# Document of The World Bank

#### FOR OFFICIAL USE ONLY

Report No: PAD1905

# INTERNATIONAL DEVELOPMENT ASSOCIATION PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED CREDIT

IN THE AMOUNT OF SDR106,600,000 (US\$ 150.00 MILLION EQUIVALENT)

TO THE

UNITED REPUBLIC OF TANZANIA

FOR A

RESILIENT NATURAL RESOURCE MANAGEMENT FOR TOURISM AND GROWTH PROJECT

September 7, 2017

Environment & Natural Resources Global Practice Africa Region

This document has a restricted distribution and may be used by recipients only in the performance of their official duties. Its contents may not otherwise be disclosed without World Bank authorization.

# CURRENCY EQUIVALENTS

(Exchange Rate Effective July 31, 2017)

Currency Unit = Tanzania Shillings (TZS)

TZS 1 = US\$ 0.00045 US\$ 1 = SDR 0.71

GOVERNMENT FISCAL YEAR

July 1 – June 30

Regional Vice President: Makhtar Diop

Country Director: Bella Bird
Senior Global Practice Director: Karin Kemper
Practice Manager: Magda Lovei

Task Team Leader: Daniel Mira-Salama

#### ABBREVIATIONS AND ACRONYMS

BOT Bank of Tanzania

EA Environmental Assessment

EIRR Economic Internal Rate of Return

ESIA Environmental and Social Impact Assessment

ESMF Environmental and Social Management Framework

ESMP Environmental and Social Management Plan

FM Financial Management
FFS Farmer Field School

GDP Gross Domestic Product
GoT Government of Tanzania
GRS Grievance Redress Service

IDA International Development Association

IBRD International Bank for Reconstruction and Development

IFMS Integrated Financial Management System

IFR Interim Financial Report

IRMPF Institutional Risk Management Policy Framework

IWRMDP Integrated Water Resource Management Development Plan

LGA Local Government Authority

MALF Ministry of Agriculture, Livestock, and Fisheries
METG Monitoring and Evaluation Technical Group

MINAPA Mikumi National Park

MNRT Ministry of Natural Resources and Tourism

MoFP Ministry of Finance and Planning
MoWI Ministry of Water and Irrigation

M&E Monitoring and Evaluation

NAO National Audit Office

NCCA Ngorongoro Conservation Area Authority

NCCS National Climate Change Strategy

NEEC National Economic Empowerment Council

NIRC National Irrigation Commission

NSSM National Sector Stakeholders Meeting

OGPFM Open Government and Public Financial Management

PA Protected Area

PCU Project Coordination Unit

PDO Project Development Objective

PEFA Public Expenditure and Financial Accountability

PO-RALG President's Office Regional Administration and Local Government

PPIs Predictive Proxy Indicators

PS Permanent Secretary

RAP Resettlement Action Plan

REGROW Resilient Natural Resource Management for Tourism and Growth

project

RPF Resettlement Policy Framework

RUNAPA Ruaha National Park

RBWB Rufiji Basin Water Board SCD Strategic Country Diagnostic

SDR Special Drawing Rights
SGR Selous Game Reserve

SoE Statement of Expenditures

SRI System for Rice Intensification

TANAPA Tanzania National Parks

TAWIRI Tanzania Wildlife Research Institute

TAWA Tanzania Wildlife Management Authority

TFS Tanzania Forest Services

ToR Terms of Reference

TTB Tanzania Tourist Board
TZS Tanzanian Shillings

UMNP Udzungwa Mountains National Park

US\$ United States Dollar VLUP Village Land Use Plans

VMG Vulnerable and Marginalized Groups

WMA Wildlife Management Area

WSDP Water Sector Development Program

## **TANZANIA**

# RESILIENT NATURAL RESOURCES MANAGEMENT FOR TOURISM AND GROWTH (REGROW)

## TABLE OF CONTENTS

		Page
I.	STRATEGIC CONTEXT	1
	A.Country Context	1
	B. Sectoral and Institutional Context	2
	C. Higher Level Objectives to which the Project Contributes	5
II.	PROJECT DEVELOPMENT OBJECTIVE	7
	A.PDO	7
	B.Project