restore degraded lands and better adapt to changing climate. The project will facilitate cross-sectoral planning to carefully identify intervention options that would maximize synergies and minimize trade-offs between livelihoods and restoration objectives. This joint exercise will help land managers

[15] URT. 2016. National Five-Year Development Plan 2016/17-2020/21: nurturing industrialization for economic transformation and human development. United Republic of Tanzania, Dar es Salaam.

to adopt sustainable forest and agricultural land management practices that not only help in improving productivity but also enhance resilience of the agricultural production system and farming communities.

***Barrier 3.* Limited institutional capacity due to inadequate access to information and training opportunities to build knowledge and skills in SLR and to demonstrate the need for SLR, the role of SLR for improving livelihoods, and potential of use of agrobiodiversity rich options in the restoration of degraded landscapes to enhance adaptive capacity of socio-ecological systems in the face of climate variability and change**

185. While Tanzania continues to benefit from strong national and international support for ecosystem management, the information base that should support decision making remains scattered and poorly accessible to those working in the field. There is a strong need to create a knowledge management system in SLR whereby all stakeholders can share, debate and access information related to SLR initiatives in the country. This begins by supporting the existing knowledge management system to collect and summarize information relevant to decision making at different levels, and to serves as a key mechanism for the replication and up scaling of identified good practices.

186. Limited knowledge and know-how regarding biodiversity based options to efficiently restore and sustainably use degraded lands and forest and limited and/or inconsistent guidelines, plans and regulatory frameworks to sustainably manage biodiversity-rich landscapes and their components are major barriers that this project attempts to address. Raising awareness and building the knowledge and technical capacity of actors, staff of local governments, is crucial in this respect. Low level of technical and institutional capacity as well as poorly developed knowledge management systems for guiding the planning, implementation and evaluation of SLR initiatives continue to be barriers for implementing even the existing policies and legal frameworks that are supportive of restoration initiatives.

187. Lack of appropriate information makes also communities at a disadvantage as they try to address growing needs with fewer resources. Smallholders, who are too poor to take risks in adopting new and unfamiliar forest and land management and use practices, could remain tied to increasingly unsustainable and unproductive agriculture. If assisted and shown alternative ways they would adopt new management practices provided that these practices improve their livelihoods and help restore degrading forest and agricultural lands. Lack of knowledge of viable options in terms of neglected and yet high potential crops is further reducing genetic diversity thus depriving farmers of options to adapt to new climatic and economic conditions.

188. Because of limited access to information and knowledge, relevant institutions at all levels, from national to local, face challenges in terms of technical and institutional capacity and financial resources. Inadequate institutional capacity makes coordination of SLR initiatives difficult. Consequently, the capacity of the government to undertake SLR remains limited. Inadequate funding for financing SLR (in the form of research, extension, capacity building, and law enforcement) is one of the drawbacks in successful implementation of various initiatives geared to halting biodiversity loss, and has been identified as the major constraint in the formulation, implementation and revision of policies, laws and strategies in SLR.

189. The current legal and policy environment and financial allocation related to agricultural production does not support biodiversity based diversification options to combat the threats of increased unpredictability of rain fall and high level of land degradation. There is not a well-articulated legal and administrative framework to provide a basis for developing agreements with farming and forest dependent communities in ways that encourage them to enter into research and development partnerships involving the sharing of genetic resources and associated knowledge and benefiting from them. Nor are there mechanisms in place to engender confidence on the part of farmers and forest dwellers that their agreements can be enforced if down-stream users of their resources or associated knowledge fail to comply with important provisions. Thus far, farmers and forest dwellers have not been provided with incentives to engage in initiatives that increase the contributions of biodiverse farming systems to ecosystem

goods and services that build resilience to climate change, enhance food security and sustain agricultural production systems.

2.4 Institutional, sectoral and policy context

Institutional framework and national policy context

190. Tanzania has put in place institutional frameworks, from the central government to the local level, to manage natural resources and environment related initiatives. The President's Office-Regional Administration and Local Government (PORALG) works closely with Local Government Authorities (LGAs) through their various departments in collaboration with the respective sector ministries to implement the strategic interventions at local level. Implementation of policies, laws and plans is also assisted by the existing committees within municipalities, districts, wards, villages and sub-villages. Successful implementation of policies, laws and plans also requires enhanced engagement with Civil Society Organizations (CSOs), development partners, the private sector, and academic and research institutions.

191. Institutional arrangements for the management of the environment in Tanzania have two basic types of environmental management functions. These are:

(i) Sectoral Environmental Management Functions (also known as Type A functions) that are concerned with the management of specific natural resources or environmental services, such as forestry, agriculture, fisheries, wildlife, mining and waste management; and

(ii) Coordinating and Supporting Environmental Management Functions (commonly referred to as Type B functions) that are engaged with the task of providing central support functions by coordinating and supporting the different and sometimes conflicting Type A activities and integrating them into an overall sustainable system.

192. Type A functions are to a large extent directly operational and these are also guided by sector specific policies and acts such as the Forest Act (2002), Fisheries Act (2003), Wildlife Conservation Act (1974), Mining Act (1998), Grazing-land and Animal Feed Resources Act No. 13 of 2010 and other relevant pieces of legislation.

193. The Forest Act obliges establishment of forest management plans for all types of forests to ensure sustainable management in the long-term. The Fishery Act emphasizes the conservation of fishery resources critical habitats or endangered species. The Act further requires formation of community management units for the purpose of protecting and conserving fishery resources. This act is particularly relevant for the Lake Rukwa basin. The Wildlife Conservation Act provides for the conservation of wildlife and ensures protection, management and sustainable utilization of wildlife resources, habitats, ecosystems and the non-living environment supporting such resources, habitats or ecosystems with actual or potential use or value.

194. The National Agriculture Policy addresses constraints and challenges that are associated with biodiversity (agro-diversity) management such as crop pests, diseases and erosion of the natural resource base and environmental degradation. The Grazing-land and Animal Feed Resources Act provides for the management and control of grazing-lands, animal feed resources and trade as well as provision for other related matters. The Act further gives mandate to the Local Government Authority in relation to soil conservation, prevention of adverse effects to soil and soil erosion in grazing-land, rehabilitation, protection or improvement of the grazing-land, grazing, watering or movement of stock and other domestic animals; husbandry practices of grazing-land; and construction of infrastructures.

195. Type B functions concern the overall organization, rules and coordination and the establishment of a coherent general context for environmental management. The National Environmental Policy (1997) and the Environmental Management Act (EMA) (2004), guide type B functions by providing a policy and legislative

framework for coordination of implementation of policies and laws on environmental and natural resources management.

196. The Environmental Management Act provides both a legal and institutional framework for the sustainable management of the environment, prevention and control of pollution, waste management, environmental quality standards, public participation, environmental compliance and enforcement. It further recognizes the need for research, public participation in environmental decision making, environmental awareness raising, and dissemination of environmental information. The Act gives the Local Government Authorities the mandate to ensure environmental compliance in their areas of jurisdiction.

197. The task of overall coordination and policy articulation for environmental management in the country and the provision of central support functions is conferred to the Vice President's Office. The Division of Environment in the Vice President's Office is responsible for environmental coordination. It has four main functions: (i) policy formulation; (ii) co-ordination and monitoring; (iii) planning; and (iv) undertaking policy-oriented research. The Regional Secretariat is responsible for the coordination of all advice on environmental management in the regions and a Regional Environmental Management Expert is responsible for advising Local Government Authorities (LGAs) on such matters. Local Government Environmental Management Officers are appointed in each City, Municipal, District and Town Councils. Also, each District Council designates, for each administrative area of a Township, Ward, Village, a public officer who shall deal with environmental issues. This office, with the advice of the National Environmental Advisory Committee, delegates the implementation of the Act to sector ministries and other government bodies, regional secretariats and local government authorities through a network of Sector Environmental Coordinators, Regional Environmental Management Experts, District/Town, Municipal Environment Committees and officers and Village Environment Committees.

198. The four key Ministries with mandates related to natural resources management are the Ministry of Water and Irrigation (MoWI); Ministry of Agriculture, Livestock and Fisheries (MoALF); Ministry of Land Housing, and Human Settlements, (MoLHHS); and Ministry of Natural Resources and Tourism (MoNRT). Particularly important national institution for this project are the Division of Forest Resources of MoNRT.

199. The institutional framework ingrained in the Environmental Management Act (EMA 2004) places the Minister responsible for environment as the focal coordination institution for the implementation and enforcement of the Act. EMA clearly states that the Minister shall be overall responsible for fostering co-ordination between the Government, Local Government Authorities and other bodies engaged in environmental management as a cross-cutting issue and shall in that respect maintain a system of collaboration, consultation and co-operation with any person having functions provided under the Act.

200. Tanzania has established a National Environmental Advisory Committee (NEAC). NEAC is the advisory body to the Minister. NEAC consisting of members from relevant government departments and agencies, the private sector, academia and civil society. In the public service, it draws its members from directors of government departments and agencies that are involved in sectors relevant to environmental and natural resource management.

201. The direct operational role on management of specific natural resources (e.g. land, water, forests, wildlife, minerals, etc.) and associated economic sectors such as agriculture, livestock, fisheries, forestry, tourism, mining, potable water, and waste management are conferred to sector Ministries and Local Government Authorities.

202. The other key government institutions are the Local Government authorities (LGA) and research and academic institutions. The Local Government Authorities are charged with the responsibilities of overseeing land issues in areas of their jurisdictions. The District and Village authorities intervene on environmental challenges though Village Environmental Committees (VECs). The committees are responsible in formulation and foreseeing various bylaws. Before the bylaws are enacted, they must be approved by the village assembly where all villagers participate

203. Research and academic institutions involved in biodiversity conservation and landscape restoration undertakings in Tanzania are: Ardhi University; Agriculture Research Institute (ARI); Ministry of Agriculture Training Institute (MATI); Open University of Tanzania; Sokoine University of Agriculture; University of Dar es Salaam; Tanzanian Fisheries Research Institute, Tanzanian Livestock Research Institute (TALIRI), Tanzanian Livestock Training Agency (TALITA); and Tanzania Forestry Research Institute (TAFORI).

Global and regional policy context

204. Tanzania is a signatory to all major international multi-lateral environmental agreements (MEAs) that are relevant to the restoration of degraded landscapes and deforested forests in the country. The relevant conventions include; (i) Convention on Biological Diversity (CBD), (ii) United Nations Framework Convention on Climate Change (UNFCC), the United Nations Convention on Combat desertification (UNCCD) and (iii) International Plant Protection Convention.

205. The project also supports the objectives of the African Forest Landscape Restoration Initiative (AFR100) that is aimed at bringing 100 million hectares of deforested and degraded landscapes across Africa into restoration by 2030. This initiative connects political partners—participating African nations—with technical and financial support to scale up restoration on the ground and capture associated benefits for food security, climate change resilience, and poverty alleviation. AFR100 contributes to the African Resilient Landscapes Initiative (ARLI), and complements the African Landscapes Action Plan (ALAP) and the broader Climate Change, Biodiversity and Land Degradation (LDBA) program of the African Union. AFR100 also accelerates progress towards achieving the Sustainable Development Goals (SDGs) and the Paris climate agreement. Tanzania has not officially signed onto AFR100 though the country has committed to a national tree planting strategy that aims to contribute to reducing forest degradation and rehabilitating landscapes.

2.5 Stakeholder mapping and analysis

206. During the design phase (PPG), guidelines were developed describing the types of stakeholders and actors that the Project should ideally engage. Based on this guidance, the executing agencies, together with national partners, undertook extensive site visits, stakeholder consultations with potential partners and related institutions to explore roles and inputs and ways of creating added value and synergies.

207. The stakeholder consultation began in 2016 with the engagement by the Vice Presidents' Office of relevant authorities in the discussion on the priorities that needed to be addressed by this project proposal. Subsequently in 2017 the project team conducted meetings with relevant local authorities in 11 districts within the target landscapes identified as priorities from the initial consultation.

208. The Project will adopt a participatory approach involving participation of a wide range of partners at national and targeted districts level. The main stakeholders of the project will be the National Government and the District Governments within the targeted landscapes. The National Government has key Ministries, Departments and Agencies that have mandates which are relevant to natural resources management and landscape restoration in Great Ruaha, Lake Rukuwa, and Malagarasi basins. The District Governments also have their own Departments that are central to natural resource management and landscape restoration. The Project, being a partnership initiative, will present a collaborative effort among the National Government, District Governments, Non-Governmental Organisations and local Community Based Organisations. The details of key stakeholders, their mandates, potential roles and contributions including their participation in management and coordination are described in Table 1 below.

209. In addition to the above listed organizations, at the community level active collaboration will be built with relevant community based organizations. Additional partners from civil society organizations and the

private sector will also be identified during the first year of project implementation based on their capacity and interest to contribute to specific outputs. The Project will also share experiences with development partners in Tanzania.

Table 1. Stakeholder Analysis

Actors	Mandate of the Institution	Anticipated roles and responsibilities in the project	Level of engagement
Ministries, Departments and Agencies (MDAs)			
Vice President's Office (VPO) Division of Environment (DoE) and the National Environmental Management Council (NEMC)	The DoE is responsible for the co-ordination of all national and international matters related to environmental protection and management. It is also responsible for national reporting to the relevant international conventions (e.g. UNCCD. CBD and UNFCCC) and serves as the Focal Point for all matters relating to GEF in the country. The NEMC sits the VPO, where its main role is to provide advice on all matters pertaining to environmental conservation and management. The NEMC is the leading technical advisory, co-ordinating and regulatory agency responsible for the protection of the environmental and sustainable use of the natural resources in Tanzania.	The Vice President's Office will act as project executing agency for this project. Execution in consultation with NEMC will be shared between the VPO at national level, district governments and line ministries on an on-demand basis. The Office will ensure the alignment and integration of the project activities with national environmental strategies and plans and ensure policy-implementation; it will also assist with securing co-finance commitments and will communicate the results of the project to the broader community.	The VPO, in collaboration with NEMC will be the Lead Executing Agency and key enabler and custodian of the Project. The Office will host the Project Management Unit (PMU) and the Director of Environment of VPO will be charged with the responsibility of overall administration and supervision of the PMU. The Permanent Secretary - VPO will take the overall fiduciary responsibility of the project. The Permanent Secretary - VPO will serve as the Chairperson of the Project Steering Committee (PSC) and the Director of Environment - VPO and Director General - NEMC will have representation on the Technical Advisory Committee (TAC) of the project. VPO will therefore be accountable to UN Environment for delivering on the project objective and outcomes and for using the project's budget in accordance with the Project Document.
Ministry of Water and Irrigation (MoWI)	The Ministry of Water and Irrigation (MoWI) has overall responsibility for national water policies and strategies; management of surface and subsurface water; and conservation and protection of water resources. It is responsible for sectoral co-ordination, monitoring and evaluation; reviewing	MoWI will lead activities designed to demonstrate sound water mobilization and conservation practices, in the context of climate smart agriculture;	The Permanent Secretary in the Ministry will serve as the member of the Project Steering Committee and the MoWI will have representation on the Technical Advisory Committee (TAC).

	policy and legislation; formulating technical standards and Integrated Water Resources Management guidelines; coordination of trans-boundary water issues; oversight of water quality monitoring; coordination of data collection and assessment of water resources; development of water resources of national interest (including dams); supervision, monitoring and evaluation of Basin Water Boards and supervision of the Water Resources Institute Agency and the Drilling and Dam Construction Agency.	MoWI will also participate in the implementation of the water sources rehabilitation and conservation.	
Ministry of Agriculture, Livestock and Fisheries (MALF)	The MALF is mandated with providing policy guidance and services to support a modernized, commercialized and effective agriculture and cooperatives system. It works to provide a conducive environment for stakeholders, build capacity of LGAs (District) and facilitate involvement of the private sector in contributing effectively to sustainable agricultural production, productivity and co-operative development.	The MALF will play an important supporting role, in ensuring the uptake of SLR and the adoption of appropriate agricultural technologies that conserve natural resources and sustain livelihoods. It will play an important role in capacity building for SLM in LGAs (Districts), in providing improved extension services and in brokering public-private partnerships.	Enabler and project partner, with representation on the Project Steering Committee (PSC) and Technical Advisory Committee (TAC).
The Ministry of Natural Resources and Tourism (MNRT) **Forest and Beekeeping Division (FBD)**	The MNRT is responsible for overseeing the land-based management of all natural, cultural and tourism resources in the country. The mandate of the Ministry includes the development of appropriate policies, strategies and guidelines for managing natural resources and the formulation and enforcement of environmental laws and regulations, including the issuing and monitoring of forest harvesting permits. Under the MNRT, the FBD is directly responsible for the development of forest policy, laws and regulations and for supervising their implementation in the forestry sectors.	The MNRT will develop enabling policy and regulations in support of the project and will work to improve policy practice interactions. MNRT has an important role to play in securing watershed services and its support is vital for the success of the project. The FBD will develop enabling policy and regulations in support of the project objectives and will work to improve policy-practice interactions. It will also provide technical inputs, as needed. The TFS has a key role to play in identification of forests to be placed under greater protection, identifying degraded forests for rehabilitation	Will be a member of the Project Steering Committee. Project partner and will participate in Project Technical Advisory Committee (TAC) and participate in selected project activities.

Tanzania Forest Services Agency (TFSA)	The TFS is an executive agency mandated with managing national forest reserves (natural and plantations) and forest resources on general lands.	and strengthening enforcement of laws regarding harvesting of forest resources SLM, SFM, BD Conservation and CC. It also plays an important role in building relationships with communities around prioritized forest landscapes and will play an important role in overseeing on-going implementation of project-initiated activities and providing technical support.	Project partner and will participate in Project Technical Advisory Committee (TAC) and participant in selected project activities.
The Ministry of Land, Housing, and Human Settlements (MLHHS)	The MLHHS is mandated with facilitating effective management of land and human settlements in Tanzania.	The MLHHS plays an important role in ensuring wise and informed allocation of land for settlement and other uses, in alignment with the objectives of the project.	Will be a member of the Project Steering Committee.
National Land Use Planning Commission (NLUPC)	The NLUPC is responsible for preparing physical land use plans; formulation and co-ordination of land-use policies and legislation; specification of norms, standards and criteria for land-use planning and the protection and beneficial use of land, and the maintenance of land quality in support of improved socio-economic development and optimal production. It has key decision-making powers in respect of land use planning in Tanzania.	The NLUPC will play a central role in providing planning expertise required for the project and coordinating and guiding activities related to land-use planning. It will be directly responsible for implementation of some project activities related to Village Land Use Planning.	Project partner and participant in project activities, with representation on the Project's Technical Advisory Committee.
Ministry of Energy and Minerals (MEM).	The MEM is responsible for facilitating the development of the energy and mineral sectors in Tanzania, through policies, strategies and plans for sustainable use	The MEM will play an important supporting role by assisting with the regulation and monitoring of illegal wood-fuel harvesting from forests, unregulated mining activities in the targeted area and in monitoring and preventing pollution of water bodies. Because of the importance of the River Basins from a hydro-electric power perspective, the MEM has a direct interest in securing water flows in the project area.	PS will be a member of the Project Steering Committee.

District Government Departments			
President's Office - Regional Administration and Local Government (PMO-RALG)	To build the capacity of Regional Administration, coordinate and monitor Regional affairs and provide support to Local Government Authorities (LGAs) by Regional Secretariats.	Develop capacity of experts to plan and implement (based on training needs)	Will be members of the Project Steering Committee (PSC).
District and Local Government Authorities	Local Government Authorities (LGAs) including Municipal and District Councils, and Ward Development Councils (WDCs) are responsible for ensuring sectoral policies, plans, and programs are integrated into locally developed programs. Within the policy framework for decentralization, the mandate to provide basic services, including water supply and sanitation has been devolved to the lowest administrative level, notably the District Councils.	Will nominate project focal points who will act as liaisons with the project Management Unit for the day to day supervision of works and will act as primary points of relay with the local communities; will provide assistance for consultation and operations of the project These authorities will contribute technical input into the project and upscale lessons generated by project activities at project pilot sites. They will play a lead role in the Outputs of the project relating to land use planning, capacity development, extension services etc.	Provision of Project Focal Points and technical support for implementation. The Districts will have representation on the Technical Advisory Committee.
Village Councils/Assemblies	Village Councils are responsible for planning and coordinating development activities and rendering assistance and advice to villagers in respect of agriculture, forestry and other such activities.	Village Councils will provide a democratic, institutional vehicle for the project to secure the support, involvement and beneficiation of local communities from project-related activities.	Participants and beneficiaries of the project.
Village Natural Resource Committees	Village Natural Resource Committees (VNRCs) are responsible for overseeing the protection, conservation and lawful utilization of natural resources.	VNRCs will actively support the on-site implementation of project activities, particularly with respect to monitoring and enforcement of permits and laws, awareness-raising and direct implementation of SLM, SFM, BD conservation and Climate Smart Agriculture practices. Specific roles will be determined	Participants and beneficiaries of the project.

		during consultations in the inception phase of the project.	
Scientific communities (Research Institutes)			
National Carbon Monitoring Centre, Sokoine University of Agriculture (NCMC – SUA)	This is the institution that manages an effective national system of measuring, reporting and verification of carbon in forest ecosystems for the United Nations Framework Convention on Climate Change (UNFCCC) and the international community on behalf of the Nation. The focus is on Carbon emission reductions in the forestry Sector.	It will be directly responsible for implementation of some project activities e.g. tCO_2 emissions avoided/sequestered	Project partner and will participate in Project Technical Advisory Committee (TAC) and participant in selected project activities.
Centre for International Forest Research (CIFOR)	This is a non-profit, scientific institution that conducts research on the most pressing challenges of forest and landscape management around the world. Using a global, multidisciplinary approach, they aim to improve human well-being, protect the environment, and increase equity.	Will provide overall support in the project execution and monitoring	Project partner and will participate in Project Steering Committee (PSC). Will be involved in planning and execution and monitoring progress of project interventions and facilitating collaboration with partners within the Global TRI Programme. Will provide assistance in development and delivery of training, sharing their substantial tools and resources in relevant components. CIFOR will also draw on specialized knowledge and expertise among its staff, and partners, for advising VPO on relevant project activities and global policy matters as needed.
Bioversity International	Bioversity International delivers scientific evidence, management practices and policy options to use and safeguard agricultural and tree biodiversity to attain sustainable global food and nutritional security.	Will provide overall support in the project execution and monitoring	Project partner and will participate in Project Technical Advisory Committee (TAC). Will be involved in planning and execution and monitoring of progress of project interventions and facilitating collaboration with partners with-in the Global TRI Programme. Will provide assistance in development and delivery of training, sharing their substantial tools and resources in relevant components. It is also

			expected that Bioversity will be able to draw on specialized knowledge and expertise among its staff, and partners, for advising VPO on relevant project activities and global policy matters as needed.
World Resources Institute (WRI)	WRI is a global research organization. WRI is a global research organization that spans more than 50 countries Our work focuses on six critical issues at the intersection of environment and development: climate, energy, food, forests, water, and cities and transport.	Will be involved as consultant agency to undertake Restoration Opportunities Assessment and to inform rehabilitation processes for different land use systems – disaggregated by biodiversity rich landscapes, forests, & managed landscapes (grazing areas and agricultural lands)	Technical support and guidance
Multilateral Agencies			
United Nations Environment Programme (UN Environment)	The United Nations Environment Programme is the leading global environmental authority that sets the global environmental agenda, promotes the coherent implementation of the environmental dimension of sustainable development within the United Nations system and serves as an authoritative advocate for the global environment. UN Environment work encompasses: Assessing global, regional and national environmental conditions and trends • Developing international and national environmental instruments • Strengthening institutions for the wise management of the environment Mission "To provide leadership and encourage partnership in caring for the environment by inspiring, informing, and enabling nations and peoples to improve their quality of life without compromising that of future generations."	UN Environment is the Implementing agency for this project, providing quality assurance, oversight, and support. It may also facilitate linkages to other relevant programs and projects, access to data and specialized technical advisory services. UN Environment will also be responsible for the project's GEF specific M&E function, including evaluation services according to its UN Environment procedures, as well as compliance with GEF requirements. As co-implementing agency of the TRI programme UN Environment will provide more specifically technical support for improving knowledge of SLR finance as well as will facilitate the synergies and complementarity with the other 10 Child TRI projects.	The GEF Implementing Agency for the Tanzania project and co-implementing Agency together with IUCN and FAO for the global TRI programme

Food and Agriculture Organization of United Nations (FAO)	FAO's mandate is to build a world without hunger through technical cooperation and assistance.	These organizations will play the following roles: • Be responsible for project monitoring and evaluation of the project activities in line with the TRI programme at various levels. • Participate in planning and execution of project interventions and facilitating collaboration with other partners. • Provide assistance in development and delivery of training activities, sharing of their substantial tools and resources in relevant components. • Provide support in the implementation of project activities at county level where relevant. • Facilitate regional and international dialogue and networking.	Co-implementing GEF agencies of TRI programme, together with UN Environment
International Union for Conservation of Nature (IUCN)	IUCN's mandate is to influence, encourage and assist societies throughout the world to conserve the integrity and diversity of nature and to ensure that any use of natural resources is equitable and ecologically sustainable.		
Civil Society Organizations			
World Wide Fund for Nature (WWF), Tanzania	WWF aims to stop the degradation of the planet's natural environment and to build a future in which people live in harmony with nature, by: ensuring that the use of renewable natural resources is sustainable. promoting the reduction of pollution and wasteful consumption	WWF has extensive experience on Integrated Ecosystem Approach for Landscape restoration and biodiversity in Tanzania and internationally. This project will benefit from this experience.	The WWF will play an important role in promoting community-based natural resources management and support and strengthening the necessary capacities of local communities.
Tanzania Forestry Conservation Group (TFCG)	TFCG have a mandate to conserve and sustainably manage forests. They do so by developing sustainable livelihoods for local communities and through capacity development of the local communities and local institutions to sustainably manage forests. They are further committed in	TFCG has extensive experience in the coastal area and the eastern arc mountains, particularly in the provide sustainable soil and water management, protect biodiversity and create carbon sinks	TFCG will be an important partner in terms of developing best practices and sustainable land management options.

	advocating for improvement in forest governance and policy at local, national and international level.		
Local communities			
Livestock Keepers	Livestock keepers are confronted with the challenges of grazing land degradation and shrinkage of land for grazing due to population pressure and conversion of traditional grazing areas to other land uses. This affects sustainability of current livestock production system.	Livestock keepers are direct beneficiaries of this project through initiatives related to the landscape restoration, sustainable rangeland management, SFM and other complementary land management practices.	Pastoralist communities are direct beneficiaries so that progress is made to sustain livestock farming.
Farmer Groups	There has been a pressing need at Local government authority (LGA) level to develop a pluralistic approach to service provision and effective local interaction with farmers that create an enabling environment for farmers' organizations, the private sector and civil society organizations to expand their roles in agricultural innovation.	Farmer Groups are direct beneficiaries of this project through initiatives related to the agro-biodiversity conservation, sustainable landscape restoration and various land management practices.	Farmers and their organizations are the primary beneficiaries of this project
Beekeepers	In Tanzania, beekeeping is mainly a traditional and rural-based activity by local communities. The need to protect crucial forage areas for bees remains critical. Tanzania has set aside and managing 506 natural forest reserves for beekeeping.	Beekeepers will be assisted to promote their income from beekeeping as this is forest friendly. Measures that promote planting of bee fodders on the landscape will be supported by the project.	Beekeepers are also direct beneficiaries of this project through initiatives to promote beekeeping activities as an important source of income.
Private Sector			
Private Companies	Options for new SLR approach development that will involve exploration with key private sector partners engaged in farming and water supply, small rural businesses and medium-sized market oriented producers, as will avenues for marketing and supply to ensure the sustainability and commercial viability of alternate, new or niche products identified by the project.	Commercial companies operating within the project footprint - roles to be identified during consultations	The Private Sector will have representation on the Technical Advisory Committee (TAC).

2.6 Baseline analysis and gaps

210. On ground level, the project will work in the Great Ruaha, Lake Rukwa and the Malagarasi water basins. The figures below illustrate the three basins. Detailed descriptions of the biophysical, socio-economic and demographic descriptions of the three basins are provided in Annex 2.

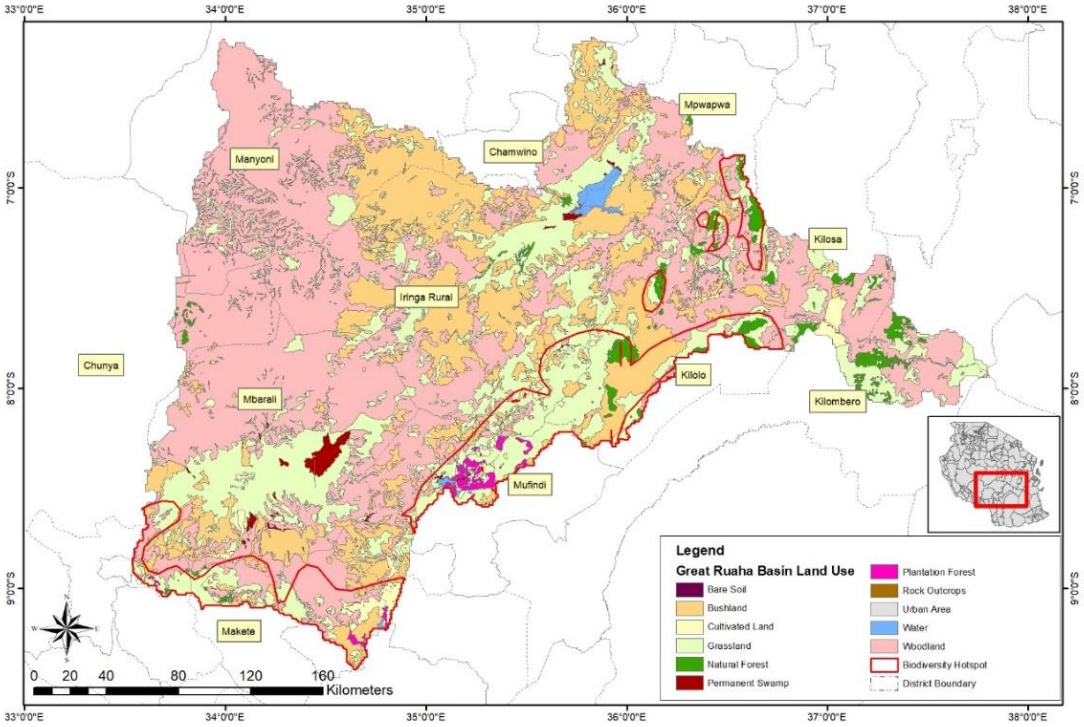


Figure 1. Land use and biodiversity critical hotspot (boundary shown in red) map of Great Ruaha Basin[16]

[16] Data Sources for figure 2,3 and 4:

1. Land use map provided by ESRI (downloaded from https://www.arcgis.com/home/item.html?id=22df85917f87410da15d7b432cc4f40c date November 6th , 2017)
2. Biodiversity critical hotspot map provided by Conservation Synthesis, Center for Applied Biodiversity Science at Conservation International (2011)
3. Basin boundary map provided by Waterbase Organization (downloaded from http://www.waterbase.org/download_data.html#id10 date November 7th , 2017)
4. District boundary map provided by National Statistic Bureau of Tanzania (2012)

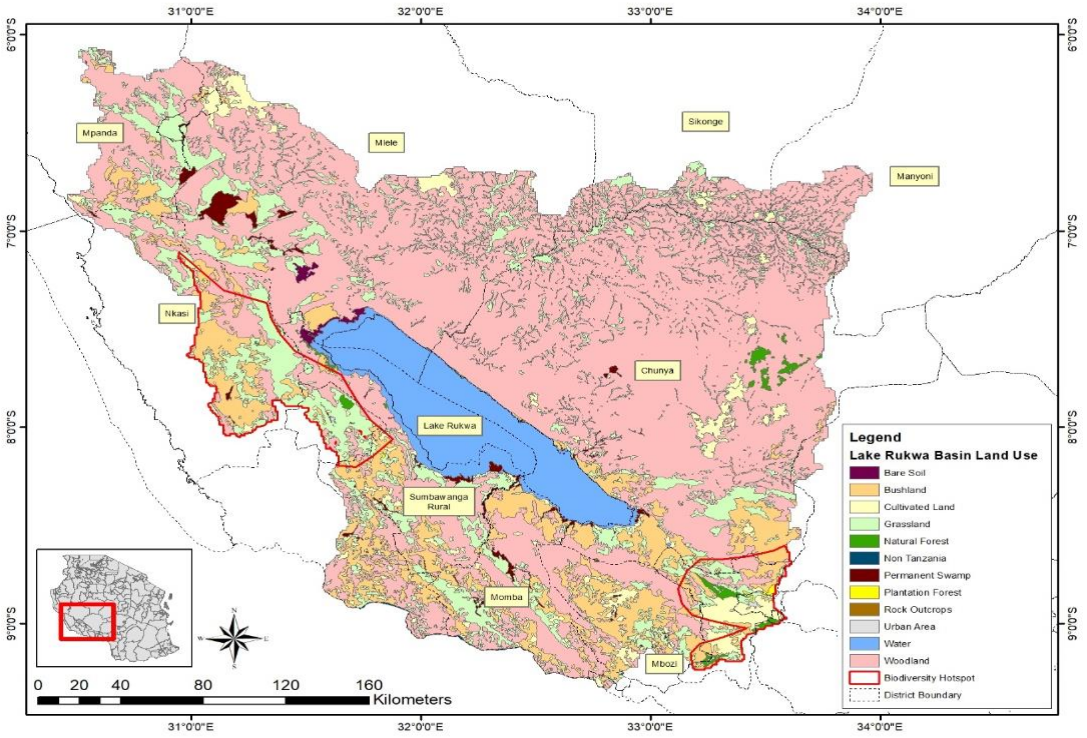


Figure 3. Land use and biodiversity critical hotspot (boundary shown in red) map of Lake Rukwa Basin

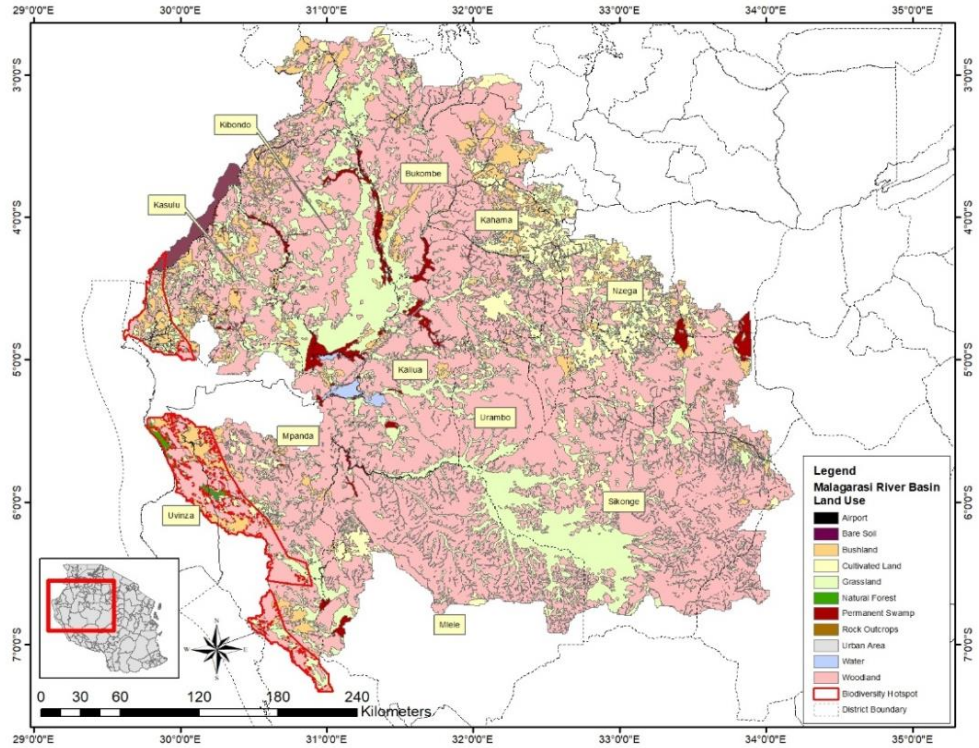


Figure 4. Land use and biodiversity critical hotspot (boundary shown in red) map of Malagarasi River Basin

211. In Tanzania, a number of initiatives support reforestation and there is a clear awareness on the potential impact of land degradation and deforestation, which is occurring in all agro-ecological zones, although with different impacts in different zones.

212. Over the last decade, Tanzania promoted joint centralized forest management and community-based forest management in its effort to decentralize forest management. The country has also put in place relatively advanced institutions, policies and strategies for sustainable forest management. Yet studies highlighted that weak forest governance, an unclear mechanism for benefit sharing, and poor enforcement of forest laws and regulations remain challenges that need to be addressed. The current institutional systems such as joint forest management are said to have failed to generate tangible benefits for local communities and contribute to sustainable management of forests.

213. Strategies for reforestation and tree planting have been in place since 1967, with the proclamation of the National Community Forestry Programme (Village Afforestation Programme). Over the years, the Tanzanian Government has designed and implemented major programs and projects aimed at restoring degraded lands. Earlier the focus was on soil and water conservation, and several projects were implemented (e.g. Dodoma Soil Conservation Programme; Natural Resource Conservation Programme in Iringa region). Their objectives were mainly to conserve land and water resources and to rehabilitate the already degraded areas. Some projects attempted to implement destocking policy to allow for natural regeneration.

214. In 2006, the Government began implementing a Strategy for Urgent Actions on Land Degradation and Water Catchments to reduce overgrazing, deforestation, wildfires, and unsustainable practices (of farming, irrigation, fishing, mining and waste disposal). Planting 1.5 million trees per annum in each district became a requirement. Schools and households were also required to plant trees. The experience so gained enabled the government to step up tree planting as a major means to addressing natural resources degradation. There has been a growing effort to plant about 10,000,000 trees per year in forest reserve boundaries, gaps and degraded forest areas.

215. Recently, a 5-year (2016-2021) **National Tree Planting and Management Strategy** has been drafted to reverse the negative trend of rapid rates of deforestation and forest degradation in the country. The strategy responds to the National Forest Resources Monitoring and Assessment (NAFORMA) findings, which show that wood demand significantly exceed supply by approximately 19.5 million cubic meters every year. Moreover, the report indicates that forest lands are heavily degraded at the rate of 372,000 ha/year. Therefore, it is estimated that reversing this trend would require a continuous planting of 185,000 ha (equivalent to 280 million trees) per year for 17 years. This requires a collective commitment of about US$ 131.5 million per year and US$ 2.4 billion up to year 2030. This can only be achieved through participation of all forest stakeholders in developing and managing the forest resource base.

216. Tree planting has been also been addressed in other programmes and strategies including the National Forest Programme, Biomass Energy Strategy, National REDD+ Strategy and National Climate Change Strategy, which explicitly recognizes the need to coordinate the government (Ministries, Departments and Agencies (MDAs) and Local Government Agencies (LGAs), private sector, Civil Society Organizations (CSOs), Community Based Organizations (CBOs), Non-Governmental Organizations (NGOs) and local communities to achieve its goals. The coordinating role is assigned to the VPO. The strategy covers all districts in which this project intends to be active.

217. However, while the Strategy provides the framework for forest landscape restoration action it does not emphasize sufficiently the importance of fostering a landscape approach, integrating actions on different land uses to address the land degradation issue from different land uses to move towards sustainable and climate resilient landscapes.

218. The baseline initiatives that the GEF project will build on the ongoing rural development programs at district level that are operationalized through Districts own local investment and operational budgets that they receive from the Central government and ministries through core programs as well as through more targeted projects (including donor-supported projects). These complement the operational funding provided through ongoing programs such as the National Tree Planting and Management Strategy (VPO, 2017-2030), the Tanzania Social Action Fund (TASAF III, World Bank), Tanzania Forest Fund, and National Environmental Trust Fund. An ooverview of ongoing relevant baseline projects is provided in Annex 6.

2.7 Linkages with other GEF and non-GEF interventions

219. A number of relevant national and international GEF and non GEF interventions have been identified, which the project will take full account of and/or with which it will develop appropriate links. This will ensure that the Project not only benefits from collaboration with other relevant initiatives and with lessons learnt in other projects, it also ensures that the project can provide a platform for bringing together a wide range of different initiatives and partners in Tanzania around a common landscape restoration agenda.

220. This Project is part of **The Restoration Initiative (TRI) Program** which has been developed to make a significant global contribution to restoring ecosystem functioning and improving livelihoods through the restoration of priority degraded and deforested landscapes, in support of the Bonn Challenge. The TRI program consists of 11 national Child projects in 10 countries of Africa and Asia, and it is supported by a Global Learning, Financing, and Partnerships project (GCP) to develop and disseminate best-practices and tools, catalyze investment in restoration, expand the scope of countries and actors engaged in forest and landscape restoration, and realize benefits at scale. As one of the 11 national Child projects under TRI, the project will build synergies and seek full complementarity with the other 10 Child projects during its implementation.

221. The proposed Project will build on each district's ongoing rural development programming as operationalised through their local investment and operational budgets. Local governments receive funding from the national government and ministries through core programmes as well as through more targeted projects (including donor-supported projects). The Tanzania TRI project will build on core operational funding delivered to Local Government Authorities (LGAs) through the departments of land, urban and rural planning, environment and forestry.

222. The project is also in line with various related national programs and strategies including the Biomass Energy Strategy, National REDD+ Strategy, the National Tree Planting Strategy, and National Climate Change Strategy described above in Section 2.4 and Annex 3. It also complements sectoral programs including those of Environment, Forestry, Wildlife, Beekeeping, Mining, Water, Land, Energy, Tourism, Agriculture and Livestock.

223. At the national level, direct links, active synergies and collaborations will be developed with the following on-going or future projects and initiatives:

- The second phases of the **Agricultural Sector Development Program (ASDP-II)** and **Water Sector Development Program (WSDP-II**), both of which are funded through various national and international sources and supported by the World Bank. The Project will especially build on the lessons learned from the first phases, and will also strive to create synergies within each district with projects on agriculture and land restoration. Using a participatory land use planning process in which district administrations will play a key role will ensure that proposed project investments are truly complementary to planned and ongoing investments in each site.

- **Tanzania's Livestock Modernisation Initiative** (TLMI), a government-led initiative aimed at increasing food and nutrition security and food safety, creating employment and contributing to the national economy, social stability and sustainable environment.

- The **National Engagement Strategy** supported by the International Land Coalition and several NGOs is a strategy used to strengthen existing multi-stakeholder national land platforms and joint strategies for coordinated action into good land governance, which focuses on policy dialogue and coordination.

- **Sustainable Rangeland Management Project (SRMP) (2016-2020).** SRMP has entered its third phase with the financial support of International Fund for Agricultural Development of the United Nations (IFAD), Irish Aid, the International Land Coalition (ILC), International Livestock Research Institute (ILRI) and the government of Tanzania. This phase focuses on the scaling-up of the joint Village Land Use Planning (VLUP) approach in several new clusters of villages, as well as expanding the original ones. This project will assess if elements and lessons learned of the VLUP approach can be integrated into landscape planning processes.

- The **Shinyanga Soil Conservation Initiative (HASHI)** (1986-2004). Although the project is now completed, it has significant lessons for the current initiative. A total of 350,000 ha has been restored with the involvement and empowerment of the communities and by bringing together government and international partners. It also built on traditional systems of enclosure (*ngitili*) to ensure acceptance by local communities. Pastoral groups were largely involved.

224. The Project also will build synergiesand draw important lessons from other international donor initiatives:

- **The Open Source Seed Initiative (OSSI)** funded by FAO through it benefit sharing fund and implemented by Bioversity International in Dodoma region. The initiative provides a framework to enhance capacity to manage crop and genetic diversity, including the capacity to produce high quality seeds by the farmers and the communities.

- **The Banana Genetic Resources and Management Systems** implemented by Bioversity in southern Tanzania (Mbeya region) and aiming at reducing pests and diseases pressures by selecting appropriate germplasm. The initiative also aims at improving nutrition in banana based systems.

- **The African Forest Landscape Restoration Initiative (AFR100)** that has a goal of bringing 100 million hectares of deforested and degraded landscapes across Africa into restoration by 2030. The initiative provides technical and financial support to participating African partners to scale-up landscape restoration works on the ground and therefore enhance associated benefits for food security, climate change resilience and poverty alleviation.

- **The African Resilient Landscapes Initiative (ARLI)**, contributes to the implementation of *African Landscapes Action Plan (ALAP)* and the broader Climate Change, Biodiversity and Land Degradation (LDBA) programme of the African Union. The AFR100 is also intended to accelerate progress towards achievement of the Sustainable Development Goals (SDGs) and the Paris climate agreement.

- **Tanzania Climate-Smart Agriculture Programme** (2015-2025), funded by DFID, and coordinated by VPO and MALF and part of the Agriculture Climate Resilience Plan 2014-2019, which has six strategic priorities, namely: i) improved productivity and incomes; ii) building resilience and associated mitigation co-benefits; iii) value chain integration; iv) research for development and innovations; v) improving and sustaining agricultural advisory services, and vi) improved institutional coordination.

- The **Global Climate Change Alliance Program** (2015-2020), supported by the EU, with an overall objective to increase local capacity to adapt to climate change, by supporting the establishment of a number of eco-villages where adaptation measures are tested in sectors such as agriculture, rangeland management, water management, sanitation and biomass energy. Main activities include climate smart agriculture, water use efficiency, diversification and renewable energies.

- **The Feed the Future program in Tanzania**, supported by USAID, through the Global Hunger and Food Security Initiative (2011-2017) is aiming at reducing food insecurity through investments aimed at improving agricultural productivity, improve market access through roads, increased trade through value chain efficiency, supplementary feeding programs.

- **The USAID Mobile Application to Secure Tenure** (2014-2016) project (MAST), currently at the pilot stage in Iringa and Njombe districts, aims to test a new, participatory approach for capturing land rights information, as well as a lower cost methodology for quickly building a reliable database of land rights claims.

- **The Land Tenure Support Programme** (DIFID/DANIDA/Sida) (2016-2019) which supports the Government of Tanzania, through the Ministry of Land Housing and Human Settlements Development (MLHHSD), to make information on land records and processes of land allocation publicly available, and clarify and address current constraints to protecting legitimate land claims.

- **The Kilimanjaro Initiative** is an idea that was conceived by rural women and supported since 2012 by civil society organisations and NGOs such as Action Aid, Oxfam and Care aims to claim Tanzanian women's rights to access and control over land and natural resources.

- **The Sustainable Rangeland Management Programme phase 3** (SRMP-3), which builds on phases 1 and 2 (2010-2012 and 2012-2014), funded through IFAD and implemented by MALF and ILRI in the period 2016 to 2020. The proposed Project will learn from the SRMP experience on participatory village land-use planning and the best practices in how to form inter-village Natural Resources Management committees and manage landscape level land use planning processes.

- **The Southern Agricultural Growth Corridor of Tanzania (SAGCOT)** (2016-2021) an inclusive, multi-stakeholder partnership aimed to rapidly develop the region's agricultural potential. SAGCOT was initiated at the World Economic Forum (WEF) Africa summit 2010 with the support from USAID and other founding partners including farmers, agri-businesses, the Government of Tanzania and companies from across the private sector. SAGCOT's objective is to foster inclusive, commercially successful agribusinesses that will benefit the region's small-scale farmers, and in so doing, improve food security, reduce rural poverty and ensure environmental sustainability. The risk-sharing model of a public-private partnership (PPP) approach has been demonstrated to be successful in achieving these goals and SAGCOT marks the first public-private-partnership of such a scale in Tanzania's agricultural history.

- **Sustainability and Inclusion Strategy for Growth Corridors in Africa (SUSTAIN-Africa)** The project is focusing on water and food security, land resources and climate change resilience, SUSTAIN-Africa is a IUCN led programme that supports action on sustainability and social inclusion in growth corridors in Africa. SUSTAIN-Africa was launched in 2014 in the SAGCOT growth corridor the project is implemented in Tanzania it Lake Rukwa basin and focuses on land resources, water security, climate change, food security, and new investments and business partnerships. The propose project will collaborate closely with SUSTAIN project and will build on experiences and lessons learned during its implementation so far.

- **Sustainable production and consumption of wood energy.** This is an FAO led project which is expected to start implementation in 2018. Its objective is to strengthen forest rehabilitation and food security

while addressing sustainable consumption of wood energy. Some of the project areas are expected to overlap with this project.

225. The proposed Project will also take forward relevant outputs and lessons learned from the following GEF supported national and international initiatives. The results of these projects were reviewed during the project preparation phase and the relevant findings, methods and approaches will be taken into consideration during the implementation of the proposed project. Some of the most relevant initiatives are described below:

- UNDP supported project on **Mainstreaming Sustainable Forest Management in the Miombo Woodlands of Western Tanzania** (2012-2016)**.** This project was designed to ensure that biodiversity conservation is mainstreamed into economic planning and development, so that agricultural productivity and sustainable livelihoods are improved while simultaneously improving the ecological integrity of the Miombo ecosystem of Western Tanzania, including securing its productivity from negative effects of climate change in Tabora and Katavi regions. This project will take up lessons learned from the adoption of sustainable-use management practices for resources harvested by local people for subsistence and local economic growth, and better regulation of commercial activities that were promoted during this pilot.

- The project **Strengthening Climate Information and Early Warning Systems in Tanzania to Support Climate Resilient Development and Adaptation to Climate Change** (2013-2017) funded by the LDCF and implemented through UNDP and the Tanzania Meteorological Agency (TMA). This project aims to provide more technologies to reinforce capacity of the national early warning network to better anticipate and respond to extreme climatic events.

- UN Environment GEF supported project **Sustainable Land Management of Lake Nyasa Catchment in Tanzania** (2016-2018). The main objective of the project is to improve natural resource management and livelihoods of communities in Lake Nyasa catchment through sustainable land management systems. In particular, the project will support capacity development of smallholder farmer groups and local institutions to create an enabling environment for SLM uptake.

- **The Ecosystem-based adaptation for Rural Resilience in Tanzania** (2017-2021), funded by the LDCF, implemented by VPO and UN Environment and aims to improve stakeholders´ capacity to adapt to climate change through ecosystem-based adaptation approaches and undertake resilience building responses and strengthen information base on ecosystem-based adaptation to support an up-scaling strategy.

- The IFAD GEF supported project **Reversing Land Degradation trends and increasing Food Security in degraded ecosystems of semi-arid areas of Tanzania** (2017-2021)**,** implemented as part of the GEF 6 Integrated Approach Pilot "Fostering Sustainability and Resilience for Food Security in Sub-Saharan Africa". The objective of this project is to reverse land degradation trends in central Tanzania and Pemba (Zanzibar) through sustainable land and water management and ecosystem-based adaptation. The proposed project will implement its activities in close coordination with the UTNWF project.

- The GEF-UNDP project **Reducing Land Degradation on the Highlands of Kilimanjaro, 2012-2016.** The project promotes Sustainable Land Management that provides the basis for economic development, food security and sustainable livelihoods while restoring the ecological integrity of the Kilimanjaro region's ecosystems. Its aim is to provide land users and managers with the enabling environment (policy, financial, institutional, capacity) for SLM adoption.

226. At the global level, the project will also seek synergies and will benefit from several international initiatives where Center for International Forestry Research (CIFOR) is either leading or a member:

- CIFOR is a founding member of the Global Partnership on Forest Landscape Restoration (GPFLR), a proactive global network that unites governments, organizations, academic and research institutes, communities and individuals to restore forests and their surrounding landscapes in response to the Bonn Challenge.
- The Global Landscape Forum (GLF), the world's largest and only science-led multi-sectoral platform designed to produce and disseminate knowledge and accelerate action to build more resilient, climate friendly, diverse, equitable and productive landscapes. The GLF platforms connects diverse stakeholders; provides learning opportunities; gathers and shares knowledge; and accelerates action to produce positive, sustainable impact. GEF is expected to join GLF as a partner when the CEO will endorse the GLF in December 2017.

- The CIFOR led Consultative Group on International Agricultural Research (CGIAR) program on Food Trees and Agroforestry (FTA), and the CIFOR programs on Forest Management and Restoration (FMR), Sustainable Landscape and Food (SLF) and Forests and Human Well-Being (HWB) which are part of the CIFOR 2016-2025 strategy and will be highly beneficial for this Sustainable Landscape Restoration (SLR) project in Tanzania. GLF provides this project an excellent platform to disseminate knowledge and accelerate action to build more resilient climate friendly, diverse and equitable and productive landscapes. GLF will provide opportunities to connect with diverse stakeholders; to learn, to gather and share knowledge, and to accelerate action to produce a positive and sustainable impact. The GLF approach and themes (Restoration, Financing, Rights, Measuring Progress, and Food and Livelihoods) are all aligned with the planned SLR work in Tanzania. Through FTA, this project will be connected to the world's largest research for development program that focusses on the role of forest, trees and agroforestry in sustainable development, food security and addressing climate change. The project can benefit from the knowledge and experience generated from over 140 projects worldwide, focussing on: Tree genetic resources to bridge production gaps and promote resilience; Enhancing how trees and forests contribute to smallholder livelihoods; Sustainable value chains and investments for supporting forest conservation and equitable development; Landscape dynamics, productivity and resilience; and Forest, trees and agroforestry for climate change adaptation and mitigation. The lessons from the FTA cross cutting themes, Gender and Youth and Monitoring, evaluation, learning and impact assessment can also be integrated into the planning and monitoring stages of the project. Several projects in FMR are underway in different countries and knowledge generated will be shared to inform the Government of Tanzania.

- The publication of country profile paper[17] on REDD+ context in the country that is believed to have been instrumental in informing REDD+ initiatives in Tanzania and elsewhere. The Tanzania country profile paper is part of CIFOR's Global Comparative Study (GCS) and builds on guidelines that have been established in 14 countries, and provides an overview on the contextual conditions that affect the REDD+ policy arena in Tanzania. It aims to understand the political economic context of Tanzania in which REDD+ policies and processes emerge. It also attempted to identify barriers, limits and opportunities in national REDD+ arenas to inform future REDD+ design by providing research-based options for achieving efficient, effective and equitable REDD+ (i.e. the 3Es of REDD+).

[17] Kweka D, Carmenta R, Hyle M, Mustalahti I, Dokken T and Brockhaus M. 2015. The context of REDD+ in Tanzania: Drivers, agents and institutions. Occasional Paper 133. Bogor, Indonesia: CIFOR.

SECTION 3: INTERVENTION STRATEGY (ALTERNATIVE)

3.1. Project rationale, policy conformity and expected global environmental benefits

227. About 70% of Tanzania's population lives in rural areas and is engaged largely in subsistence farming and livestock keeping. Rural Tanzanians rely on natural resources and local crop genetic materials to satisfy their basic needs, including fuel, food, water and income. Over exploitation of resources leads to reduced productivity and increased vulnerability to climate related shocks. Slash and burn agriculture and wood collection for energy also contribute to extend the degradation to forests and woodlands, which cover 35.3 million hectares, as well as the loss of biodiversity and wildlife habitats, increased risk of bush fires, and ecosystem shifts (for example from forests to woodlands or from woodlands to bushes and grasslands).

228. As described in Section 2 in detail, the rate of biodiversity and forest loss in Tanzania is alarming (at a rate of about 0.4 million ha deforested land per annum), and the cost of land degradation continues to rise. Biodiversity and forest loss, and land degradation combined with climate change are directly affecting agricultural and livestock production in the country impacting the livelihoods of millions of Tanzanians. Highly degraded areas are estimated to cover about 61% of land in Tanzania.

229. Tanzania has been engaged in promoting community-based forest management and tree planting practices as well as soil and water conservation measures that have been successful in reducing land degradation and enhancing the provision of ecosystem services. However, these initiatives have been guided by sectoral plans with limited coordination. As a result, taking these to the scale needed to reverse current trends in deforestation and biodiversity loss remains unlikely. By encouraging cross sectoral planning mechanisms and promoting landscape approach, this project seeks to bridge this gap. It will demonstrate that careful planning and active engagement of key stakeholders can make restoration initiatives to work for communities as well and to contribute to local economic development.

230. Through improved support at the national, district and ward levels, the project will encourage national efforts to create an enabling environment that would facilitate the scaling up and wider adoption of Sustainable Landscape Restoration (SLR) initiatives in the country. SLR is understood as a negotiated process of rehabilitating degraded landscapes (ideally to regain ecological integrity and restore forest functions) and enhance human well-being in deforested or degraded landscapes while also aiming to ensure flow of ecosystem services. Emphasis is given to the relationship between various functions within the landscape, and requires informed consensus by stakeholders, resulting in a negotiated and acceptable balance between ecological integrity and enhanced human well-being.

231. As described in Section 2, the main barriers that undermine Sustainable Landscape Restoration (SLR) initiatives in Tanzania which this project is aiming to address are:

232. Gaps in designing, implementing and harmonizing legal and policy instruments and inadequate cross-sectoral coordination;

233. The promotion of sector cantered and simplistic agricultural intensification and limited knowledge on, and experiences in, designing and implementing SLR initiatives on critical landscapes, and on how to integrate biodiversity objectives on managed landscapes for better conservation and livelihood outcomes;

234. Limited institutional capacity due to inadequate access to information and training opportunities to build knowledge and skills in SLR and to demonstrate the need for SLR, the role of SLR for improving human well-being, and potential of use of agrobiodiversity rich options in the restoration of degraded landscapes to enhance adaptive capacity of socio-ecological systems in the face of climate variability and change.

235. The proposed project has been designed to overcome these major barriers and to pilot innovative approaches of cross sectoral planning and working at landscape level so that SLR initiatives in Tanzania will become more successful.

Expected Global Environmental Benefits

236. By implementing this project, and documenting and sharing lessons learnt, the Government of Tanzania hopes to better lead national efforts for mainstreaming and scaling up SLR across Tanzania. Taking SLR to scale and restoring large areas of land will result in a range of benefits and improvements in ecosystem services at both the local, national, and global level. The project is designed to achieve the following long-term impacts or Global Environment Benefits (GEBs) in line with the specific GEF 6 strategic objectives in Biodiversity, Land Degradation, Climate Change and Sustainable Forest Management focal areas as described in the table below.

Table 2. GEF6 strategic objectives and anticipated benefits

GEF-6 Corporate Results and GEF6 Strategic Objective	**Project Target**	**Anticipated Benefits**
Maintain globally significant biodiversity and the ecosystem goods and services that it provides to society *Biodiversity SO4:* Mainstreaming Biodiversity Conservation and Sustainable Use in Production Landscapes/ Seascapes and Sectors *Program 9:* Managing the Human-Biodiversity interface (landscape approach)	110,000 ha will benefit from supporting natural regeneration using biodiversity reach options Globally significant biodiversity will benefit indirectly in an additional area of 304,767 ha of game reserves through enhanced ecosystem services	*Global:* • Increased protection of forests and biodiversity hotspots in the project areas • Increased biodiversity on agricultural landscapes • Large area of degraded land rehabilitated and put under improved management (e.g. regulated grazing, fire control, etc.) *Local:* • Better coordination of planning and implementing SLR initiatives using cross sectoral planning and landscape approaches • Awareness about and participation in SLR of communities in general and women is ensured • SLR options jointly identified, evaluated and implemented
Sustainable land management in production systems (agriculture, rangelands, and forest landscapes) *Land Degradation SO2:* Forest Landscapes *Program 3:* Landscape Management and Restoration – community and livelihood-based options for increasing forest and tree cover *Land Degradation SO3:*	110,000 ha of degraded forests put under restoration in transition, of which 22,755 ha of degraded forest landscapes is put under various restoration options (e.g. afforestation) At least 87,245 ha of land is under sustainable forest, grazing and crop land management (integrating agro-forestry, controlled grazing, fire control, sustainable harvesting, and supporting natural regeneration)	• Expanded use of joint forest management and community based NRM to better manage forest resources • Integrating trees into the production landscapes for conservation and economic objectives • Adopting regulated grazing and fire control • Identify and promote SLR friendly alternative livelihood systems • Collect repackage and share knowledge and good practices in SLR to actors and land holders to help them select and use SLR practices

GEF-6 Corporate Results and GEF6 Strategic Objective	**Project Target**	**Anticipated Benefits**
Integrated Landscapes *Program 4:* Scaling-up SLM – moving appropriate interventions to scale for crop and rangeland productivity		• Build capacity to mobilise resources from the public and private sectors to finance SLR initiatives • Improve coordination of actors in SLR (private sector, communities, and government agencies) and government agencies and sectors at different levels
Support to transformational shifts towards a low-emission and resilient development path *Climate Change Mitigation 2:* Demonstrate systemic impacts of mitigation options *Program 4:* Forests and other land use, and climate smart agriculture	*4.7 million* metric tons of CO_{2e} mitigated were committed at PIF stage.	• Increased adoption of climate smart agriculture including options for greening livestock • Increased carbon sequestration in natural and production landscapes • Afforestation and reforestation activities undertaken on degraded areas • Tree planting promoted on agricultural and rangelands • Fire control mechanism put in place
Reverse the loss of ecosystem services within degraded forest landscapes. *Sustainable Forest Management 3:* *Restored Forest Ecosystems*		• Expanding and strengthening Joint Forest management and community based forest management to engage communities in sustainable forest management of natural forests • Increase community and public-sector investment in afforestation and reforestation of degraded forest lands Enhanced documentation and sharing of lessons learnt regarding the technical and social aspects of sustainable forest management practices

237. The project will also complement efforts towards the implementation of Tanzania's Nationally Determined Contribution (NDC). Tanzania is committed to reduce national greenhouse gas emissions between 10-20% by 2030 relative to the BAU scenario of 138 – 153 million t CO_2 eq. - gross emissions, depending on the baseline efficiency improvements, consistent with its sustainable development agenda

238. In addition to these benefits, the project will also contribute towards Tanzania's commitments to the Convention for Biological Diversity Aichi Declaration Targets (Table 3), by restoring habitats and conserving globally significant biodiversity. Also, it is hoped that achieving the restoration targets of this project will build experience and institutional arrangement for Tanzanian authorities to make official commitment of the forest area to be restored as part of the Bonn Challenge and Africa 100 initiative.

Table 3. Project Contribution to Aichi Targets

CBD Aichi 2020 Targets which the project will contribute to	How the project will support achievement of targets
Target 2: Integration into development strategies	By working both at national and local levels, this project aims to encourage cross sectoral planning and use of landscape approach to operationalise the plans. By so doing it is expected that restoration and development or agricultural objectives can be reconciled. Efforts will be made to make sure that SLR options also lead to increased income and livelihood benefits for those who take part in the process. This paves the way for mainstreaming biodiversity in the development planning process. Experience so gained will enable local government authorities to align SLR with local development plans, and development objective sin conservation goals and vice versa.
Target 5: Decrease rate of loss of natural habitats and forests	Adoption of SLR practices (reducing deforestation, afforestation and reforestation, tree planting on agricultural landscapes, agroforestry systems, planned grazing, etc.) also contribute to increasing and sustaining agricultural productivity and reduce the need for local communities to expand into natural habitats for their resources, and increases availability of wood and other forest products. The project promotes SLR practices that increase productivity while also rehabilitating degraded landscapes.
Target 7: sustainable management of agriculture, aquaculture, and forestry	Agricultural and grazing land represents the largest opportunity for landscape restoration in Tanzania. The project sites are composed of agricultural, rangelands, and forested landscapes. The project will identify and test SLR options that work best for different land uses and land holders (particularly small farmers) to restore productivity and conserve biodiversity. Experiences of the process and best practices in SLR that worked for different land uses and actors will be documented and shared nationally, sub-regionally as well as with other TRI countries.
Target 10: Minimize anthropogenic pressures	The forests, rangelands, and rivers in the three target basins are particularly susceptible to human effects. Over exploitation of water and forests and degradation of land due to deforestation and over grazing have been identified as major threats in the project areas. This project intends to engage communities and local authorities in tackling these drivers of degradation. It begins with increasing awareness, jointly identifying drivers of degradation and restoration options, including alternative livelihoods to reduce pressures on forests.
Target 11: Conservation of terrestrial and coastal water areas	The three water basins selected represent important terrestrial water resources for south-western Tanzania. These water systems support not only people but also commercial and subsistence agriculture and for the wildlife in forest reserves and in protected areas. The use of water from rivers and lakes remains poorly regulated. This project intends to raise awareness about the decline in river flows and its impacts on lower stream areas and parks and to help stakeholders to regulate water extraction.
Target 14: Ecosystem services	This project will focus specifically on the rehabilitation of degraded forested and managed landscapes in the selected wards. Communities in the wards will be encouraged and supported to empower themselves to assert their rights and control their resources while also being responsible for restoring degraded forests and landscapes so that the flow of ecosystem service would continue.
Target 15: Ecosystem resilience and carbon stocks	SLR options that the project will promote (tree planting, soil and water management, afforestation, climate smart agriculture, controlled grazing, controlling forest fires, etc) are expected to contribute significantly to the sequestration of carbon in better managed forests, rehabilitated landscapes and better managed grazing and agricultural production landscapes. SLR practices regenerate the natural capital and help build the resilience of the agricultural and livestock production systems and communities (i.e. socio-ecological systems).

Expected opportunity costs

239. The project opportunity cost is envisaged to include loss of income for some communities due to limited access to restored landscapes in the selected project areas. The lost income is basically linked to deferment of economic activities such as charcoal burning, unsustainable e farming and grazing practices. However, these cost are significantly outweighed by the benefits gained through project implementation as indicated in table 2 and 3 above.

3.2. Project goal and objective

240. The overall objective of the project is to *strengthen integrated natural resource management and restoration of degraded landscapes for resilient socio-ecological systems in Tanzania.*

241. Specifically, the project will: (i) enhance the national enabling environment and capacity of stakeholders for sustainable landscape restoration (SLR) efforts and for commitment to SLR; (ii) improve landscape management through implementation of restoration plans and integrated landscape management practices in 16 wards selected from 11 districts in the Great Ruaha, Lake Rukwa and the Malagarasi basins, using a phased approach; and (iii) develop and share knowledge, disseminate good practices, and put in place appropriate M&E systems and financing arrangements that support adaptive management of SLR interventions and strategies.

242. These outcomes are expected to be achieved through the provision of technical support to key public stakeholders responsible for sectoral policies, planning and enforcement, and to farming communities in the project areas to promote the adoption of SLR initiatives and innovative practices in conserving and mainstreaming biodiversity that are suitable for different land use categories. Innovative SLR practices refer to technologies, institutional mechanisms and management practices to support landscape rehabilitation and low GHG emission development. These include joint forest management, community based forest management, reforestation, establishing woodlots, use of alternative sources and energy saving stoves, adopting alternative income generating activities such as beekeeping, conservation of threatened species, promoting wild life management units, water users associations to govern sustainable water use, sustainable land management practices, planting environmental friendly tree species, adopting water harvesting technologies, climate smart agriculture, greening livestock farming, etc.), mobilizing gender and youths in project activities as "agents of change", etc.).

243. Through the achievement of its specific objectives, the project will contribute directly to The Global Restoration Initiative (TRI) overall program objective of contributing to the restoration and maintenance of critical landscapes to provide global environmental benefits and enhanced resilient economic development and livelihoods, in support of the Bonn Challenge. It will also assist the Government of Tanzania in supporting its efforts to address the challenges of land degradation. The knowledge gained during the planning and implementation of the project helps the Tanzanian Government in improving its capacity and strengthen its willingness to set its land degradation neutrality target and work towards its achievement.

3.3. Project components and expected results

244. Field intervention of the proposed project interventions will be implemented in 16 wards (covering a total area of 1.02 million ha) selected from 11 districts located in the Great Ruaha, Lake Rukwa and Malagarasi basins (see Figures 1, 2, 3 and 4 in Section 2.6). The selection of the wards, districts and basins was made through a series of consultative meetings and a National Stakeholder Inception Workshop that brought together stakeholders from national, regional and district levels as well as representatives of development partners.

245. The selection also considered major factors of resource degradation and biodiversity loss, the uniqueness of the ecosystems and biodiversity richness, severity of ecosystem degradation, and presence of related initiatives to complement and build on. In Great Ruaha and Lake Rukwa basins the main drivers of resources degradation and biodiversity loss are rapid population growth, poverty, unsustainable agriculture and livestock, uncontrolled

mining and wild fire. In Malagarasi River basin influx of refugees from neighboring countries has become an important driver of deforestation and degradation, besides those mentioned above. The selected wards are either bordered by protected areas or are route for migratory wildlife and they are home of important and endemic fauna and flora, and have been severely degraded due to different drivers.

246. The project would be implemented through three distinct components. Figure 5 below illustrates how the three components interact to contribute to the overall objective of the project. The corresponding activities that fall under each of these components will therefore complement each other. Components 1 and 3 will be implemented at national level, while component 2 will focus exclusively on 16 wards selected from 11 districts targeted by the project. A detailed logical frame work and project work plan can be found in Appendix 4 and 5 respectively.

247.

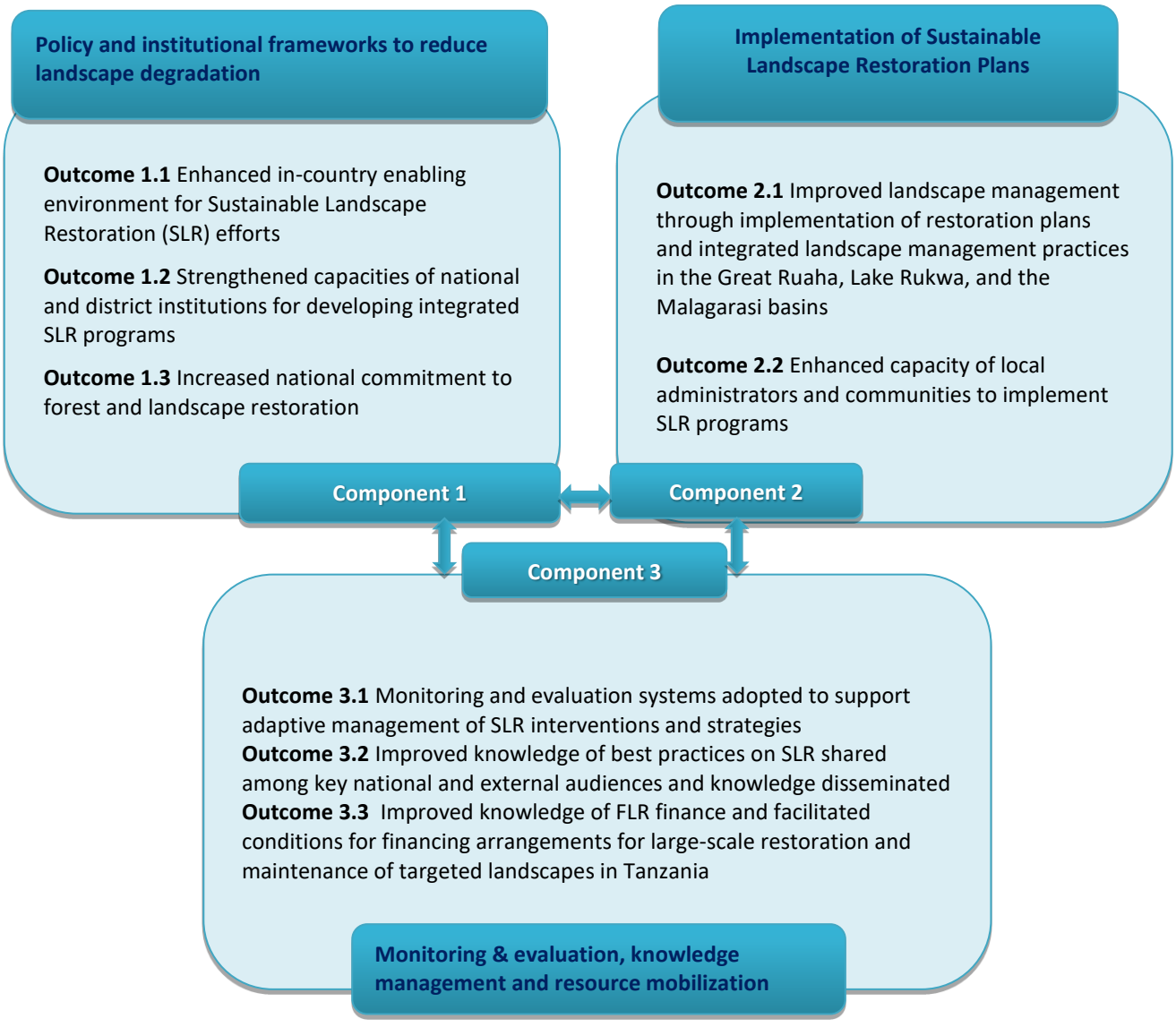
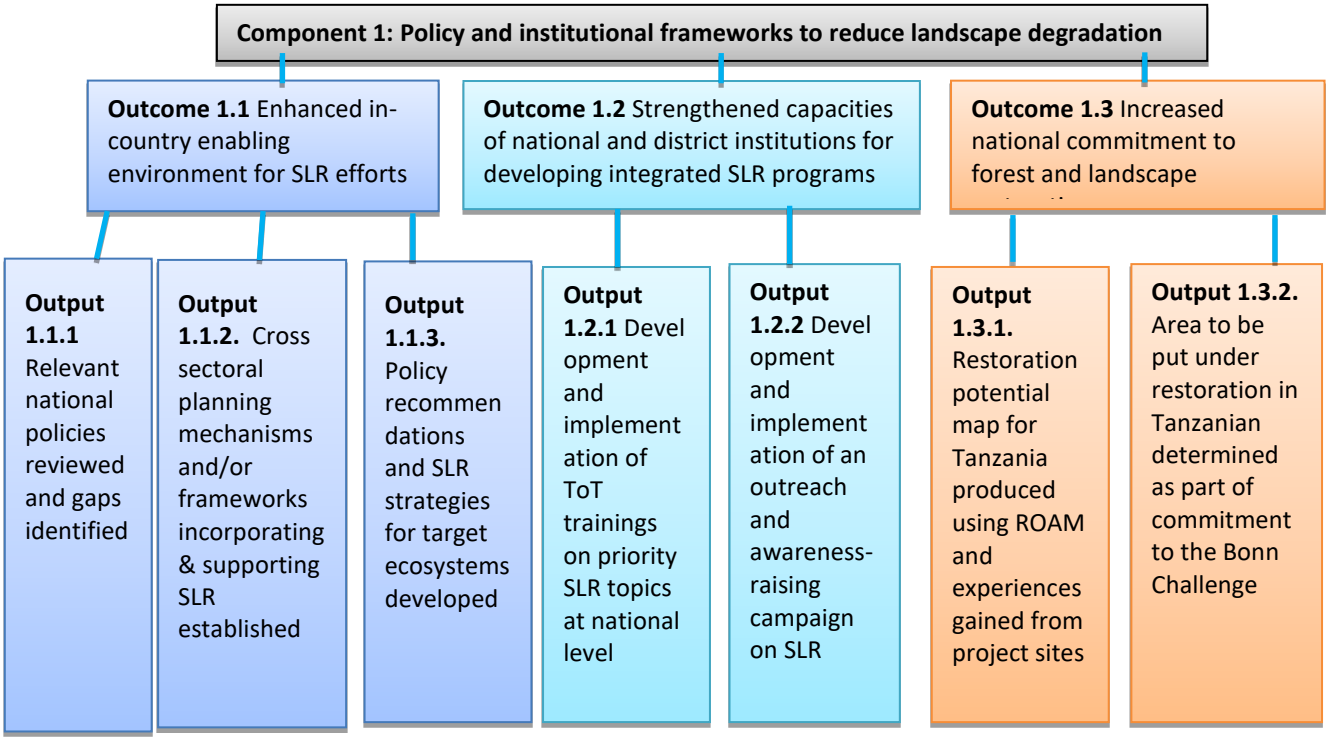


Figure 5. Relationship between project components

Component 1. Policy and institutional frameworks to reduce landscape degradation



248. The objective of the component is to create an enabling environment for the development and integration of SLR policy instruments and regulatory framework, as well as the strengthening of coordination mechanisms among relevant institutions at national and district level.

249. The national level engagement with planners and policy makers will be used (i) to jointly identify improvement measures; (ii) to bring the voice of SLR actors notably communities into the policy planning process, and (iii) to facilitate efforts to mainstream SLR into policies and conservation and development strategies of the Tanzanian Government. The focus of Component 1 will be on helping create a national enabling environment through suggesting specific policy measures and institutional frameworks to reduce landscape degradation, and take SLR restoration to scale. To realize this, the project plans to accomplish three outcomes:

Outcome 1.1: *Enhanced in-country enabling environment for sustainable landscape restoration (SLR) efforts;*
Outcome 1.2: *Strengthened capacities of national institutions for developing integrated SLR programs;*
Outcome 1.3: *Increased national commitment to forest and landscape restoration*

Outcome 1.1: Enhanced in-country enabling environment for SLR efforts and for commitment to SLR

250. In Tanzania, sectoral policies exist but coordination across sectors to facilitate the adoption of an SLR approach remains limited. This poses significant challenges for implementing various restoration initiatives. To overcome this challenge, the project aims to (i) propose recommendations for policy revisions and make them available to the national and district governments; and (ii) establish and operationalize national SLR governance and regulatory structures.

251. Additionally, Tanzania has aspiration to officially commit to forest and landscape restoration (as part of the Bonn Challenge and AFR 100). To help achieve these aspirations, the project aims to (iii) support the efforts of the government to determine the area (ha) to be committed to restoration, and (iv) support Tanzania in making an official commitment to SLR (as part of the Bonn Challenge and AFR 100).

252. Outcome 1.1 contains three outputs, each contributing to the achievement of the outcome.

Output 1.1.1: Relevant national policies reviewed, and gaps identified

253. Sectoral policies, legal, and institutional framework exist but lack coordination and harmonization to support SLR initiatives. The project will review relevant national policies and identifying gaps, so that options to facilitate implementation of SLR can be identified and taken to scale. In turn, these identified options will be proposed to and adopted by the government. This would be achieved through the collection and analysis of baseline data in the areas of policy, development plans, and legal frameworks that impact SLR initiatives to evaluate the extent to which the national policies, strategies and plans are supportive of SLR. The project will assess incentives and challenges for community and private sector participation in SLR. Based on this, opportunities and gaps will be identified options for improvement proposed to facilitate mainstreaming of SLR and biodiversity conservation in national strategies and plans. Project partners will also support the national government in developing guidelines for (a) mainstreaming SLR and biodiversity into sectoral policies and strategies and in the planning, financial and regulatory frameworks of Tanzania, (b) integrating communities and other actors' participation in the planning and implementation of SLR initiatives, (c) mainstreaming gender into SLR and biodiversity conservation; (iv) ensuring equitable benefit sharing mechanisms in SLR. These will be enriched through a series of high level policy discussion sessions to obtain buy-in and facilitate their implementation.

Output 1.1.2: Cross sectoral planning mechanisms and/or frameworks incorporating and supporting SLR established

254. There are currently no structures or mechanisms to facilitate cross-sectoral planning in Tanzania. Each sector (water, agriculture, energy, etc.) develops its own sectoral plan and implements it. As a result, certain studies have already pointed out that agricultural and forest policies are in collision course[18]. Bringing key sectors together helps reduce such risks and enhance the possibility of increasing synergy and minimizing trade-offs between sectoral plans and programs. The project therefore aims to establish a total of 12 platforms that will promote the needed cross-sectoral planning mechanisms at national level (1) and at district or local levels (a total of 11), and provides assistance to make them operational and sustainable. The cross sectoral planning mechanism will be coordinated by the Vice-President's Office, and the project will identify needs and provide training and logistical support. Terms of reference for the platform will also be prepared to facilitate coordination and collaboration across sectors and to bridge the sectoral divide at different levels for better restoration and livelihoods outcome at landscape level. The project will continuously engage relevant authorities at different levels and consult broadly so that they will promote integration of sectors in implementation of SLR programs.

Output 1.1.3: Policy recommendations and SLR strategies for target ecosystems developed

255. Sectoral policies and strategies exist that are relevant, but not entirely sufficient to guide SLR strategies on the ground. The project will support the cross-sectoral platform developed in Output 1.1.2 to generate draft proposals to improve cross-sectoral integration on the ground and support such undertakings at district level. The project will also engage national policy makers to promote methods that ensure equitable access and benefit sharing laws that would support the planning and implementation of SLR in the selected project areas. Thus, at least two major policy proposals will be tabled – one on the gaps and the need to address them, and another on

[18] Franks, P., Hou-Jones, X., Fikreyesus, D., Sintayehu, M., Mamuye, S., Danso, E.Y., Meshack, C.K., McNicol, I. and Soesbergen, A.V. 2017. Reconciling forest conservation with food production in sub-Saharan Africa: case studies from Ethiopia, Ghana and Tanzania. IIED Research Report, London.

options to be tabled to tackle these challenges. These goals in the target ecosystems will be realized through engaging key actors and reviewing their experiences; sharing these through consultative workshops to examine policies and assess implementation practices and plans in each of the target basin so that the exercises would yield specific recommendations on policy implementation, and policy reform. Project partners will facilitate these exercises through a series of consultative workshops in the target project districts and by developing terms of reference for establishing cross-sectoral planning mechanisms and implementation of SLR plans at district or ward level. In each district, a cross-sectoral working group will be established with the core mandate of promoting integration of sectors in implementation of SLR programs, and project partners will provide support to these groups to design an action plan, including training program, and to build their capacity and the level of awareness of policy options and mainstreaming tools. They will also be supported in their efforts and disseminate relevant information widely.

Outcome 1.2: Strengthened capacities of national institutions for developing integrated SLR programs

256. Domestic capacity to develop SLR programs exists, but it remains sectoral and needs to be improved and integrated across sectors. Such improvements are necessary so that SLR programs can be effectively and equitably implemented. Given the existence of in-country capacity to plan and implement soil and water conservation practices and joint forest management arrangements, there is increased knowledge and capacity for developing integrated SLR programs at the national level. Due to increased awareness about the impacts of climate variability and change, it appears that public support for landscape restoration and sustainable land management is growing over time. The project aims to work towards strengthening the capacity of institutions at different levels through the training of at least 50 policy makers at the national level and a minimum of 160 planners and senior experts at the district level. A list of stakeholders will be developed, and they will be consulted broadly. An action plan will be designed that includes a training program to build capacity of experts at local levels and increase their awareness about policy options and tools in SLR and to scale up similar initiatives.

257. Outcome 1.2 contains two outputs, each contributing to the achievement of the outcome.

Output 1.2.1: Development and implementation of Training of trainers (ToT) trainings on priority SLR topics at national level

258. At the national level, the existing capacities need to be strengthened and aligned with project objectives. To achieve this, the project will provide training and logistical support to senior experts working in national government ministries and agencies. The focus will be on how to develop partnerships to engage key stakeholder for planning and implementing SLR, and how to enhance their participation and contribution in planning and implementing SLR at national and sub-national levels. Tailored trainings will be organized based on needs assessments. For some agencies that play lead roles in coordination (e.g. the VPO office) the training will also be designed on how to coordinate implementation of activities by all parties, including M&E elements of the project; how to undertake training needs assessment of experts at district and ward levels, and how to organize and deliver need-based training to relevant district and ward offices engaged in project implementation.

Output 1.2.2: Development and implementation of an outreach and awareness-raising campaign on SLR

259. Most Tanzanians are not sufficiently aware of the consequences of land degradation and its national and global impacts (e.g. its implication for economic development and human well-being in general). This lack of awareness leads to limited public support for SLR, and conversely, strong public support for land uses that are not compatible with SLR. This output will be achieved through the development of a communication strategy and program content on SLR showing the need for, and positive impact of, SLR on landscape management, including experiences from other countries. The project will also organize communication campaigns using print media, mass media (TV and radio), and social media to transmit messages in SLR. Project partners will also monitor the effects of communications in increasing awareness and will use the information to improve the design of subsequent campaigns.

Outcome 1.3: Increased national commitment to forest and landscape restoration

260. A clear national commitment to SLR is necessary to achieve the broader objectives of this project – contributing to global environmental benefits and to human well-being. To this end, the project strives to support the Tanzanian government in declaring their commitment in forest and landscape restoration, such as the Bonn Challenge and AFR100. In the mid-term, the project aims to identify criteria for commitment, and help develop national and sub-national policy and regulatory frameworks that are increasingly supportive of SLR. By the end of the project, it is expected that, with the technical backstopping of a National Sustainable Landscape Restoration Committee that will be established by this project, the government would have determined the area (ha) to be committed to SLR, and is expected to make an official commitment to forest and landscape restoration (as part of the Bonn Challenge and AFR100).

261. Outcome 1.3 contains two outputs, both contributing to the achievement of the outcome.

Output 1.3.1: Restoration potential map for Tanzania produced using ROAM and experiences gained from project sites

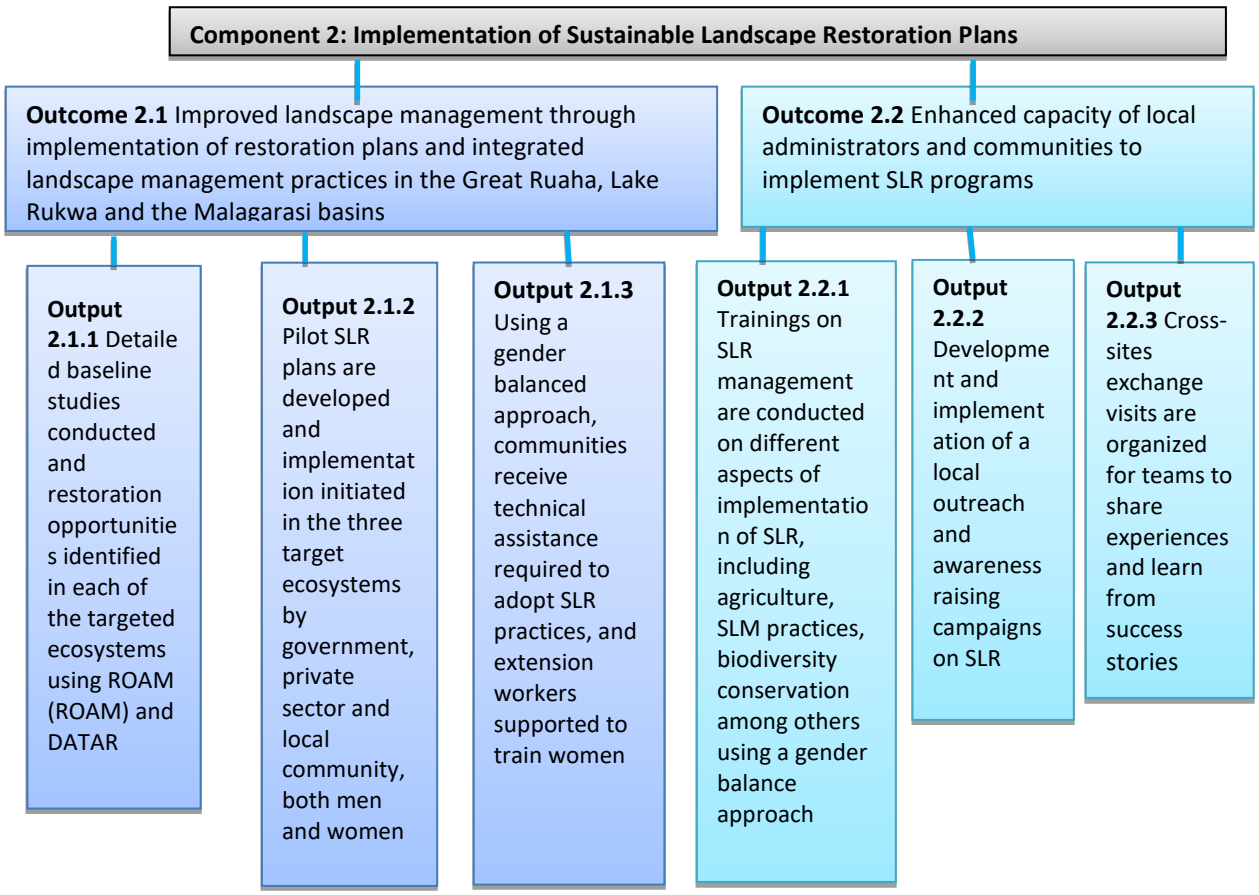
262. To implement a national SLR program, a country needs to identify where and how many hectares of land is available for restoration in a given period. This basic set of information does not yet exist for Tanzania. The project aims to provide this information through implementing a range of studies from which recommendations will be made available to policy and decision makers. The project will conduct Restoration Opportunities Assessments (following the ROAM), which are. expected to provide national level pictures. As far as possible the study is expected to (i) identify areas within the three selected basins that can be put under SLR; and (ii) specify most feasible options that need to be considered for different land use types and landholders. The results will inform specific project site selection in the selected wards and districts. The findings will also be presented to the National Project Steering Committee and the National SLR committee. It is expected that the national SLR committee will use these results to provide a better estimate of land that can be put under SLR in Tanzania. The project will work closely with the committee so that the VPO and other concerned authorities get this evidence for Tanzania to make official commitments to the Bonn Challenge.

Output 1.3.2: Area to be put under restoration in Tanzanian determined as part of commitment to the Bonn Challenge

263. Tanzania does not yet have information on the location of areas and number of hectares that can be considered as candidate for SLR, either at the national level or in the sites where this project is targeting. The project will assist in the establishment of a high-level national SLR committee, which will play a major role in determining areas that have restoration potential based on relevant studies that exist and particularly by the results the ROAM work (conducted as part of component 2) would generate. The project will work in facilitating this process and providing the necessary technical and logistical support for the national SLR committee. The national SLR committee under VPO will agree on plans to guide SLR initiatives of the project, facilitate the identification and documentation of various restoration initiatives in the country, agree on basic principles to be used on determining the areas to be committed to forest and landscape restoration; and develop the enabling conditions for scaling up SLR. As a result, it will lay the foundation to guide coordination and implementation of SLR activities in Tanzania. It is also expected to propose to the Government the area of land that can be restored and officially communicated as part of the Bonn Challenge and AFR 100.

264. The project will assist the government of Tanzania in making an official commitment to forest and landscape restoration (as part of the Bonn Challenge and AFR 100) by providing the needed technical information. To do so, as indicated above, the project will work with the VPO and through a high-level national SLR committee. The VPO and other appropriate government agencies will be supported in their efforts so that the Government of Tanzania can make commitment to the Bonn Challenge and to AFR 100.

Component 2. Implementation of sustainable landscape restoration plans



265. The objective of this component is to jointly identify and test feasible restoration options at landscape level by actively engaging communities and local authorities in selected wards and districts of the Great Ruaha, Lake Rukwa and Malagarasi basins. The component of the project is designed to achieve two important outcomes.

> ***Outcome 2.1:*** *Improved landscape management through implementation of restoration plans and integrated landscape management practices in the Great Ruaha, Lake Rukwa, and the Malagarasi basins*
> ***Outcome 2.2:*** *Enhanced capacity of local administrators and communities to implement SLR plans*

Outcome 2.1: Improved landscape management through implementation of restoration plans and integrated landscape management practices in the Great Ruaha, Lake Rukwa, and the Malagarasi basins

266. The key targets of this component are (i) piloting and adoption of SLR options and complementary land management practices covering 110,000 ha of land in the project areas selected from the three basins; (iii) benefiting a total of 100,000 households from taking part in FLR initiatives in the 11 districts; and (iv) conservation and enhancement of carbon stocks in landscapes undergoing restoration and/or complementary land management practices generating an estimated emissions reduction and/or sequestration in the order of 4.7 million tons of CO_2 eq.

267. Outcome 2.1 contains three outputs, each contributing to the achievement of the outcome.

Output 2.1.1: Detailed baseline studies conducted, and restoration opportunities identified in each of the targeted ecosystems using Restoration Opportunities Assessment Method (ROAM) and (Diversity Assessment Tool for Agrobiodiversity and Resilience (DATAR)

268. ROAM analyses have been the basic building blocks of planning for landscape restoration in Africa, Asia and Latin America, including neighboring countries such as Malawi, Rwanda and Uganda. ROAM provides a first-assessment of what kinds of restoration opportunities exist within a country, and the potential impact that restoration will have. DATAR describe agricultural biodiversity and resilience at landscape level, so that the agricultural sector can be the beneficiary and part of the landscape restoration agenda. Additionally, consistent baselines need to be established for biophysical and socioeconomic indicators, to be the basis of planning, monitoring and evaluation. These are essential decision-making tools that are still not available in Tanzania.

269. The ROAM, DATA and baseline assessments will yield knowledge on landscape baseline conditions, which will be used to identify SLR options for different land use types, e.g. agriculture, agroforestry and pasture land uses. Therefore, output 2.1.1 includes activities on undertaking ROAM and DATAR assessments at targeted ecosystems and generating baseline data and a Business as Usual (BAU) scenario in the project sites for selected biophysical and socioeconomic indicators

Output 2.1.2: Pilot SLR plans are developed and implementation initiated in the three target ecosystems by government, private sector and local communities, both men and women

270. This output represents the major intervention of this project. Across the three targeted river basins, there is a total of 7.7 million ha of managed landscape. The project aims to make sure that communities within these landscapes benefit from SLR, by using a participatory approach and making available locally-adapted planting materials to restore degraded landscapes. A pilot phase will be implemented to provide lessons that can improve SLR management plans, to be applied to 110,000 ha of land in the three selected basins. The approach centers on engaging local stakeholders to work towards a unified vision of a restored landscape.

271. Within the pilot sites, the project will conduct a stakeholder analysis. Changes in the land cover during the project lifetime will be documented at the baseline and project end using drone technology. The resulting maps will be used to facilitate communication and participatory planning with local stakeholders. The project will produce maps of land use development scenarios that captures local people's views of what they desire their landscape to look like beyond the lifetime of the project. This product will help to visualize the restoration objectives, making it understandable to a wide range of stakeholders. Land managers will be asked to identify drivers of degradation and biodiversity loss at specific project sites in each of the selected wards, to elicit their views on which actors need to be engaged in the restoration effort. Based on the maps and analyses developed, project partners will initiate discussions with communities and government institutions in charge of SLR to better understand the effects of current land tenure and land use policies on sustained engagement in and benefits from SLR of communities. Appropriate tenure and benefit-sharing arrangements are crucial for the success and sustainability of SLR efforts. Such dialogues are necessary to manage potential negative impacts of SLR that have been found in other countries, such as loss of livelihood options, or increased burdens on land managers.

272. At the site level, planning will be done with local authorities and communities to select and refine the SLR practices that will be applied locally, and cost sharing arrangements in implementing SLR initiatives. Costs and benefits of SLR practices will be indicated in a project implementation manual that will be produced by the project. This manual will be developed for forested and managed landscapes and rangelands, including Climate Smart Agriculture (CSA) options. A significant portion of SLR efforts will involve planting trees on-site. To ensure tree seedling supply, while creating employment, the project will support establishment and running of tree nurseries. For areas within the river basins that are critically degraded, the project will develop targeted land and water conservation plans.

273. Agriculture sustains the lives of millions in the targeted landscapes, and should be viewed as a potential entry point for SLR. The project will develop integrated options for climate smart agriculture, including agrobiodiversity based solutions, soil fertility management, agroforestry, forage and livestock management, and conservation agriculture. Overexploitation of natural resources also needs to be addressed, by piloting alternative income generating activities with people that depend on over exploitation of NRs. Implementation of SLR options will be based on jointly identifying these options with local stakeholders, and jointly implementing them on forested and managed landscapes.

Output 2.1.3: Using a gender balanced approach, communities receive technical assistance required to adopt SLR practices, and extension workers supported to train women

274. Some SLR practices are completely new, and others are familiar practices that are used in a different way. For example, planting new tree and grass species to increase agrobiodiversity and plowing the land differently to reduce soil erosion are practices which can only be implemented if targeted communities receive the necessary technical assistance to adopt them. The current extension system, however, is mainly sectoral, focused on improved agricultural production or on protection of forests. This sectoral approach cannot maximize potential synergies across sectors, and can even be counterproductive. SLR implementation needs extension services that are better-equipped to provide assistance to communities with a more cross-sectoral approach. To deliver this effectively at the national level, the project intends to improve the capacity of 220 extension workers through improved access to and use of knowledge in SLR, including biodiversity approach to agriculture and other land uses.

275. Support will also be provided to community members, especially farmers. The support will consider community needs, and is therefore designed after preliminary consultations with communities about their interest in taking part in SLR and their expected modality of engagement and project outcomes. Relevant manuals will be developed to guide implementation of planned activities, including CSA, tree nurseries and planting, livestock management, soils and water conservation, biodiversity conservation, and income generation activities (IGA). Based on these manuals, training will be provided to communities, CBOs and other land users along with the necessary logistical support to implement relevant SLR practices.

276. Rural community needs often lie outside the forestry and land use sector. These needs, however, impact how landscapes are used and managed. For example, over-harvesting of natural resources for cash income, fuel, or fodder, or challenges related to accessing water in highly degraded landscapes. This project will address these issues by engaging rural communities in alternative income generating activities, and in the use of alternative energy sources. Also, the project will support efforts to improve access to clean water for people and livestock in the project sites. There are also marginalized groups within communities, who will receive targeted support to organize themselves and take part in and benefit from SLR.

277. In a highly agricultural country like Tanzania, farmers play a crucial role in determining sustainability at the landscape scale. Training to farmers will be delivered by establishing farmer field schools, with logistic support for extension workers that are in line with project activities and within the limits of the project budget.

278. Gender and age influences the way individuals can participate and benefit from SLR initiatives. These factors need to be considered so that the wider community can contribute meaningfully, to ensure social acceptance and – ultimately – sustainability of the initiative. The way gender and age affect SLR, however, are not well understood and needs to be carefully integrated into SLR practices and policies in a practical way. For example, it is widely understood that women and men, the young and old, have different knowledge, roles and experiences in natural resource management. They also have different rights and access to natural resources, including land, trees, water, and animals. For this reason, the project will take measures to ensure the different gender and age groups participate in the planning and decision-making processes related to SLR implementation

in their community through the establishment and strengthening of Natural Resources Management Committee, Water Users' Associations, etc.)

279. The project aims to engage with a total of 100,000 households, from a total of 2,835,609 people living in the project area. To do so, the project will take the necessary steps to ensure meaningful and lasting participation of these households, and develop modalities that can eventually be scaled up to other areas in Tanzania. Project partners will prepare the participation modality for engaging actors and increasing awareness among community members about SLR. The outcomes of these modalities will be recorded to reflect differences across gender and age groups, to facilitate monitoring, evaluation and learning from the process, and eventual scaling up.

Outcome 2.2: Enhanced capacity of local administrators and communities to implement SLR plans

280. The capacity of local administrators and communities to implement SLR plans will, in the end, determine the effectiveness of SLR in achieving its environmental and development outcomes. This capacity exists but needs to be strengthened and integrated across sectors. In each SLR site, the project plans to reach 10 local administrators and community leaders, and train at least 100 farmers in SLR practices in all the 16 wards selected for project implementation.

281. Outcome 2.2 contains three outputs, each contributing to the achievement of the outcome. The outputs are:

- *Output 2.2.1: Trainings on SLR management are conducted on different aspects of implementation of SLR, including agriculture, SLM practices, biodiversity conservation among others using a gender balance approach*
- *Output 2.2.2: Development and implementation of a local outreach and awareness-raising campaign on SLR*
- *Output 2.2.3: Cross-sites exchange visits are organized for teams to share experiences and learn from success stories*

Output 2.2.1: Trainings on SLR management are conducted on different aspects of implementation of SLR, including agriculture, SLM practices, biodiversity conservation among others using a gender balance approach

282. An integrated landscape approach is needed to plan and implement SLR at the landscape level, yet this approach has not been considered in the target ecosystems. To address this, the project aims to train 500 personnel (MDAs, district experts, local government officials, community members and CSOs) and establish at least one Farmer Field School per project site to train at least 100 farmers per site on SLR practices. This is achieved by (i) Assessing the training needs of local administrators and community leaders, (ii) Preparing tailored training modules, and (iii) Undertaking training in each of the project districts.

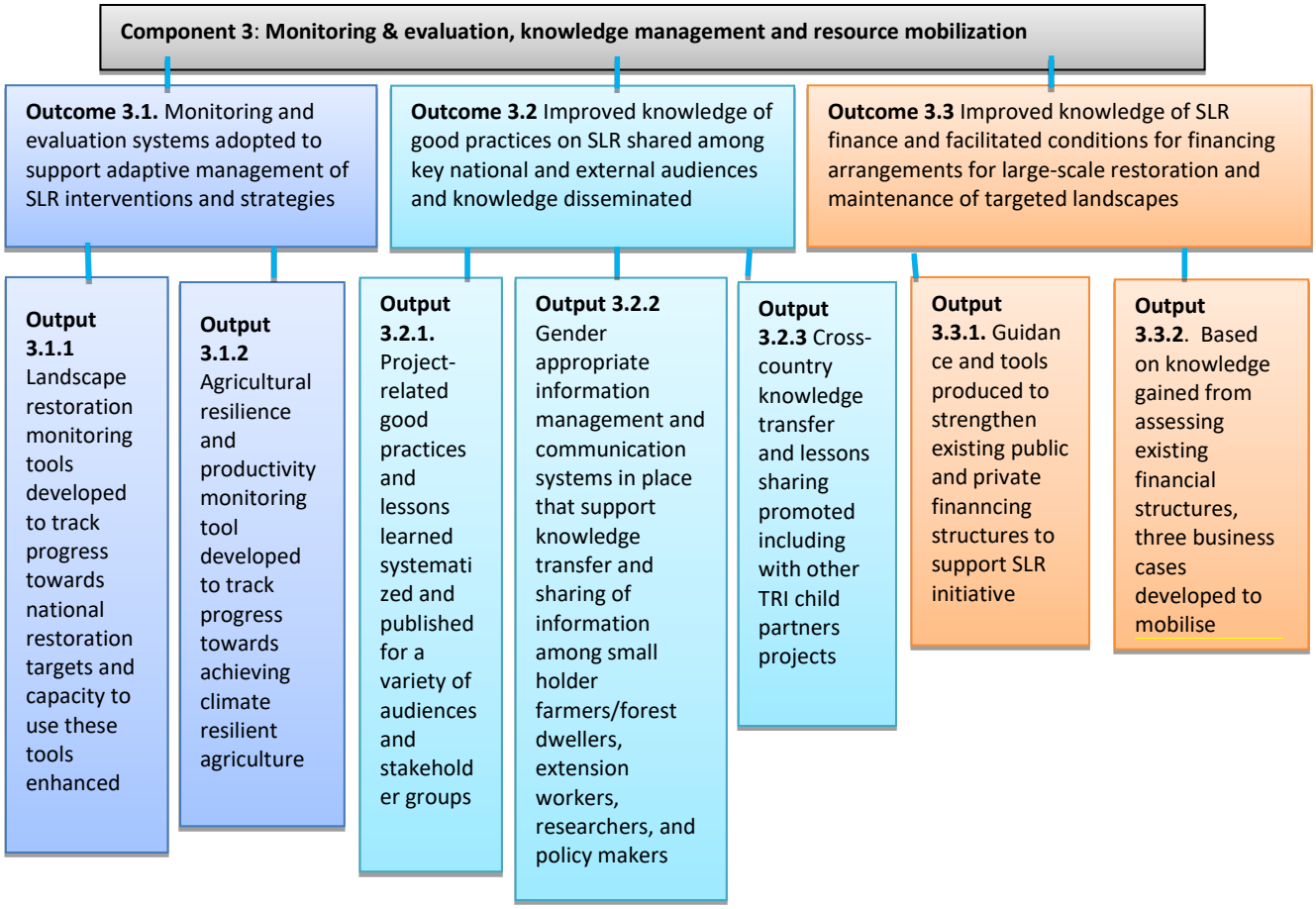
Output 2.2.2: Development and implementation of a local outreach and awareness-raising campaign on SLR

283. Within the targeted site, an outreach and awareness-raising campaign is needed to inform local stakeholders about the objectives of SLR, its benefits and costs. The project aims to have a minimum of 48 such events. To do so effectively, this output is envisioned to be achieved through four activities: (i) Identifying appropriate message and means for local outreach and awareness-raising campaign on SLR; (ii) Assessing existing outreach and awareness mechanisms in each of the districts to identify their needs; (iii) Supporting mandated agencies in the districts to better engage in outreach and awareness raising campaign; and (iv) Support the development of diversity fairs in each site.

Output 2.2.3: Cross-sites exchange visits are organized for teams to share experiences and learn from success stories

284. Lessons and experiences across SLR sites need to be shared to help local actors gain knowledge, learn how to address challenges, or have a sense that they are not alone in facing these challenges. At present, no such practices exist in the SLR domain. To facilitate this, the project aims to hold a minimum of 16 cross site visits. This encompasses three activities: (i) Jointly identify strengths and limitations observed in the implementation of SLR plans in each of the sites; (ii) Documenting how the different teams and district project committees are dealing with challenges; and (iii) Organizing exchange visits for site implementation team and district project coordination committee members.

Component 3. Monitoring & Evaluation, Knowledge Management and Resource Mobilization



285. The objectives of this component are to support the adoption of improved governance and regulations developed by Component 1 and the scaling up of SLR interventions developed through Component 2, by promoting the adoption of M&E system related to SLR, disseminating project-related good practices and lessons learned, and generating improved knowledge on SLR financing opportunities and conditions.

286. The component is designed to promote efforts to build effective partnership strategies to actively engage key actors in SLR on the ground. It will work on improving knowledge management and building capacity of local administrators, extension agents, community members and other relevant stakeholders. The component will also have a strong emphasis on M&E to monitor progress and assess impact, beginning with taking stock of existing land restoration technologies and knowledge management and community participation practices and partnership strategies. Through participatory processes, the capacity of project implementers will be assessed to

identify knowledge and skill gaps and the findings will be used to design specifically tailored training programs. Training will be designed to allow beneficiaries to gradually take on more responsibilities and to increase ownership over project activities and impacts.

287. Component 3 is designed to achieve three outcomes as follows:

Outcome 3.1 *Adaptation of monitoring and evaluation systems that support adaptive management of SLR interventions and strategies*

Outcome 3.2 *Improve knowledge of good practices on SLR shared among key national and external audiences and knowledge disseminated*

Outcome 3.3 *Improved knowledge of SLR finance and facilitated conditions for financing arrangements for large-scale restoration and maintenance of targeted landscapes*

Outcome 3.1: Monitoring and evaluation systems adopted to support adaptive management of SLR interventions and strategies

288. The planned M&E system will provide relevant information on landscape restoration, agricultural resilience and productivity, and support managers and planners to track progress towards landscape restoration and climate resilient agriculture. Specific outputs under this outcome include:

Output 3.1.1: Landscape restoration monitoring tools developed to track progress towards national restoration targets and capacity to use these tools enhanced

289. The data used to monitor landscape restoration is available only at the national level, and are generic. The restoration monitoring tools will support the generation of knowledge from aggregating data on SLR initiatives at the national level. To develop the tools the project will identify missing and validate existing baseline data on environmental/forest income of HHs, carbon stock and emission levels from project areas. Partners will also collect baseline information on the level of participation of communities and other key actors in SLR. The M&E system will be devised and introduced through awareness creation and training. Local level staff will receive facilities and training to gather adequate and reliable data disaggregated by gender for monitoring and evaluation.

Output 3.1.2: Agricultural resilience and productivity monitoring tool developed to track progress towards achieving climate resilient agriculture

290. Data used to monitor resilience and productivity of agriculture are generally limited to national level, and are very generic. To improve this, the project aims to establish a M&E system at the national level that can generate aggregated data on resilience and productivity parameters of SLR initiatives. The Project partners will develop, test and use the tool in the project sites, and document the process and lessons learnt to facilitate wider use in Tanzania. Relevant stakeholders will be trained to use the tools for monitoring agricultural resilience and productivity.

Outcome 3.2: Improve knowledge of good practices on SLR shared among key national and external audiences and knowledge disseminated

291. Currently, SLR best practices are not yet systematically evaluated, documented and shared in Tanzania. To address this, project partners will develop knowledge products for a variety of audiences and stakeholder groups that will be publicly available through knowledge platforms. Specific outputs for improved knowledge and sharing of good practices are:

Output 3.2.1: Project-related good practices and lessons learned systematized and published for a variety of audiences and stakeholder groups

292. Experiences relevant to SLR exist in Tanzania due to attempts made by the government to rehabilitate degraded lands using mainly soil and water conservation. Nevertheless, these experiences are not systematically documented. Hence, lessons are not learned and experiences are forgotten. To maximize learning, project partners will systemize best practices and lessons learned, facilitate learning through collating and synthesizing project successes and publishing findings through web sites and policy briefs.

Output 3.2.2: Gender appropriate information management and communication systems in place that support knowledge transfer and sharing of information among small holder farmers/forest dwellers, extension workers, researchers, and policy makers within each and between targeted eco-regions and at national level.

293. In Tanzania information management and communication on SLR are not tailored to the needs of smallholder farmers/forest dwellers, extension workers, development partners, researchers, and policy makers. With the support of this project partners change this and ensure that targets groups have access and the capacity to utilize communication systems that are gender appropriate and facilitate information sharing and knowledge transfer. This will be realized through the development of a knowledge management system of the project, packaging relevant knowledge and practices in SLR in formats that best suit different user groups, a national web portal on SLR and the dissemination of TRI related knowledge products.

Output 3.2.3: Cross-country knowledge transfer and lessons sharing promoted including with other TRI child partners projects

294. Currently, cross-country exchanges on SLR hardly exist. This project will promote cross-country knowledge transfer and lessons sharing by documenting Tanzanian experiences in SLR and participation in at least three knowledge-sharing events in TRI South-South exchanges. The Tanzanian team will need to present national findings at TRI global meetings, and to participate in the meetings of other TRI global projects.

Outcome 3.3: Improved knowledge of SLR finance and facilitated conditions for financing arrangements for large-scale restoration and maintenance of targeted landscapes

294 Currently, communities, public sectors, and development partners are encouraged to contribute in SLR in Tanzania. However, efforts are fragmented and capacity to attract SLR investments is limited, the total value of resources put to SLR initiatives is unknown. The project will support strengthening of national and district level fund raising mechanisms and assist in raising additional funds for SLR through the following outputs:

Output 3.3.1: Guidance and tools produced to strengthen existing public and private finanncing structures to support SLR initiative

295. The current incentives and capacities to mobilize resources for SLR initiatives and constraints in raising funds are not known by the partners. To address this project partners will undertake an assessment of the available resources, and the structure of public and private financiers that have an interest in financing SLR. After the assessment, partners will provide government staff guidance and tools for private sector engagement to attract investments in Sustainable Landscape Restoration.

Output 3.3.2: Based on knowledge gained from assessing existing financial structures, three business cases developed to mobilize support for SLR initiatives in the selected ecosystems

296. There is currently no specific financing support mechanism to support SLR initiatives. Hence a knowledge base and support mechanism for financing SLR needs to be developed. To do so, the project will build the capacity of key stakeholders to develop and present bankable SLR projects and attract private sector

investment.

297. Developing a business case for SLR requires knowledge about the net economic benefits. The existence of such studies is unknown. Therefore, the project will conduct desk studies and develop business cases and proposals for SLR, including fish, livestock, honey, ecotourism, crops to upscale socio-economic status and biodiversity conservation. This will support selected stakeholders to approach and engage with the private sector to attract funding for SLR initiatives.

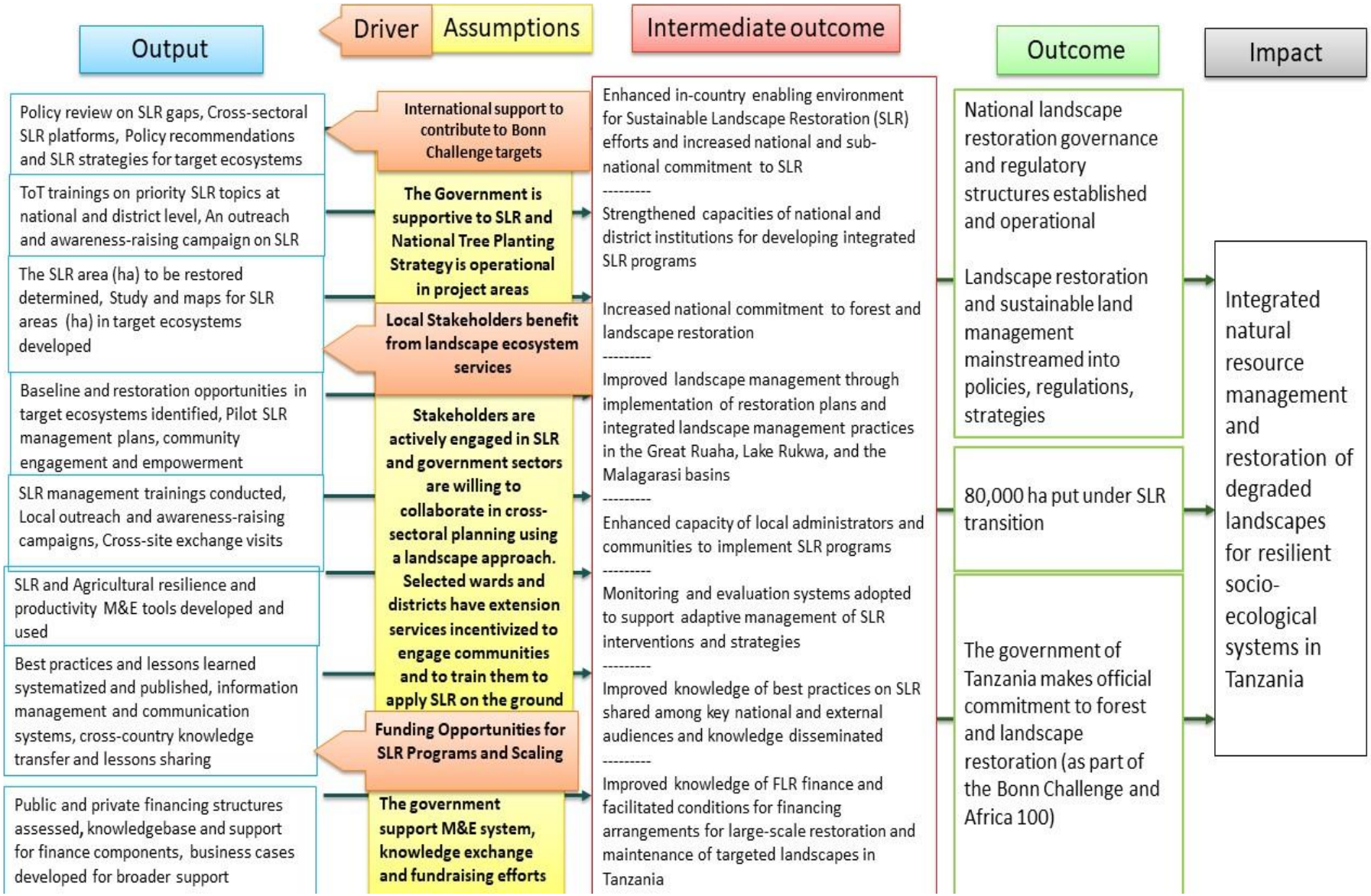
3.4. Intervention logic and key assumptions

298. Efforts to reduce deforestation and natural resources degradation began decades ago in Tanzania. There have been scattered successes in terms of conserving biodiversity, reducing deforestation and undertaking soil and water conservation measures. The challenge remained that these were isolated, often impacts were short lived and not broad enough to bring about measurable change at national and sub-national levels. Efforts were also designed and implemented on a sectoral basis – forest, agriculture, water, energy, etc. Thus, looking at and working in a big picture remained a challenge. By introducing a cross-sectoral planning mechanism and the landscape approach to i jointly plan and implement agreed upon cross sectoral plans, the project aims to create synergies between restoration and livelihoods objectives. Landscape approach differs from more traditional sectoral and project-based approaches as it provides tools and concepts for managing trade-offs in allocating and managing land to achieve social, economic, and environmental objectives in areas where agriculture, mining, and other productive land uses compete with environmental and biodiversity goals. It recognizes the need for addressing major constraints related to institutional and governance concerns and capacity limitations and by emphasizing on the key principles of adaptive management, stakeholder involvement, and reconciling and managing multiple objectives[19]. Landscape approaches are designed in a participatory manner (by actively involving key stakeholders and relevant sectors) in such a way that conservation efforts to restore and maintain ecological functions of a given landscape will be designed in such a way that they also contribute to socio-economic gains through supporting efforts to meet the growing demand for food and non-food products. By so doing landscape approach support efforts to simultaneously address the needs of oftentimes competing sectors of agriculture and forestry/conservation and thereby to attaining SDGs. The project will also link field level pilot activities with national policy making processes to facilitate learning from experience and to taking SLR to scale in Tanzania. This approach presents a departure from the business-as-usual practice to sustained transformation of restoration initiatives that are expected to contribute to poverty alleviation and sustainable development in an era of rapid socio-economic changes and climate variability and change.

299. Piloting and successfully scaling up SLR options in Tanzania requires: (i) taking baseline information and building on what has been attempted in the past by sectoral authorities and land holders; (ii) proposing options to improve existing practices and also to introduce, test and support adoption of new SLR options that would maximize conservation and livelihoods objectives; (iii) simultaneously working at national level to provide the right enabling environment to allow land users, private companies, and government agencies to actively engage in, and benefit from, landscape restoration; (iv) identifying and supporting sustainable financing mechanism to support SLR initiatives; (v) putting in place planning, M&E mechanism of SLR to coordinate and support national restoration efforts; and (vi) building knowledge management system (to synthesize and systematically document experience and knowledge in SLR (synthesizing, and sharing) and communication strategies.

[19] Jeffrey Sayera, Terry Sunderland, Jaboury Ghazoul, Jean-Laurent Pfund, Douglas Sheilb, Erik Meijaard, Michelle Venter, Agni Klintuni Boedhihartono, Michael Day, Claude Garcia, Cora van Oosten, and Louise E. Buck. 2013. Ten principles for a landscape approach to reconciling agriculture, conservation, and other competing land uses PNAS | May 21, 2013 | vol. 110 | no. 21 | 8349‑8356

Figure 5: Project Theory of Change



300. In terms of impact, the project is designed to contribute to integrated natural resource management and restoration of degraded landscapes for resilient socio-ecological systems in Tanzania. The project will work with the central and local governments of Tanzania to support the establishment and operationalization of national SLR governance and regulatory structures. Most livelihoods of rural communities are directly based on natural resources, biological diversity and ecosystem services, particularly in the case of the fragile agro-pastoral communities. Ensuring an SLR framework is therefore essential to achieve the intended goal. Furthermore, considering current and anticipated effects of climate change, proactive adaptation and mitigation solutions based on improving the resilience of ecosystem services are also required. At the end of the project, SLR and land management practices would be mainstreamed into policies, regulations and strategies (**Outcome 1**).

301. Policy reviews and recommendations on SLR, the establishment of cross-sectoral SLR platforms and the development of SLR strategies for the target ecosystems will lead to an enhanced local enabling environment for SLR efforts towards national commitment to SLR (intermediate outcome 1.1). Through training and capacity building on priority SLR topics and an outreach and awareness-raising campaign on SLR, the project will strengthen the capacities of national institutions for developing integrated SLR programs (intermediate outcome 1.2). Project partners (including VPO) will determine the SLR area to be restored nationally and will develop maps for the project areas in the target eco-systems to support national commitment to SLR (intermediate outcome 1.3). At the end of the project, implementing partners will have put 110,000 ha in the Great Ruaha, Lake Rukwa, and the Malagarasi basins under SLR transition (**Outcome 2**).

302. The project will conduct baseline studies and identify restoration opportunities of the different land uses in the project areas, develop pilot management plans and ensure community engagement and empowerment for improved landscape management and implementation in the three targeted ecosystems (intermediate outcome 2.1). SLR management trainings, local outreach and awareness raising campaigns and cross exchange visits will contribute to an enhanced capacity of local farmers and communities to implement SLR practices (intermediate outcome 2.2).

303. Project partners will work closely with GOT in generating the required information in terms of land that can be restored so that the Government can develop an official commitment to FLR as part of the Bonn Challenge and AFR 100 (**Outcome 3**).

304. M&E tools will be developed and used to support adaptive management of SLR interventions and strategies (intermediate outcome 3.1). Systematic capturing and publishing of best practices and lessons in SLR, improved information management and communication systems, will provide the Government with a continuous access to up to date information and know-how for SLR in Tanzania (intermediate outcome 3.2). Project partners will assess public and private financing structures, develop a knowledge base on financing SLR components and develop business cases for broader support for improved access to knowledge of SLR finance and to further facilitate conditions for large-scale restoration and maintenance of landscapes (intermediate outcome 3.3).

305. The theory of change of the project is based on an understanding that there will be iterative processes which will evolve and continuously align with development of stakeholder capacity, resulting in landscape restoration governance and established, implemented and mainstreamed structures ensuring that restoration targets in terms of hectares are achieved. The major activities build on raising awareness at all levels on the need for SLR, undertaking ROAM and DATAR to identify feasible SLR and biodiversity conservation options for specific land uses and for different actors; engaging communities to identify options to be implemented and the modalities of SLR implementation, facilitating interactions between communities, the private sector and the government in SLR, and documenting the process of planning and implementing SLR on the ground and assessing its outcomes, at least during the project implementation period. Experiences gained during planning and implementation of SLR on the ground will be documented and used to inform the policy process at national level. National SLR committee will play a lead role in identifying and addressing gaps in policy and legal frameworks

to support SLR initiatives nationally. Because of this interlinkage, all three components are equally important in achieving the project objectives.

306. The project will contribute to SLR initiatives in Tanzania by working on three key areas; 1) building enabling policy and institutional frameworks 2) enhancing capacity and willingness to implement FLR initiatives and 3) developing financing mechanisms to taking SLR to scale and sustain the initiatives. These three preconditions for successful SLR, will be supported through the project in line with shared principles regarding restoration activities, primarily that SLR activities should be conducted in such a way that they:

- secure the flow of multiple ecosystem services
- ensure resilience of socioecological systems to climate change
- support biodiversity conservation
- ensure equitable distribution of costs and benefits.

307. As the project moves from cooperative planning and development into implementation of SLR initiatives, trialling of financing models and facilitating reforming policies and institutional frameworks, the project will provide engaged implementers and policy groups with science informed skills building and implementation mentoring as defined through the planning process. This implementation support will include working with national counterparts to conduct rigorous baseline studies, monitor implementation and assess results. The product of this skills building and mentored implementation will be tested implementation models, frameworks and mechanisms being available to inform future planning. As part of its remit to conduct assessments and reviews, the implementation of all three work areas will be documented and assessed, ensuring that the developed tools, processes and lessons learned from the process will be available to inform replication and scaling of future implementation, monitoring reporting and verification, not only nationally in Tanzania but also to other TRI countries.

308. These assessments will be used to frame and solicit participatory reflections from implementation through project convened knowledge consolidation and reflection processes. The process will engage relevant implementers for the purposes of ensuring learning, fostering ownership of the process and facilitating improvements in future implementation. These insights will provide additional knowledge and experience that will be feed into the further rounds of project convened knowledge co-production and cooperative planning. These designs and assessments will inform future SLR planning and implementation initiatives, institutional reform processes and SLR financing mechanisms.

309. As a result of the structures, facilitated engagement of relevant actors at appropriate scales in iterative cooperative planning, reflective implementation and evidence informed assessment and interpretation of results, stakeholders at multiple levels will be equipped with experience and evidence informed, jointly owned models, frameworks and mechanisms for taking SLR to scale.

310. The project assumes that appropriate, evidence informed engagement with key networks of stakeholders at different levels with known decision-making roles, along with targeted provision of skills and mentoring will enable actors (government agencies, communities and the private sector) inclined to act to address known barriers and overcome institutional constraints to effective, multi-dimensional and equitable SLR implementation.

Key Assumptions

311. The Results Framework (Appendix 4) of the project includes a number of assumptions which have the potential to influence the activities needed to achieve the respective outputs and the overall objective. The major assumption is that the Government of Tanzania will maintain and increase its commitment in human and budgetary resources, and political support towards SLR and mainstreaming it in its strategies to achieve development goals. Over the past two decades, the Department of Environment under the VPO has been engaged in supporting national efforts of environmental protection and biodiversity conservation. Attempts to

promote landscape restoration were boosted by the National Tree Planting Strategy issued in 2016. The project assumes that this strategy will be operational in the project areas as well and would supports SLR activities to be implemented in the selected project sites. The project also assumes that national government and local government authorities have evolving interest and capacity to make use of strategies, plans, guidelines, methodologies, best practices and lessons developed through this project and will apply these tools effectively for landscape restoration in other parts of the country.

312. The project requires a good level of coordination and complementarity among different sectors to ensure that the planned cross sectoral planning and landscape level integrated implementation of restoration options will take place. The VPO is the main executing agency of the project and will ensure coordination and leadership. CIFOR, as co-executing agency is a neutral entity and could play important role in facilitating interagency communications and coordination that helps in building willingness among the different sectors and ministries so that they will actively to take part in national committees and assume oversight and leadership roles. In the past, these groups have been collaborating to achieve common objectives, and the project assumption is that this will also apply to landscape restoration.

313. As the project builds on and complements the restoration activities of other stakeholders, notably projects supported by development partners, it is the project assumption that there will be adequate opportunity to facilitate coordination among development partners and investors. The assumption is that donors will be willing to align, leverage and synergize with one another, and that funding agencies, private sector actors, and national and local government authorities see value in coordinating their investment efforts and are willing to collaborate with each other.

314. Engaging in cross sectoral planning and implementing SLR options using a landscape approach requires a minimum capacity in terms of institutional and human resources. That is why the project is designed to have a strong capacity building component adapted to the local needs and demands. Thus, it is assumed that the selected wards and districts have extension services and number of trained experts that are willing and incentivized to engage communities and to train them and provide guidance and technical support for communities and CBOs to apply SLR on the ground. The project intends to support extension workers in the selected wards with improved knowledge on SLR. It is expected that the local government authorities also facilitate this and make sure that the extension system has mechanisms on the ground that are responsive to the needs of the project and the demands of the communities.

315. Other assumptions underlying the intervention logic and the theory of change of this project include:

- National and district governments support efforts towards cross sectoral planning in SLR, and provide incentives and resources for the private sector and the communities to be actively involved in SLR
- There will be increased long-term national and county level financing for landscape restoration in the three basins because of implementation of this project;
- Donors and other partners working on landscape restoration in Tanzania will continue to support the work of the VPO, sectoral ministries and the National SLR Committee; and
- Local communities will be empowered and incentivised to cooperate in the implementation of project activities and that economic benefits derived from SLR and alternative livelihoods will be adequate to sustain continued engagement of communities in SLR;
- Public organizations, the private sector and local communities are willing to work together to maximize synergy and impacts of SLR;
- Land users (communities, the private sector, relevant local government agencies) in the project area will respect laws, bylaws and regulation governing ecosystem management, and comply with local agreements and land use plans;
- Public and private investors would see returns on investment opportunities and are thus are willing to invest in SLR in the three basins.

3.5 Risk analysis and risk management measures

316. During the PPG phase of this project the design team supported by its international partners conducted a series of consultative meetings followed by a national project inception workshop to analyze potential risks of the project and to propose the respective mitigation options. Attempt has been made to identify risks that would affect the project and hinder its ability to achieve outcomes and objectives. The risk analysis was conducted, and risk elements were identified, risk mitigation measures for each of the risks were identified and the project has been designed accordingly. The main risks and their likelihood and potential impacts and the respective risk mitigation options are listed below in Table 5. In addition to the above risks identified during the project preparation stage, other may also emerge during implementation. The project will anticipate and manage any other risks that may emerge during project implementation by involving key stakeholders.

Table 5. Project risks and risk management measures

Risk	Impact/ Likelihood	Risk mitigation measures proposed
Risk 1. *Inadequate political will* The national government may not accord sufficient priority to the identification of gaps in policies and strategies and formulating options to better support SLR initiatives nationally. Conflicting policies in other sectors, including agriculture, livestock, development can also reduce the commitment towards restoration goals.	Medium / Low	The project is implemented by the VPO that has been supporting restoration initiatives in the country. The Project Steering Committee and the National SLR Committee will help create the needed linkages and interactions amongst sectors and to ensure that SLR will also be getting similar attention by other sectors. The project will provide support through implementation of Components 1 and 4 that are focused on policy development and knowledge management and sharing. At the local level, a very strong participatory process will ensure the preparation and implementation of SLR plans on the ground using landscapes approaches. Undertaking landscape restoration requires political commitment and will to provide leadership in the planning, implementation and monitoring of SLR initiatives in Tanzania. Through its National Tree Planting Strategy as a vehicle to promote landscape restoration, the Government of Tanzania has shown its commitment. The leadership role played by the VPO is also an example. Yet the drive to increase agricultural production and aiming to increase export revenue from cash crops could put pressure on restoration initiatives. The proposed mitigation measures also include making efforts to build the capacity of senior experts at the VPO to better coordinate and work with relevant agriculture and forestry agencies in Tanzania. One proposed vehicle is the national high-level committee where relevant ministries and agencies are members. This will be used as a vehicle to secure and build political commitment and will to implement SLR in Tanzania using integrated landscape management approach where the roles of different actors are sought and included. The significant income generation activity and livelihood improvement embedded in this proposal will also contribute to mitigate the risks. The economic benefits and livelihood improvements will also contribute to sustaining positive impacts of SLR.

***Risk 2**. Inadequate capacity at the lower level government structure to lead the coordination of sectors through cross sectoral planning and implementation of SLR activities on the ground using landscapes approach*	Medium / Medium	During the PPG stage and field visits to selected districts, capacity gaps were identified within districts and wards. To address this, Component 2 and 3 of the project will work to build and strengthen capacity experts and institutions at lower levels of government structure to effectively take part in the coordination of actors, planning and implementation of activities as well as monitoring and evaluation of the process and outcome of SLR in the pilot wards. Capacity building through training and exchange visits particularly opportunities for South-South learning will contribute significantly. Undertaking landscape restoration requires having the required technical and managerial capacity to facilitate the planning, implementation and monitoring of SLR initiatives in Tanzania. The proposed mitigation measure is to build the capacity of senior experts at the VPO and at district level to work across sectors and to better coordinate and work with relevant agriculture and forestry agencies in the country. As the project covers wider area and involves the participation of numerous institutional actors, there is risk associated with poor coordination of actors. The proposed risk mitigation measures are: (i) promote the participation of actors and appropriation of annual plan of operations from the highest level, VPO, to the lowest administrative levels specific project sites (wards); (ii) improve communications among relevant actors; and (iii) periodically monitor the effectiveness of the implementation arrangements. (iv) develop local teams that will be properly trained and can steer the process during implementation.
***Risk 3**. Inadequate awareness about the need for and support for SLR by stakeholders:* There is a risk that stakeholders may not understand the need for SLR and would not actively participate in the process due to lack of awareness the need for and the potential net benefits of engaging in SLR in the selected wards.	Medium / Low	The project has plans to engage in public awareness campaigns targeting policy makers, development practitioners and the public at large on the need for SLR in the era of climate variability and change to ensure sustainability of agricultural production systems and other sectors of the economy (e.g. water, energy, etc.). Locally, a full implementation plan will be developed with the participation of all interested parties. All elements of the restoration plan will be explained and agreed.
***Risk 4**. Limited financial capacity of land managers for rehabilitation of degraded forests and agricultural lands* There is lack of financial capacity of land users particularly smallholders to undertake rehabilitation and restoration activities in degraded areas.	Medium/ Medium	Mitigation of this risk will be done through involvement of GOs, NGOs and CBOs and conservation associations with the support of relevant government institutions. The risk will be addressed through involvement of various local and international organizations including incentivizing the private sector to invest in SLR. Schemes in which the clear economic benefits deriving from SLR will be developed and explained to generate financial support for the communities and smallholder farmers.
***Risk 5**. Lack of adequate involvement of the poor, women and marginalized groups* As SLR initiatives are generally labor intensive, it is likely that mainly 'well-off' communities with more resources will invest in and adopt FLR initiatives whereas the	Medium/ low	This risk will be mitigated by developing a specific strategy targeted at ensuring active participation in decision making by the poor and other vulnerable groups. Elements of this strategy will include: building teams and group cohesion for labor pooling; convening focal group discussions (women, youth, poor farmers) to identify and address barriers to participation. The project has planned training of experts at

poor and other vulnerable communities could be 'missed out'. Poverty leads to over-exploitation of natural resources and may prevent local communities from actively participating in SLR initiatives. Poor households and other vulnerable segments of the communities (e.g. women–especially widows, disabled, youth, the elderly) may not be able to actively engage in and equitably share the benefits of SLR.		different levels on how to engage communities in SLR. Participatory approaches will be used to empower communities and to ensure that women, the poor and other marginalized segments of the community stakeholders are aware of their rights to participate and the requirements and benefits of project interventions. Other mitigation strategies include (i)design and implement an inclusive mechanism so that the process is transparent in the selection of participants and beneficiaries; (ii) Preparing annual plans in such a way to provide opportunities at local level to ensure women participation and promote gender equality in local committees and to empower women and vulnerable social groups in the project areas, and (iii) working to address if any unequal access to project activities and associated benefits for vulnerable social groups, especially women and very poor households.
Risk 6. *Land holders and forest and water users fail to observe regulations* In some cases, land owners or water users may not respect rules governing access to, management and use of resources, leading to further encroachment of river beds, informal pumping of water for irrigation, mining in the river beds, burning of forests, and expansion of agricultural areas into forest reserves and Protected Areas.	Medium/ Low	The project has plans to first increase awareness about the need for SLR, and participation strategy that promotes active involvement of communities in decision making. SLR options to be promoted are also those that increase benefits to communities. All these are expected to increase ownership by communities and respecting rule and by-laws. Also, the project will collaborate with local authorities to supporting efforts to make sure that laws governing access to and use of natural resources are respected.
Risk 7. *Communities and private sector investors not willing to invest in landscape restoration:* Restoration being a long term and resource intensive engagement, unless sufficient incentive mechanisms are put in place it is possible that communities and the private sector may not invest sufficiently in SLR	Medium / Medium	The project attempts to mitigate this risk by proposing activities under Component 1 (where policies and legal frameworks will be assessed for their support for SLR) and Component 3 where innovative financing mechanisms are to be identified and tested. The project will also develop business cases on the value of ecosystem services. The project encourages dialogue between policy makers and the private sector to build awareness that SLR initiatives could also become investment opportunities. Communities and CBOs in the project sites will be trained and supported to develop investment-worthy SLR business plans that are attractive to private investors. Experiences show that in some cases certain groups of land managers, community groups or local government authorities may be reluctant and even resistant to implement SLR options identified by the project for a landscape. Proposed risk mitigation measures are: (i) broadly involve stakeholders in local level planning and share widely the results of the cost and benefit analysis of SLR options; (ii) demonstrating to all the costs and benefits of selected SLR options by adequately disclosing the opportunities, risks, and commitments associated with the operation to individual households or community groups to make informed decisions about their participation; (iii) create and maintain channels of communication with local stakeholders on the progress and achievements of the operation and define channels to receive and address worries, concerns, and complaints, and (iv) put in the annual plan activities to closely work and strengthen relevant community organizations, such as forest users

		associations, water boards, etc. (v) when possible develop rewarding schemes and incentives for those participating in SLR
Risk 8. *Adverse impacts of climate change* Tanzania in general and the selected water basins in southern and western parts of the country are prone to impacts of climate variability and change. Climate variability and change has the potential to increase the frequency and intensity of land use changes to woodlands and forests due to agricultural expansion or livestock grazing or may even impact the establishment of agroforestry and sustainable forest management through increase forest fire incidence for example	Medium /Low	Planned interventions for the different land uses, particularly in agricultural field and rangelands will contribute in building resilience to climate variability and change, besides contributing to mitigation. The use of biodiversity and the identification of well adapted tree species as well as agricultural crops and varieties We will use GIS based models to find the best possible species and varieties for prevailing climate conditions and future climates as part of risk reduction approach. The proposed mitigation measures are: (i) to design a fire management plan as part of the intervention in prone landscapes; (ii) to put in place monitoring systems that allow timely detection of land use changes in the project areas; and (iii) establish commitments in deals (co-management agreements and management plans) to be signed with the beneficiaries to continue maintaining restored areas, which extend beyond the project period. Generally, we will continue assessing risks through proper characterization of existing conditions so that we can have objective assessment of both pre-intervention conditions and desired restoration outcomes to better document and understand benefits and costs restoration activities to environmental risks

3.6 Consistency with national priorities or plans

317. The Government of Tanzania has enacted several legal and regulatory instruments to govern the management of critical ecosystems, biodiversity conservation, forest and agricultural landscape. For brief description of each of the major acts relevant to SLR, please see Annex 4. The proposed project is fully in line with these policies and normative documents.

318. The project contributes to all three principal objectives of The Tanzania Development Vision 2025 that has been developed to guide national development efforts which include achieving good and quality life for all, good governance and building strong and resilient economy. Vision 2025 also informed the Agricultural Sector Development Strategy issued in 2001. The strategy aims at reducing rural poverty, securing the long-term productivity of agriculture (which is dependent on sustainable use of natural resources) and mainstreaming of planning in other sectors. The planned project activities, as well as outcomes of the project contribute to all these key elements of the Agricultural sector development strategy.

319. The project is consistent with the Tanzania's National Climate Change Strategy issued in 2012 to address climate change challenges in the country and to help Tanzania participate in and contribute to the global efforts to reduce GHG emissions. The project directly contributes to six of the eight objectives of the Strategy: to build the capacity of Tanzania to adapt to climate change impacts; to enhance resilience of ecosystems to the challenges posed by climate change; to enhance participation in climate change mitigation activities that lead to sustainable development; to enhance public awareness on climate change; to enhance information management on climate change; and to mobilize resources including finance.

320. The project is in line with the National Biodiversity Strategy and Action Plan (NBSAP) 2015 -2020 which recognizes that biodiversity wealth contributes significantly to the sociocultural, economic and environmental goods and services to the country and peoples` livelihood. The NBSAP 2015-2020 also highlights the value and contribution of biodiversity to human well-being and the causes and consequences of biodiversity loss, and set national biodiversity targets based on national priorities and aiming at contributing to the global targets. Through rehabilitation of large tracts of degraded forests and landscapes, the project contributes to conserving biodiversity resources of the country. The project contributes directly to National Biodiversity Target 1 (By 2020 at least 60% of the population is aware of the importance of biodiversity and its impact on human well-being and socio-economic development of the country), and Target 4: By 2020 investments in systems of production and consumption based on sustainable eco-friendly practices increased.

321. The project is also consistent with the draft for a REDD+ strategy submitted to the Government in 2012. In particular the project will support the Government of Tanzania in demonstrating emission reductions from deforestation and forest degradation and other aspects of REDD+ and thus enhancing carbon investments in the country. More specifically, the project will contribute to establish a robust baseline scenario and an effective MRV system for determining forest carbon changes, will contribute to build capacity in terms of training to support the REDD+ policy; will generate knowledge and promote scientific understanding on REDD+ issues through researches, and will strengthen public awareness, communication and information sharing systems on REDD+ and other forest management related issues and it will strengthen mechanisms to address drivers of deforestation and forest degradation in various agro-ecological zones, in particular in the three selected basins.

322. The project is consistent with the African Forest Landscape Restoration Initiative (AFR100) that is aimed at bringing 100 million hectares of deforested and degraded landscapes across Africa into restoration by 2030. This initiative connects political partners—participating African nations—with technical and financial support to scale up restoration on the ground and capture associated benefits for food security, climate change resilience, and poverty alleviation. AFR100 contributes to the African Resilient Landscapes Initiative (ARLI), and complements the African Landscapes Action Plan (ALAP) and the broader Climate Change, Biodiversity and Land Degradation (LDBA) program of the African Union. AFR100 also accelerates progress towards achieving the Sustainable Development Goals (SDGs) and the Paris climate agreement. Tanzania has not officially signed onto AFR100 though the country has committed to a national tree planting strategy that aims to contribute to reducing forest degradation and rehabilitating landscapes.

323. The project is in line with and supports the efforts of the UN Development Assistance Plan (UNDAP II) 2016-2021 for Tanzania[20]. UNDAP II builds upon the accomplishments of UNDAP I (2011-2016) following the agreements the two parties reached to work together towards more coherent programming. The UN system works to ensure it is 'fit for purpose', able to respond to the demands of the post-2015 global and domestic agenda through its strong existing ties with central and line ministries, the UN will continue to pursue robust engagement with local government at regional and district levels, complemented by outreach to communities across the country. By working from local to national level, and sharing experiences and lessons to the UN system, this project is aligned with and contributes to the successful implementation of UNDAP II (2016-2021) that UN and GoT have agreed to work together in common pursuit of the National Visions and the SDGs, in collaboration with the support of Development Partners.

3.7 Incremental cost reasoning

[20] United Nations Tanzania Office of the United Nations Resident Coordinator in Tanzania. 2016. United Nations Development Assistance Plan (UNDAP) II July 2016- June 2021. United Republic of Tanzania. A United Vision: Working Together for the United Republic of Tanzania www.tz.one.un.org

324. The project builds on national resources (e.g. the Tanzanian Forest Fund, The Environment Fund, besides budgets for sector ministries and local governments to managing natural resources) and on-going national initiatives and commitments (e.g. the National Tree Planting Strategy, Intended Nationally Determined Contributions, etc.). However, the project rational builds on the realization that the sustainability of such interventions is affected by the fact that they are sector driven and poorly integrated. Thus, the project will address the lack of integration using cross sectoral planning mechanism and the lack of experience in landscape approaches in implementing SLR plans on the ground, two important aspects of this project that ensure landscape restoration is sustainably taking place.

325. Component 1 will address the issue of multi-sectoral and integrated approaches at the national level and will lead to the commitment of restoration targets to the Bonn challenge. Analysis of degraded areas in Tanzania and the potential for restoration will inform the government on areas to be committed for restoration. The policy and processes analysis under component 1 will also allow to identify and remove barriers to the adoption of multi-sectoral planning at the national level. At all levels (national and local) this will entail bringing together key stakeholders to assess resource status, mechanism of access and use, management practices, and agree on options to improve economic, social and ecological benefits of conservation and restoration efforts. The focus on both agricultural and surrounding forested and agroforest landscape is justified from the Aichi Target and ecosystem approach perspective. This component will create and/or strengthen institutional frameworks and policies enabling scaling up of innovative SLR options that improve forest and agricultural land productivity and sustain or improve flow of agro-ecosystem services. Integrated agricultural and forest biodiversity management practices and restoration plans to restore and maintain deforested and degraded landscapes implemented by government, private sector and local community actors, both men and women is the outcome that this component is set to contribute to. Without GEF intervention, it is likely that restoration efforts will continue to be less coordinated and sectoral.

326. Component 2 will demonstrate practically how to implement landscape work in large landscapes and ecosystems. Component 2 will put in place enabling conditions to allow for and facilitate large-scale restoration of degraded forests and maintenance of critical biodiversity-rich landscapes. This component is designed to apply policy and legal frameworks for active community participation, equitable access to forests and agricultural land and to help put in place equitable benefits and responsibility sharing arrangements in restoration schemes to reward custodians of forest ecosystems and ensure flows of ecosystems services and thereby resilience of socio-ecological systems to climate change. The component will enhance capacity of local administrators, extension service and local communities to manage landscapes in an integrated manner and will raise awareness on the importance of conserving biodiversity to ensure flow of ecosystem services for the resilience of the whole system. Results from this component will also inform component 1 on the major steps to be taken for successfully restoring degraded land. The manuals developed for implementation in the three selected landscapes and water basins will be adopted at the national level for upscaling purposes.

327. Existing barriers to sustainable forest and agricultural land use will be overcome by enhancing awareness and capacity building, by improving knowledge of critical natural systems, by testing solutions and new participatory approaches to resource management through on the ground demonstrations, and by preserving biodiversity that sustains the ecological integrity and services. Special attention will be given to evaluating the opportunities and needs of women, youth and disadvantaged groups to ensure that suggested changes and options also yield benefits to them. The multiple benefits arising from such an integrated approach can only be achieved if the community is actively involved in the planning, and implementation of specific measures and the evaluation of project outcomes. Gender-balances watershed management committees will be established in each of the selected sites and work alongside relevant national and local institutions to implement this ambitious plan. Without GEF support, efforts to address landscape degradation within the targeted ecosystems will include ad-hoc interventions with limited geographical coverage and often focusing on the symptoms of the problem rather than on root causes/barriers and inadequate attention to effective engagement of stakeholders that enable the

adoption and replication of sustainable landscape restoration practices. GEF additional contribution is therefore critical to support efforts in restoring healthy ecosystems in the selected 11 districts from the three basins.

328. Component 3 will have a strong emphasis on M&E, thereby also taking stock of innovative land restoration technologies and the dissemination of best practices on improved Tanzanian farming and forestry and biodiversity conservation to stakeholders. Through this component, best practices will be disseminated at the national level for upscale and replication. In addition, it will raise awareness on SLR finance and facilitates conditions for financing arrangements so that SLR initiatives would continue to be applied in degraded landscapes in Tanzania.

329. The experiences gained will be made available for use by the TRI in other countries. The full realization of these expected global environmental benefits (large areas of degraded forests and landscapes rehabilitated, critical landscapes protected, species and genetic diversity maintained in agricultural and livestock production systems) requires GEF involvement and provides significant added value to the efforts of the Government of Tanzania in SLR and mainstreaming biodiversity.

330. Through the alternative scenario, the following outcome will be achieved: i) at least 110,000 ha will be restored using SLR approaches, ii) improved policy, governance and regulatory frameworks to support coordinated and equitable landscape restoration efforts, iii) there will be a new national commitment (ha) to forest and landscape restoration, iv) a total of 1.18 million tCO2 eq per year of emissions avoided or sequestered in the target landscapes because of SLR and SLM interventions, v) an estimated total of - 4.7 million tCO2 eq emissions is avoided or sequestered over a period of 20 years in the project area through SLR and other improved resource management practices, vi) M&E systems and awareness raising and communities strategies established and put in place to provide relevant information to managers and planners, and vii) National and district level fund raising mechanisms strengthened and assisted to raise additional funds.

331. The incremental costs and benefits of the project are summarized in the incremental cost matrix (Appendix 3). Baseline expenditures amount to US$ 45,941,142 while the alternative has been estimated at US$125,373,747. The incremental cost of the project, US$ 79,432,605 is required to achieve the project's global environmental benefits of the project. Of this amount US$ 11,205,872 (representing 14.11 %) is being requested from the GEF. The remaining amount of US$ 68,226,733 (85.89 %) of the total cost will come from the Government of Tanzania and other national and international donors. The figures include both in-kind and cash contributions.

3.8 Sustainability and Innovation

332. The project is designed to promote long term sustainability of SLR in Tanzania by working on mechanisms that ensure continued engagement of land managers in SLR, including options that enhance and sustain positive impacts of SLR and facilitate flow of resources to support SLR initiatives. By encouraging the VPO and by working through the Steering Committee, the project aims to actively involve most appropriate academic and research institutions and line Ministries so that the project benefits from and builds on existing potential in the country and lays the foundation for scaling up good practices. By working with Universities, experiences gained in SLR could be included into the curricula. This is necessary to integrate experience gained into the learning and research undertakings in Tanzania. Collaborative works across institutions also help secure the continued support of policy makers and the national academic and research institutions, besides the government and the engagement of local government authorities and communities in landscape restoration. That is why the three components of the project address issues of creating an enabling environment in terms of policies and programs, and building capacity of actors at different levels to engage in restoration and sustainably finance such initiatives. By linking field level piloting with national level planning and policy making processes, the project is laying the foundations for ensuring sustainability of SLR initiatives. Other aspects of the project that enhance long term sustainability include: (i) implementing project activities through existing national and local

government authorities at district levels; (ii) active engagement of landholders, notably communities in the selection and implementation of SLR options; (iii) documenting the process and outcome to draw lessons, share experiences, and raise awareness; (iv) providing capacity building to a broad range of stakeholders (from national level experts to community members) to facilitate the planning and implementation of SLR initiatives; and (v) putting in place M&E systems that will help the GOT design and implement the scaling up of best practices in SLR, and to monitor progress.

333. Sustainability has several dimensions, three of which are fundamental. These are economic and financial sustainability, social sustainability and institutional sustainability. The project is designed to work on all these aspects of sustainability.

334. ***Economic and financial Sustainability:*** Economic sustainability is about the incremental benefit of SLR practices. Unless rehabilitated landscapes are productive, landholders will not continue investing in their management. The project will support efforts to sustainably intensify agriculture and livestock farming (e.g. Sustainable Land Management, Sustainable Forest Management, conservation agriculture, greening livestock production, rangeland management, agro forestry, efficient water use, etc.). It will also assist households to reduce their dependence on forests and trees on landscapes using alternative energy sources and energy saving stoves. The project will also encourage diversification of livelihood options that are compatible with SLR (e.g. beekeeping, petty trade, poultry, fish farming, etc.). Financial sustainability of SLR initiatives is assessed by the extent to which stakeholders, notably government, allocate funds for landscape restoration activities through provision of co-financing contributions. The project during the PPG phase engaged district authorities that have agreed to provide co-financing for implementing project activities and to continue financing activities that will be initiated under the project once GEF funding ends. This Child project is also linked to the global child project under TRI that is designed to support national SLR initiatives improve their capacity to generate finance from local, national and international sources.

335. ***Social Sustainability:*** Social sustainability requires ensuring inclusive participation particularly local communities, women, and minorities; transparent and participatory decision-making processes; and equitable net benefit sharing mechanisms in SLR. Efforts are being made to be as inclusive as possible, adopting transparent selection of beneficiaries and restoration sites. The other aspect of social sustainability is the involvement of local communities in the implementation of project activities. The project will also provide an opportunity for local communities to develop environment and gender-sensitive income-generating activities that can be used to supplement the financing coming from governments, NGOs and donor agencies. Genuine participation of communities and other local actors in all stages of the project cycle will build ownership of project activities and impacts by communities. The project will pay attention to women and girls, which is described in detail in the section on gender. By so doing, it is assumed that the project will contribute to enhancing social benefits among communities residing in the projects areas.

336. ***Institutional Sustainability:*** As the project was designed under the lead role of the VPO, government ownership is assured, and institutional sustainability enhanced. The design process was also participatory that engaged not only governmental agencies but also NGOs and communities. During implementation, cross sectoral planning mechanisms and national level oversight committees will be established under the VPO. These will be assisted by the project to take measures that would allow them to be operational even after the project period and to play a greater role in guiding SLR efforts in the country. The other factor of institutional sustainability is the fact that the project will be implemented by government staff at district and ward levels. This will ensure that experiences, lessons learned, and best practices generated by the project are maintained within the government structure and mainstreamed into other projects. Another aspect that the project will support to enhance institutional sustainability is the long-term engagement of investors in landscape restoration initiatives. Capacity building is an integral part of the three components of the projects, and attempts will be made for long-term engagement of investors in landscape restoration projects. Capacity building and awareness raising activities are integrated in each of the three components of the project. The project will assist SLR actors, including NGOs and

CBOs to work closely with local government officials to ensure that relevant laws are enforced at local level. This creates confidence for communities and the private sector to further invest in SLR.

Innovation

337. The project builds on the experiences accumulated in Tanzania over the years in the areas of soil and water conservation, tree planting, joint forest management, community based natural resources and other related initiatives. The two major innovations this project comes up with to support SLR initiatives in Tanzania are: (i) cross sectoral planning; and (ii) landscape approaches. The national development plans and strategies to restore forest and reduce land degradation are currently planned and implemented in a sectoral manner, resulting in significant conflicts among different policies. The project will introduce and support cross-sectoral planning at national and local level so that trade-offs are known and minimized while synergies between and across sectors are maximized. The landscape approach helps create the mechanism to bring in all key actors into implementing the planned SLR options on the ground and to negotiate objectives and net benefit sharing mechanisms in SLR interventions, In addition, the project will be supported by the latest technical and technological capacities to map landscapes (ROAM at national and sub-national level, using drone based mapping for project sites, etc.) that need to be put under restoration, and from international experiences in informing the planning, implementation, and evaluation of SLR, and in synthesizing lessons learnt and sharing them nationally and internationally.

3.9 Replication

338. This project is designed to cover planned districts in a phased approach, by starting and learning from experiences to move on and cover all the 16 wards by the end of the project period. By linking field level interventions with national level policy dialogue forums, the project is also set to lay the foundations for up-scaling SLR options in other districts within the three basins and ultimately across Tanzania. The ROAM and DATAR studies will lay the ground work in terms of identifying degraded landscapes and what options could be proposed to restore them. Restoring degraded lands plays a major role in addressing climate mitigation and adaptation challenges, strengthening ecosystem health and resilience, and improving livelihoods of rural communities. By so doing, the project contributes to building resilient and prosperous socio-ecological systems in Tanzania.

339. VPO, along with relevant sector ministries and local government authorities and in collaboration with development partners are already engaged in implementing sectoral projects that do contribute to efforts of landscape restoration. These are described in detail in Section II of this proposal. By working closely with these projects, the project will also facilitate efforts to scale up good practices. Districts have several sectoral plans that are also ready to learn from the project and disseminate good practices widely. In all the selected districts, there have been consultations and commitment to work with the project is high (as illustrated by the willingness of local governments to co-finance), it is highly likely that experiences of cross sectoral planning, landscape approach and best practices in SLR will be adapted and replicated throughout the country.

340. As the National SLR Committee to be established will inform and learn from the project about SLR related initiatives in Tanzania, there is also great potential for replication at the national level through multiple government institutions, NGOs and development partners. The selection of the project sites also considered the potential for dissemination of lessons learnt to other areas. As a result, processes followed and many of activities to be carried out through the project will be relevant to other parts of the country. It is expected that through successful demonstration of local plans, policies, governance frameworks, incentive programs, and capacity building exercises, national actors will adopt some of these practices for replication in other parts of the country. Component 3 of the project specifically focuses on mechanisms to scale-up SLR results achieved in the project area to the rest of the country through dissemination, training and knowledge management. Through individual and institutional capacity building, the project will improve stakeholders' access to knowledge on SLR. Emphasis

will be on options to enhance the role of communities and the private sector in SLR, and how to mainstream SLR in policies, plans and programs at local and national levels.

341. The project has plans to document lessons learnt from Tanzania and to share them internationally. Thus, replication at the international level is envisaged, particularly with neighboring countries and with other TRI project countries. As much as possible, the project will also work closely with other relevant GEF funded projects in the country to learn from and to share lessons and experiences on SLR so that best practices can be replicated in other GEF supported projects in Tanzania and elsewhere.

3.10. Public awareness, communications and mainstreaming strategy

342. The public awareness and communications work under Component 3 includes the review of past experiences (in restoration and integrated natural resources management projects that were expected to have a positive effect on environmental outcomes at different levels – local to global) and identify limitations as well as successful replicable experiences and best practice cases to draw lessons from. Likewise, approaches, techniques and practices that failed and should be avoided will be identified to inform project planning and implementation. After careful review by VPO, successful experiences and failures will be communicated to stakeholders so that project implementers will not repeat failures while building on successful experiences. At regional, district and community levels, information on good practices including local knowledge and experiences will be shared with SLR actors in the project area. To provide cost-effective information services in places where computers, phone lines or the internet is not often accessible, the best practices will be shared through community information centers, outreach fora/platform with up-to-date technology. Other relevant fora such as meetings, notice boards, posters, social gathering and communications opportunities will be established for sharing and disseminating relevant information.

343. Good practices will also be shared with other TRI countries; international environmental NGOs; other practitioners; and other donor agencies. All information gathered on best practices and lessons learned will be stored online in the project website.

344. The project will develop a communication strategy focused on reaching out to the wider stakeholders at various levels of decision making. The communication strategy will outline the products to be communicated to every group of identified stakeholders and the action needed to make a difference. For a product to be received, understood and utilized by a stakeholder, it must be packaged and delivered in a manner appropriate for the target stakeholder. The strategy will also highlight the appropriate media platform to be used, timeframe for communicating the product and the responsible partner among the implementing partners.

345. The project will also ensure regular communication between the VPO, the Project Management Unit, and TRI Global program coordination unit. Project management will maintain necessary consultations with UN Environment and GEF projects in Tanzania to consolidate joint efforts and share experiences. The project will also provide regular updates to the national and district level governments, UN Environment and GEF on the progress made in the implementation of the project.

346. Both electronic and print media will be engaged through the project by disseminating information on landscape restoration success stories and other activities that will be undertaken by the project. The project will therefore ensure that there is an increase in media coverage and public awareness of landscape restoration and integrated natural resources management issues in Tanzania.

347. The project has plans to organize public meetings for local communities and other stakeholders in the project sites to create awareness about the need for SLR and about the objective and scope of the project. At the

later stages of the project, there is a plan to also disseminate information to potential investors on landscape restoration investment opportunities in Tanzania.

348. In addition, the project would support South-South exchanges with other TRI countries to promote experience sharing and learning. International cooperation plays a critical role in addressing issues related to SLR in the country. Promoting South-South collaboration in areas of exchange of experiences and innovations (technologies, institutional arrangements, and management practices) will help build capacity not only in field level planning and implementation of SLR but also in SLR research, technology transfer and policy making. Planned activities about information sharing to policy makers, raising awareness of the public and sharing information on SLR at large, are indicated in Component 1 and 3 of Appendix 5.

3.11 Environmental and social safeguards

349. During the PPG phase, the project underwent the UNEP Environmental, Social and Economic Review. The review is based on UNEP's Environmental, Social and Economic Sustainability Framework. This Framework sets minimum sustainability standards for UNEP and its implementing/executing partners, and enables UN Environment to anticipate and manage emerging environmental, social and economic issues. The assessment found no major threats on the seven safeguards since the project focus is on landscape restoration through inclusive participation of communities and women, and it is not involved in major infrastructural development, introduction of new technologies, displacement of populations or introduction of GMOs (Appendix 16). However, precautionary measures will be taken if there will be risk of causing harm to the people or to the environment.

350. The project is designed to rehabilitate degraded landscapes and protect biodiversity, and improve habitats and ecosystems, including productive lands. By improving the management of critical landscape with biodiversity significance, and by promoting the integration of biodiversity objectives in the management of agricultural landscapes and water courses, the project contributes to biodiversity conservation and carbon sequestration on a significantly large area of land.

351. The risks associated with biodiversity is low as the biodiversity that will be promoted and mainstreamed is locally-adapted and helping local communities to adapt their agricultural landscapes to climate change. The focus on land scape rehabilitation helps lower risks to biodiversity loss as communities will be supported to maintain and even plant indigenous trees and use local varieties of crops that are well adapted to climatic vagaries common in drought prone areas. Special attention will be paid to reduce the possible environmental risks of the project if partners tend to promote the use of certain agricultural and tree biodiversity through enhanced linking of farmers to markets to improve income. However, as this project only deals with cultivated agricultural biodiversity and not with any extraction from the wild, there is no undue pressure on the biodiversity resource leading to possible over-harvesting and depletion. The project clearly avoids any practices that result in any reduction of on-farm agricultural biodiversity.

352. With regards to social safe guards, rural communities are the target beneficiaries of the project and it will support their efforts for SLR and agricultural production practices. The project ensures the involvement of a high percentage of the marginalized population in all the selected sites. By working closely with community based organizations and local government authorities, the project enhances active participation in SLR and a more equitable distribution of net benefits from landscape restoration and improved forest and land management practices so that communities who invest time and resources in SLR would benefit accordingly from the fruits of landscape rehabilitation works. Social benefits of the proposed project, as also highlighted under para 145, include promoting inclusive participation particularly local communities, women, and minorities; transparent and participatory decision-making processes; and equitable net benefit sharing mechanisms in SLR. Through the process the project contributes to: (i) facilitating participation of communities and other local actors in all stages of the project cycle to build ownership and maximize project impacts on people and the environment; (ii) encouraging communities and local authorities practice transparent selection of beneficiaries and restoration sites;

and (iii) developing environment and gender-sensitive income-generating activities that are SLR friendly and work for women and girls. By so doing, it is expected that the project will contribute to enhancing social benefits among communities residing in the projects areas.

353. The M&E system of the project has key indicators related to ensuring inclusiveness in community participation as well as careful consideration of gender so that through the project cycle, it embeds a thorough gender engagement strategy. It is designed to also track and monitor this and to ensure that this critical role is not overlooked and to also ensure that mechanisms and incentives can be developed which provide rewards and benefits to women and thereby strengthen their role in and benefit from SLR initiatives. Tanzania's own SESA strategy articulated in its REDD+ strategy will be followed up on and fully observed. Likewise, by also paying attention to participating the youth, women and the poor in FLR initiatives, the project maintains an international standard of social safeguards.

354. The project will work very closely with district level regulatory authorities to ensure compliance of environmental and social safeguards as provided in various statutory regulations. In addition, the community groups will also be trained to monitor environmental indicators including biodiversity and critical ecosystems to ensure that the ongoing project activities do not harm the environment.

Gender mainstreaming and women empowerment

355. According to the national population census of 2012, females make up 51.3% of the population. As in many countries of Sub-Saharan Africa, In Tanzania, women play a major role in agriculture and in accessing and using natural resources, notably forest, water and land. It is also evident that particularly women are victims of the consequences of deforestation and land degradation. Land degradation results in loss of vegetation that leads to shortage of fuel wood and food in rural areas forcing women to walk ever-increasing distances to collect fuel wood and wild food. The time spend to collect these forest products could be used for economic activities such as agriculture. Their role in various agricultural operations, from cultivation to harvesting, in non-farm activities such as weaving and basketry, and in managing household chores, women spend most of their day and evening times working. Despite multitudes of responsibilities, the power most women have in making decisions at household, village and higher levels remain limited due to socio-cultural barriers. Their access to education and to productive assets like land and forest resources remains limited. Besides, the responsibilities that women have in their day-to-day activities and the existing barriers limit the extent to which woman may participate in and benefit from SLR initiatives. It has been reported that factors affecting engagement of women in and benefits from natural resources management in general include: institutional failures, poverty, limited knowledge and inadequate skills in resource management, lack of incentives for engaging in natural resources management, and lack of innovations (e.g. alternative energy sources). In so far as the productive potential of women is impaired by the disproportionate burden they bear, little societal progress can be made and it will be difficult to have restored and functional landscapes. Empowerment of women is thus a critical factor to secure effective participation of women in natural resources management and biodiversity conservation and responsible use of these resources.

356. Women in Tanzania are also regarded as important natural resource managers. Thus, the project will pay special attention to engaging, empowering and enabling women in managing their resources for sustainable flow of ecosystem services, and in play active role in making decisions regarding project undertakings – what will be done, where, and who participates and how responsibilities and benefits are shared in SLR initiatives. The project will pay attention so that planned activities should not disproportionately affect the social and economic needs of women. Rather they will be designed in such a way that they help address the challenges women face and as much as possible enable them to participate in the process of planning, implementation and evaluation. The table below presents how gender will be mainstreamed in the proposed project.

357. The project has plans to actively engage women in the planning, implementation and monitoring and evaluation processes so that they could play active roles in decision making and to make sure that they also equitably benefit from gains to be made. Budget has also been allocated to collect gender disaggregated at all stages to generate evidence and document the process and impact of the project on engaging and benefiting women.

Table 6. Objectives, activities and targets of gender mainstreaming strategy of the project

Gender Mainstreaming Objective	Gender Mainstreaming Activity	Gender mainstreaming Target
To encourage the participation of women in project activities, including playing lead roles in committees and CBOs	Women will be assisted to organize and mobilize themselves and play active role in project activities planning, implementation and evaluation. They will be assisted to become members of the committees working directly with the project, and with existing CBOs and associations (e.g. Natural Resources Management Committees, Joint Forest Management committees, Water Users Associations, etc.) If the identified SLR option or alternative livelihood entails establishing separate women's teams, we will assist women to do so	As SLR options require investment in terms of time and labor, participation of women is likely to be lower. However, the selection of SLR options will consider women and we will work to make sure that at least 30% of project beneficiaries are women. The project will work to ensure at least 25% women representation in project specific committees at project site level
Undertake need assessment and organize training and support programs tailored to women	The project will undertake needs assessment to identify areas where women experts and farmers need training and support to actively engage in SLR. The findings will be used to inform policy and legal frameworks support envisaged in component one of the project. Specific suggestions will be made to address gender related challenges in SLR and to support interventions in terms of capacity building through training and on options how to strengthen the legal framework to enable women to use their full potential.	The project will identify gender related constraints to participate in both national level policy discussions and local level project planning and proposes measures to improve participation and contribution of women in national level committees and at project site level engagements.
Building knowledge and skills of women representatives through exchange visits	Study tours/exposure visits will be organized for women leading associations or are members of committees working with the project to help them learn from other women and project sites	At least 50% of women technical staff and extension workers as well as members of committee participate in experience sharing visits
Actively engage with women in the project sites and undertake awareness raising about their rights in general and their potential role in the project in particular	Design communication strategies to enhance awareness of women about their rights about access to resources and the objectives and expectations of this project	At least 75% of women residing in the project sites are reached, and about 30% of all who take part in implementing the project are women.
Select SLR options that increase income to women, and reduce their work (e.g. in collecting firewood, fetching water, etc.)	Work with relevant local authorities to promote such activities as smallholder plantations, use of alternative energy sources and biomass saving stoves, assisting in engaging in forest-friendly livelihood options, etc.	Introducing at least three technologies that help reduce work load and improve health, and making sure that selected options in SLR do all consider reducing drudgery of women and girls and improve the livelihoods and health of family members.
Building a M&E system that documents the process and outcome of engaging women and girls in SLR and ensuring that they participate in decision making, in project implementation and evaluation	Design M&E scheme that allows for the collection of gender-disaggregated data along the project management cycle	Gender disaggregated data gathered to enable to assess impact

SECTION 4. INSTITUTIONAL FRAMEWORK AND IMPLEMENTATION ARRANGEMENTS

358. The proposed project is nested within The Restoration Initiative (TRI), a program designed and led by 3 GEF Agencies (FAO, IUCN and UN Environment), and developed to make a significant global contribution to restoring ecosystem functioning and improving livelihoods through the restoration of priority degraded and deforested landscapes, in support of the Bonn Challenge. The TRI program consists of National Child Projects (NCP) in 10 countries of Africa and Asia, and supported by a Global Learning, Financing, and Partnerships project (GCP) to develop and disseminate best practices and tools, catalyse investment in restoration, expand the scope of countries and actors engaged in forest and landscape restoration, and realize benefits at scale. Mechanisms have been built to ensure cross-linkages between the project, other Child Projects - especially with the Child project implemented in neighbouring Kenya and the overall program. In addition, the project will benefit from the wealth of international experts, lessons learned, and best practices in the domain of SLR, that the GCP will make available to the national components. The cooperation between the proposed project and the GCP will also be critical in Monitoring and Evaluation of interventions under the TRI. The harmonization of M&E systems among all TRI partners will be facilitated through a Program-level tracking tool, developed within the GCP, and integrated into all child projects, thus allowing for greater compatibility and utility of aggregated M&E data.

359. UN Environment will implement the Project and bring to bear its vast scientific and empirical experience of critical relevance to the objectives of the project. UN Environment through the Global Environment Facility (GEF) has in the past decades partnered with national and international organizations on the implementation of national and multi-country projects focusing on issues related to landscape restoration and biodiversity conservation. This project will benefit from the results and outputs of these projects and explore approaches that better integrate the many elements of the landscape restoration and biodiversity conservation. UN Environment will be providing technical support in the project and expertise in coordinating the development of environmental policy consensus through sharing experiences of its other projects being supported by GEF or other agencies. As the GEF Agency for this project, UN Environment will provide a platform for a collaborative partnership between national and international organizations which will bring the best available expertise in science and knowledge from the scientific community to partners who are working at the development interface at the national level.

360. UN Environment, as the GEF Implementing Agency will implement the project though its Ecosystems Division and will be responsible for overall project supervision to ensure consistency with GEF and UN Environment policies and procedures and will provide guidance on linkages with related UN Environment and GEF-funded activities. UN Environment will also monitor implementation of the activities undertaken during the execution of the project and will provide the overall coordination and ensure that the project is in line with UN Environment Medium-Term Strategy and its Program of Work (PoW).

361. More specifically UN Environment shall:

- Provide project oversight to ensure that GEF policies and criteria are adhered to and that the project meets its objectives and achieves expected outcomes in an efficient and effective manner. Project supervision is entrusted to the UN Environment/GEF Task Manager and Fund Management Officer. Project supervision missions by the Task Manager and/or Fund Management Officer will be stipulated in the project supervision plan;
- Enter into an Execution Agreement with the lead executing agency for the provision of services to the project;
- Have a representative on the project steering committee;

- Report to the GEF Secretariat on the progress against milestones outlined in the CEO approval letter;
- Inform the GEF Secretariat whenever there is a potentially substantive co-financing change (i.e. one affecting the project objectives, the underlying concept, scale, scope, strategic priority, conformity with GEF criteria, likelihood of project success, or outcome of the project);
- Be responsible to submit the overall annual Project Implementation Review report to the GEF Secretariat and Evaluation Office and rate the project on an annual basis in terms of progress in meeting project objectives, project implementation progress, risk, and quality of project monitoring and evaluation, and report to the GEF Secretariat through the Project Implementation Review (PIR) report;
- Review and clear manuscripts prepared by the Executing Agency before publication, and review and agree any publishing contracts;
- Undertake a mid-term management review of the entire project or request the Evaluation Office (EO) to perform an independent mid-term evaluation;
- Ensure that EO of UN Environment arranges for an independent terminal evaluation and submits its report to the GEF Evaluation Office;
- As deemed appropriate, facilitate access to information, advisory services, technical and professional support available to UN Environment and assist the Executing Agency to access the advisory services of other United Nations Organizations, whenever necessary;
- Manage and disburse funds from GEF in accordance with the rules and procedures of UN Environment.

362. The Vice President's Office (VPO) in collaboration with the National Environmental Management Council (NEMC) and supported by the Centre for International Forestry Research (CIFOR) will be the Executing Agency for this project. The Director of Environment of VPO or his designate will act as Project Director and will be charged with the responsibility of overall administration and supervision of the PMU. The Permanent Secretary of VPO will take the overall fiduciary responsibility of the project as well as forming and leading and supporting the Project Steering Committee (PSC). CIFOR will provide appropriate scientific support and technical expertise as required by the project partners in accordance with the objectives and key activities outlined in Section 3.1-3.3 of this document.

363. The **Project Management Unit (PMU)** will be established and housed at the Division of Environment under the Vice President's Office. The PMU will consist of a Project Director (PD), Project Coordinator (PC), Project Manager (PM), Administrative Assistant and thematic consultants (seconded staff form VPO and NEMC on a part time basis). The TORs for staff in the PMU are provided in Appendix 11**.** The PD will lead the project in its technical and development directions. Full time Project Coordinator will be hired by the project and will be responsible for coordinating overall project activities and hence will facilitate the execution of project activities by the project partners involved. The Project Coordinator will liaise with the other TRI projects and the global child to ensure lessons from other countries can be considered in Tanzania. The Project Coordinator will work as counterpart of the Project Director.

364. The Project Manager will work under the supervision of the Project Coordinator and will oversee the daily execution of activities. The Project Manager, will serve as the secretary of the PSC and will be responsible for compiling reports, budgets and work plans which are then reviewed and approved by the PC and the PD. Administrative Assistant will be hired by the project. This person will be working under direct supervision of the Project Coordinator and under overall supervision of the Project Director.

365. The PMU will serve as the critical link between the project sites at District level, the different groups engaged on project activities and the lead Project Executing Agency, VPO, to ensure that lessons learned are shared among sites and within national committees and to provide visibility of the project at the national and

international level. The PMU will be responsible for ensuring adequate communication of information to all national and international partners.

366. The execution of the project at the District level will be supported by the **District Project Coordination Committee (DPCC)** consisting of **District Project Manager** and technical staff responsible for environment, agriculture, land use planning, livestock, forestry and water resources. The DPCC will establish coordination mechanism and help assure inter-sectoral coordination within the district to ensure sustainability of the project activities and outcomes on ground at wards level. The District Project Manager will have the responsibility to ensure that there is good communication between the project sites and the PMU and that within each site the required links and collaborative arrangements are developed to support implementation of project activities. In addition, the DPCC will ensure the full participation of communities in planning and execution of SLR initiatives.

367. The DPCC will be further supported by a District Project Manager hired by the project to ensure smooth and timely implementation of activities and the participation of communities in the planning and execution of the project. The ToRs for the project staff mentioned above are provided in Appendix 11.

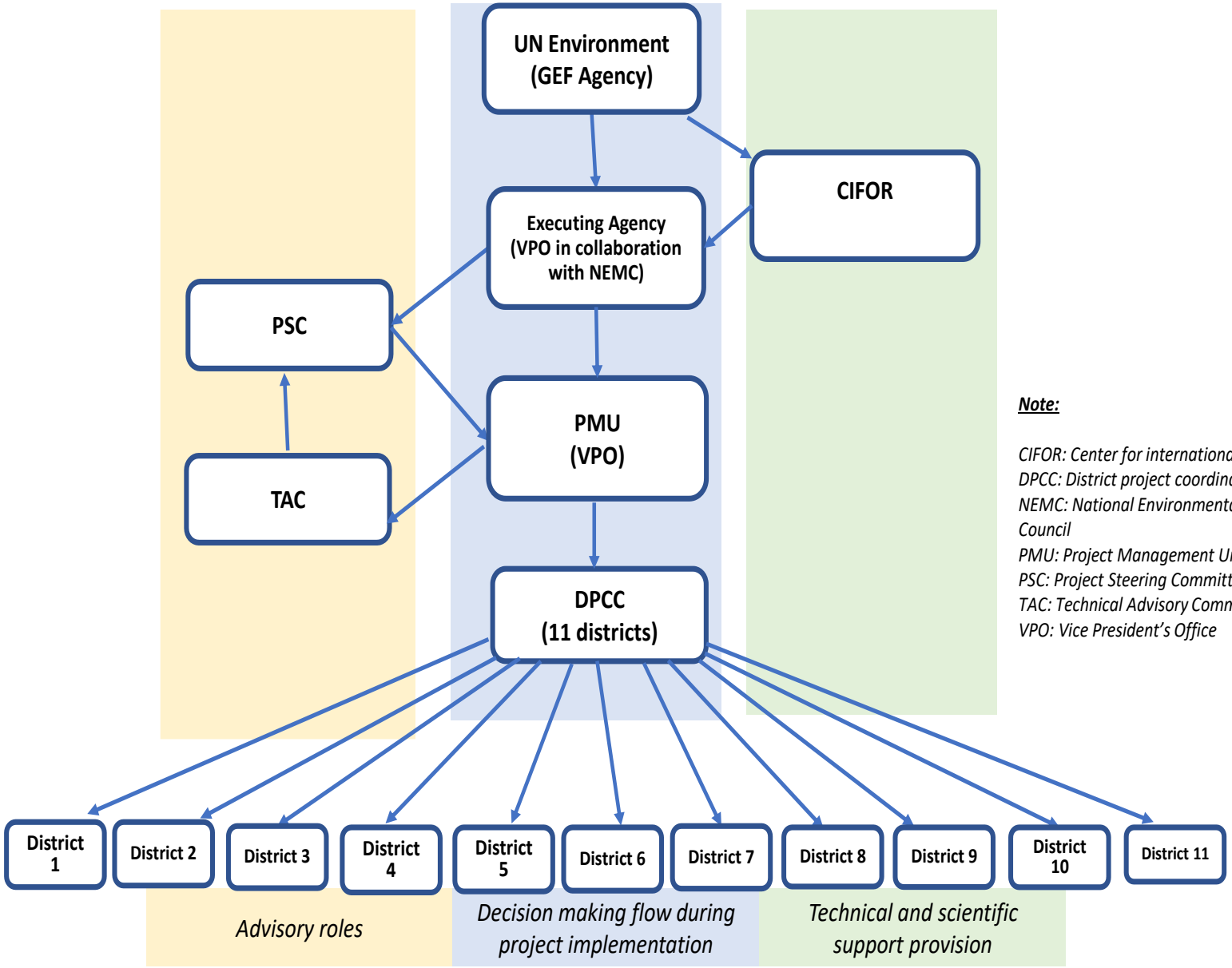
368. The project will establish a **Project Steering Committee (PSC)** consisting of representatives of the partner institutions including Directorate of Environment, District Executive Directorates of respective project districts, the Ministry of Agriculture, Livestock and Fisheries (MALF), the Ministry of Water and Irrigation (MWI), the Ministry of Natural Resources and Tourism, Tanzania Forest Services Agency**,** Ministry of Finance and Planning, the Ministry responsible for Local Government Authorities, the Ministry of Land, Housing and Human Settlement Development, UN Environment, CIFOR, Bioversity International and the Water Basins Office of Rufiji, Lake Rukwa and Lake Tanganyika. The GEF Focal Point of Tanzania will be also a member of the PSC. The Project Manager will serve as the Secretary to the Project Steering Committee. The PSC will be chaired by the Permanent Secretary in the Vice President's Office.

369. The PSC will be responsible for taking policy decisions about the implementation of the project. It will be also responsible for making, by consensus, management decisions for the project and holding periodic reviews. In order to ensure UN Environment's ultimate accountability to GEF, the final decision-making rests with UN Environment and will be in accordance with its applicable regulations, rules, policies and procedures. The PSC will meet physically once a year and its functions will be mainly to evaluate the overall progress of the project relative to the outputs and milestones expected, to provide strategic direction for the implementation of the project and to guarantee the necessary inter-institutional coordination. PSC meetings will be complemented with ongoing and more regular project meetings at the national level. Continuous exchange of information through electronic means will be established from the outset, and steering committee meetings via telephone conference or other electronic means can be called as required. Reports and recommendations of all PSC meetings, and other relevant project meetings, will be prepared and disseminated no later than one month after the actual meeting. When necessary, the PSC can take decisions through email consultation without waiting for the annual meeting.

370. All partners will undertake to disseminate information about the project and its outputs through their various networks, conferences, meetings and other relevant consultations. Detailed description of the roles and responsibilities of the PSC, and other committees, are provided in Appendix 11. These formal implementation arrangements will ensure a constant exchange of information and experiences among the partners.

371. A Technical Advisory Committee (TAC) will be established to provide expert guidance and advice on the effective technical implementation of the project. The TAC members will provide ongoing technical advice to the Project and will participate in PSC meetings as observers. Membership of TAC will be defined based on the specific technical needs of the Project. The composition of the TAC may change according to project needs, and will meet as necessary to guide specific project activities.

372. The Project's institutional framework is illustrated in the following organogram.



Note:

CIFOR: Center for international Forestry Research
DPCC: District project coordination Committee
NEMC: National Environmental Management Council
PMU: Project Management Unit
PSC: Project Steering Committee
TAC: Technical Advisory Committee
VPO: Vice President's Office

SECTION 5: STAKEHOLDER PARTICIPATION

373. The project is grounded in a participatory approach that includes a detailed stakeholder engagement process at the outset of planning to ensure inclusion of groups that could otherwise be marginalized. The participatory approach is one of the most significant components of the project in terms of shifting decision-making power from government extension agents to communities of land users. During the project preparation phase, key stakeholders who can contribute to the project were in project preparation and will be directly and continuously involved in the project through a number of means, which will include their participation in activities.

374. During national and site planning meetings, stakeholders, including individual farmers from the identified sites, researchers, extension and development workers, educators, NGOs, and government policy makers contributed to the development of procedures and criteria for: site selection, strategy for public participation; identification of roles and responsibilities for each of the key stakeholders; identification of capacity strengthening and needs assessments; related project and baseline estimation; project implementation and coordination plan. Stakeholders during these national planning meetings also contributed to the finalization of the national logical frameworks and work plans; systems for monitoring and evaluation at national and site level; and identification of co-financing for the project, both in-kind and in-cash.

375. The VPO and NEMC played leading roles in conceiving this project. SLR is a cross-sectoral initiative that involves negotiated and agreed engagement of stakeholders from national to local levels. It also requires transparent and participatory decision making, effective coordination of activities at different scales and times, and informed planning and decision making. To this end, the project will use and build on the existing institutional frameworks for environmental management in the country. The project will also seek to inform all stakeholders of the values of SLR and mainstreaming biodiversity into other sectors of the economy.

376. Key stakeholders who are important to achieve the projects objectives include national and local government agencies, donors, NGOs, CSOs, CBOs and local communities in the project sites. National institutions will be involved in guiding the formulation of options for improvement in terms of policy and plans for SLR and in the preparation of national guidelines relevant to informing and supporting SLR initiatives in the country. The participation of CSOs is needed as they will be involved in advocating for policy and for institutional frameworks to support efforts of actors in SLR and for increasing awareness that in the long run restoration could be mainstreamed into the work of Government, communities, NGOs and the business sector. All these processes will be participatory and consultative.

377. The proposed project will be knowledge intensive. The field level work will be preceded by mapping restoration potentials of the country in general and the selected project sites. The study will also help in identifying feasible options for restoration. This will then be presented to community members to further evaluate results and to identify intervention options and strategies that work better for the selected landscapes and for the communities managing these landscapes. Thus, SLR undertakings will be participatory and collaborative efforts between national, district and specific project site level governmental authorities, on one hand and land managers and their CBOs on the other, with CSOs and NGOs playing facilitating and enabling roles. Each of these categories of stakeholders will provide a specific contribution to the implementation of project activities.

378. As a result, stakeholder participation will be even more engaging at field level implementation of SLR to ensure that that the decision-making power of identifying restoration options that work for the landscape and for people rests with the local authorities and communities. Local project teams, established at each district, and coordinated from the national project office, will ensure active participation of local communities in determining what will be done, where, how and by whom will encourage communities to take more responsibility for the landscapes they manage. It will also make them feel empowered in relation to the project to address issues that

affect their lives and their natural resource base. Women will be represented in key decision-making forums to make sure that their voices are heard and their aspirations are included in the watershed development plans.

379. Stakeholders' engagement in monitoring will be targeted at national level (focusing on the tasks of the Project Steering committee and those of the National Sustainable Landscape Restoration Committee) and aims to bring together national actors to guide national efforts for taking SLR initiatives to scale and to develop guidance for implementing SLR at national level). At district and project site levels, stakeholders that would take part in M&E will be focusing on assessing progress against plans, identifying challenges faced and exploring options to overcome them.

380. The M&E system of the project will also focus on the benefits that local communities realize from planned interventions. Stakeholder consultations around proposed activities help engage and mobilize local communities, initiate discussions and promote buy-in. Representatives of land managers will also be members of the participatory monitoring team so that their suggestions and concerns are taken seriously by the project. Active participation of LGAs, the private sector and CSOs is equally important to achieve the stated objectives of the project. Thus, the project will actively engage key actors and ensure equal and active participation of partners in project implementation. It will as well consider inclusiveness and equity aspects.

381. Research institutions will be involved in baseline assessments of biodiversity, forest cover, land use change and carbon balance monitoring and reporting including production of final year status and trend reports. They will increase knowledge and generate information needed to inform ROAM assessments in the study areas and selected project sites and landscapes. Specialized experts will be involved in determining land use and land cover changes, in assessing the resource management practices and options for improving livelihoods and conservation outcomes, in assessing carbon balance in forests and other land uses including areas under climate smart agriculture, and in assessing options for catalyzing sustainable financing of SLR, including ecosystem service assessments, the development of business cases for landscape restoration and sustainable natural resource management.

382. As much as possible, private investors will be involved in the project. The project, with the support and endorsement of the Project Steering Committee, will propose policy options to the VPO to create incentives to attract the private sector to invest in SLR. It will also develop criteria for transparent selection of private sector investors and companies that could invest in SLR. Representatives of the private sector will be invited to comment on incentive mechanisms and on selection criteria before being proposed to be adopted by the government.

383. Further details on various categories of stakeholders to be involved in the implementation of the project are presented in Table 1 under section 2.5.

384. The Project will impact many different people and organizations beneficiaries from the outcome of the project and involved in its implementation would include:

385. **Policy makers at national and district levels**: Project activities, outputs and outcomes will be of great benefit to the policy makers in various national government ministries, particularly the Ministry of Natural Resources and Tourism where forest and landscape restoration activities are anchored, and the Ministry of Agriculture, Livestock and Fishery. Policy makers, particularly senior Ministry officials such as the VPO, will gain immensely important knowledge that will be critical in the formulation of policy, and legal and institutional frameworks for the restoration of degraded landscapes and forests in Tanzania, including the integration of diversity based approach to ensure sustainability and productivity of agricultural ecosystems. The project will also benefit senior District Government officials by increasing their knowledge and skills for implementation of landscape and forests restoration measures in their areas of jurisdiction. The project outcomes will also inform the relevant Committees of the National and District Assemblies.

386. **Decision Makers at national and local levels**: Project activities, outputs and outcomes will be invaluable to the senior government officials who are key advisers to the policy makers. The project will increase their capacity to provide appropriates support in the formulation of policies and guidelines for the restoration of degraded landscapes and forests in Tanzania, including the integration of diversity based approach to ensure sustainability and productivity of agricultural ecosystems.

387. **Government Officials at national and local levels**: The project will benefit officers working with various ministries (listed in the table above) and national government institutions such as the Tanzania Forest Division. Experts at districts and ministries and state agencies will benefit from the specific training on how to implement degraded landscape and deforested forests restoration activities using well tested approaches. This will in turn be used to develop policies, legal frameworks, incentives and guidelines for the restoration of degraded landscapes and forests at the Ministry of Environment and Natural Resources. They will also benefit through the formulation of Ecosystem Management Plans (EMPs), Participatory Forest Management Plans (PFMPs), integration of diversity based approach to ensure sustainability and productivity of agricultural ecosystems, among others.

388. **Research and academic institutions** benefit from their involvement in the implementation of selected activities of the project. Research scientists in various higher learning and research institutions of Tanzania will be involved in the monitoring of the effectiveness of various degraded landscapes and forest interventions, identification of alternative livelihood systems including SMART agriculture and aquaculture, among others. Selected universities will also benefit from the project outputs and outcomes, thus upgrading knowledge and skills for the restoration of degraded landscapes and forests in Tanzania, including the integration of diversity based approach to ensure sustainability and productivity of agricultural ecosystems.

389. **Community Based Organizations (CBOs):** The project will also be of great benefit to the members of various Community Based Organizations (CBOs) that will be involved in various training programmes and in the formulation of Community Action Plans (CAPs). The CBOs will benefit from new skills and knowledge that will be gained in various training activities focused on the restoration of degraded landscapes and forests,

390. **Non-Governmental Organizations (NGOs):** Project activities, outputs and outcomes will also be of great benefit to the members of various Non-Governmental Organizations (NGOs) that will be involved in collaborative activities and partnerships that will be built with local, regional and national experts and other relevant organizations through the implementation of this project. The NGOs will benefit from new skills and knowledge that will be gained in various training activities focused on the restoration of degraded landscapes and forests, initiation of SMART agriculture projects for communities, management of Community Forest Areas (CFAs), forest habitat monitoring, among others.

391. **Farmers**: Individual farmers in the three selected basins will benefit from the SLR interventions to be promoted at the field level. Crop producing farmers will benefit from agrobiodiversity and tree integration into their production systems options to maximize and sustain production in the face climate variability and change. The options will also help in improving nutrition and conserving important genetic diversity. The livestock farmers will also benefit from the integration of fodder trees and shrubs onto the grazing lands and the implementation of Livestock Grazing Plans and through lessons on the marketing of their livestock. Farmers will also be supported to be linked with relevant research and extension units of national research and higher learning institutions as well as development organizations.

392. **Women**: Women will be involved in the implementation of the project as researchers, managers, technicians and farmers. The project will create more training opportunities for them and this will help achieve gender balance and equity. By making sure that marginalized groups, notably women, are engaged in the SLR process, to the project would maximize their role on the outcome of SLR initiatives. Special emphasis will also

be made to ensure that they benefit from project support such as training and employment opportunities such as nursery management.

393. **Private sector**: These will be partners in the development of diversity rich practices, which will include activities and public awareness campaigns to change consumer preferences, norms and behaviors to support landscape and forest restoration including also implementation of climate smart agriculture by providing investment opportunities and markets to farmers.

SECTION 6: MONITORING AND EVALUATION PLAN

394. The project will follow UN Environment standard monitoring, reporting and evaluation processes and procedures. Substantive and financial project reporting requirements are summarized in Appendix 8. Reporting requirements and templates are an integral part of the UN Environment legal instrument to be signed by the executing agency and UN Environment.

395. The project M&E plan is consistent with the GEF Monitoring and Evaluation policy as well as the National Public Investment Management and Operational Manual. The Project Results Framework presented in Appendix 4 includes SMART indicators for each expected outcome as well as mid-term and end-of-project targets. These indicators along with the key deliverables and benchmarks included in Appendix 6 will be the main tools for assessing project implementation progress and whether project results are being achieved. The means of verification and the costs associated with obtaining the information to track the indicators are summarized in Appendix 7. Other M&E related costs are also presented in the Costed M&E Plan and are fully integrated in the overall project budget.

396. The M&E plan will be reviewed and revised as necessary during the project inception workshop to ensure project stakeholders understand their roles and responsibilities vis-à-vis project monitoring and evaluation. Indicators and their means of verification may also be fine-tuned at the inception workshop. Day-to-day project monitoring is the responsibility of the project management team but other project partners will have responsibilities to collect specific information to track the indicators. It is the responsibility of the Project Manager to inform UN Environment of any delays or difficulties faced during implementation so that the appropriate support or corrective measures can be adopted in a timely fashion.

397. The project Steering Committee will receive periodic reports on progress and will make recommendations to UN Environment concerning the need to revise any aspects of the Results Framework or the M&E plan. Project oversight to ensure that the project meets UN Environment and GEF policies and procedures is the responsibility to the Task Manager. The Task Manager will also review the quality of draft project outputs, provide feedback to the project partners, and establish peer review procedures to ensure adequate quality of scientific and technical outputs and publications.

398. At the time of project approval only about a third of baseline data needed is available. Baseline data gaps will be addressed during the first year of project implementation. A plan for collecting the necessary baseline data is presented in Appendix 6.

399. Project supervision will take an adaptive management approach. The Task Manager will develop a project supervision plan at the inception of the project which will be communicated to the project partners during the inception workshop. The emphasis of the Task Manager supervision will be on outcome monitoring but without neglecting project financial management and implementation monitoring. Progress vis-à-vis delivering the agreed project global environmental benefits will be assessed with the Steering Committee at agreed intervals. Project risks and assumptions will be regularly monitored both by project partners and UN Environment. Risk assessment and rating is an integral part of the Project Implementation Review (PIR). The quality of project monitoring and evaluation will also be reviewed and rated as part of the PIR. Key financial parameters will be monitored quarterly to ensure cost-effective use of financial resources.

400. In-line with UN Environment Evaluation Policy and the GEF's Monitoring and Evaluation Policy the project will be subject to a Terminal Evaluation. Additionally, a Mid-Term Review will be commissioned and launched by the Project Manager before the project reaches its mid-point. If project is rated as being at risk, a Mid-Term Evaluation will be conducted by the Evaluation Office instead of a MTR.

401. A mid-term management review or evaluation will take place on at mid-term as indicated in the project milestones. The review will include all parameters recommended by the GEF Evaluation Office for terminal evaluations and will verify information gathered through the GEF tracking tools, as relevant. The review will be carried out using a participatory approach whereby parties that may benefit or be affected by the project will be consulted. Such parties were identified during the stakeholder analysis (see sections 2.5 and 5 of the project document). The project Steering Committee will participate in the mid-term review and develop a management response to the evaluation recommendations along with an implementation plan. It is the responsibility of the UN Environment Task Manager to monitor whether the agreed recommendations are being implemented.

402. An independent terminal evaluation will take place at the end of project implementation. The Evaluation Office will be responsible for the Terminal Evaluation (TE) and will liaise with the Task Manager and Executing Agency(ies) throughout the process. The TE will provide an independent assessment of project performance (in terms of relevance, effectiveness and efficiency), and determine the likelihood of impact and sustainability. It will have two primary purposes: (i) to provide evidence of results to meet accountability requirements, and (ii) to promote learning, feedback, and knowledge sharing through results and lessons learned among UN Environment, the GEF, executing partners and other stakeholders. The direct costs of the evaluation will be charged against the project evaluation budget. The Terminal Evaluation will be initiated no earlier than six months prior to the operational completion of project activities and, if a follow-on phase of the project is envisaged, should be completed prior to completion of the project and the submission of the follow-on proposal. Terminal Evaluations must be initiated no later than six months after operational completion.

403. The draft Terminal Evaluation report will be sent by the Evaluation Office to project stakeholders for comments. Formal comments on the report will be shared by the Evaluation Office in an open and transparent manner. The project performance will be assessed against standard evaluation criteria using a six-point rating scheme. The final determination of project ratings will be made by the Evaluation Office when the report is finalised and further reviewed by the GEF Independent Evaluation Office upon submission. The evaluation report will be publicly disclosed and may be followed by a recommendation compliance process."

404. The GEF tracking tools are attached as Appendix15. These will be updated at mid-term and at the end of the project and will be made available to the GEF Secretariat along with the project PIR report. As mentioned above the mid-term and terminal evaluation will verify the information of the tracking tool.

SECTION 7: PROJECT FINANCING AND BUDGET

7.1. Overall project budget

405. The overall budget of the project is US$ 75,489,373 which includes the GEF contribution of US$ 11,205,872 and co-financing contributions amounting to US$. Details of the budget according to UN Environment budget lines are attached as Appendix 1.

7.2 Project co-financing

406. A total of US$ 64,283,501is committed as co-finance. Of this US$ 11,655,726 is in cash and US$ 52,627,775 is in kind. The breakdown per Project component is given in Appendix 2. The co-financing from partners committed to the project includes two elements: commitment from a wide range of national partners to support the different components of the project as indicated in Appendix 2 and commitments from international partners. The co-financing from international partners generally supports provision of inputs on methodologies, data collection and analysis, and capacity development. International partners, particularly WRI, will also support making the results of the work undertaken available to the wider international community.

7.3 Project cost-effectiveness

407. The project will emphasize on maximizing the socioeconomic benefits of SLR. This entails that SLR options will be selected and implemented to ensure not only to address ecological objectives but also to generate tangible economic and social outcomes to land managers and the surrounding communities. In other words, improving economic, community and environmental outcomes is consistent with SLR objectives. SLR if designed and implemented properly contributes to building a forest economy that creates jobs and vibrant rural communities. However, achieving local economic benefits for land managers requires deliberate strategies that are carefully matched to local strengths and limitations. The project will prepare quick to consult guide to help stakeholder in SLR to select and implement strategies that improve the local economic outcomes from SLR. The monitoring and evaluation aspects of the project will also focus on assessing social and economic gains that could be generated by implementing SLR on selected landscapes.

408. Through careful selection of options with active involvement of land managers notably smallholders, SLR activities will be designed so that they do not require high up-front costs and would not result in low rates of returns. SLR options will be selected based on ROAM study findings and will be designed so that they allow for investments by land managers and by relevant government agencies. Only SLR options that land managers see as an investible opportunity will be promoted as the landscapes where SLR options will be implemented are composed of a number of land uses that work together to create ecosystem goods and services that people rely on. To facilitate this, the project uses the cost-benefit framework for restoration decision making prepared by IUCN[21] for accounting for the ecosystem service and economic impacts of SLR activities. The framework is designed so that it easily shows multiple types of restoration options and cost benefit assessment results that we need to consider in decision-making by understanding also the trade-offs of different restoration scenarios. Particular attention will be paid to estimate as much as possible the costs and benefits of restoration options during the planning stage. Undertaking spatial analysis will enable to identify areas with high net benefits for

[21] Michael Verdone. 2015. The Economics of FLR: Cost-Benefit Framework for Analyzing Forest Landscape Restoration Decisions. IUCN.

specific SLR options as the net value of ecosystem service benefits are strongly context specific[22]. This is needed to demonstrate how restoration initiatives being undertaken in the selected landscapes would make a significant contribution to sustainable development at local level with potential positive impacts at national and global scales. The analysis to be produced using the framework can also be used to identify landscapes that would better meet strategic local and national priorities if some restoration activities were to take place.

409. The project builds upon the willingness of the Government of Tanzania and the local governments in 11 districts to work jointly with various agencies and communities to promote SLR in the selected three basins. The resulting gains will improve ecosystems and enhance their capacity to provide global environmental benefits including sustainability of economic development and human well-being. It will promote cross sectoral planning and landscape approach in translating planned SLR initiatives.

410. The project considered two alternatives – business as usual and introducing sustainable landscape restoration options – in three major basins in Tanzania. In the first option, where no intervention to rehabilitating degraded forests and managed landscapes are envisaged, it is assumed that the current trends of high levels of degradation would continue with results of more degradation and increased vulnerability of communities to the impacts of climate variability and change. Communities and governmental institutions see this as an undesirable option as it would only aggravate existing problems and challenges facing the three basins. The existing scenario has been presented in detail in Section II of this document. The level of natural resources degradation in the three basins is so high that in the absence of any significant SLR intervention, the status of natural resources is likely to get worse, with adverse impacts on the ecosystem and on communities' dependent on these landscapes. It will also contribute negatively to biodiversity and other global environmental benefits and ecosystem goods and services that these three basins provide.

411. The second alternative is to pilot cross-sectoral planning and using landscape approaches to plan and implement sustainable landscape restoration options that would have better conservation and livelihood outcomes. The alternative begins with undertaking restoration opportunities assessment and identification of biodiversity based agricultural intensification options. This approach would entail provision of support to communities in 11 districts to actively engage in the planning and implementation of SLR initiatives. It is anticipated that various landscape restoration options will be identified and piloted in selected sites, and this will progressively cover a total of 110 000 ha in 16 wards from 11 districts. It will bring together actors from different sectors together in the planning and implementation of relevant restoration options. This cross sectoral planning and landscape based integrated approach is expected to yield tangible restoration results in terms of cost effectiveness as it creates synergy of initiatives and enables us to optimize human and financial resources.

412. In order to ensure sustainability of project impacts, attempts have been made to undertake consultative planning meetings with key stakeholders. To achieve project objectives with minimal cost, the project will build on good practices and relevant experiences of existing institutions in the project areas and in other parts of Tanzania. Section II has identified stakeholders and barriers and risks for SLR. Detailed activities have been planned in Section III to address these barriers and to manage risks. The project will promote various SLR initiatives for sustainable management and conservation of ecosystems. It will also improve mechanisms of

[22] Jennifer C. Birch, Adrian C. Newton, Claudia Alvarez Aquino, Elena Cantarello, Cristian Echeverría, Thomas Kitzberger, Ignacio Schiappacasse, and Natalia Tejedor Garavito. 2015. Cost-effectiveness of dryland forest restoration evaluated by spatial analysis of ecosystem services. *PNAS* December 14, 2010. 107 (50) 21925-21930; https://doi.org/10.1073/pnas.1003369107

disseminating them widely to various stakeholders in Tanzania.

413. The project is designed to be cost-effective as it brings together partners from the various sectoral ministries and agencies. Experts and institutions from the different sectors come up with their own experiences and expertise to the project. By involving NGOs, the project promotes the linkages between formal and informal sectors. NGOs are good at supporting farmers through training and various support systems that they have to strengthen local institutions. NGos are also good at making project results known by the wider development community, and in upscaling successful results.

414. By working together, collaboration is nurtured and this will help reduce trade-offs and maximize synergy across sectors and actors. Project cost-effectiveness is enhanced by the partnership arrangement put in place by this project in the planning and implementation of activities as outlined in this document. Partnership with national and international institutions allows creating additional capabilities and allows better and greater coordination of interventions between different actors. It also wards and districts to learn from each other and to apply experiences gained during the project will be applied in other areas and projects. This allows for applying SLR initiatives in wider areas and creating synergies, resulting in much higher cost-effectiveness as compared to the isolated and poorly coordinated sectoral plans and initiatives. The cost-effectiveness of the Project is further strengthened through the involvement of CIFOR and Bioversity International. This ensures that an international partner with experience in managing UNEP GEF projects can support project execution and, as part of its co-funding commitment, strengthen the administrative, financial and technical oversight of the Project.

415. In summary, the following highlight how the cost-effectiveness of the project is planned to be achieved: (i) the design of the project was consultative as it brought together key stakeholders through inception workshop and series of consultative meeting; and communities will be actively involved in the identification of location-specific and demand-driven SLR intervention options that would produce concrete results in terms of conservation and economic returns to land managers, and hence can be up-scaled in various regions in Tanzania; (ii) supporting district and ward level government agencies and communities so that they build capacity to plan and implement SLR options; (iii) engagement of international institutions to provide technical and scientific support to the VPO; and (ivi) promoting proper monitoring in a participatory way to learn from experiences and to synthesis and share lessons in SLR. The project will adapt its management to emerging needs and priorities so that it will continuously be adjusted to better manage challenges in SLR.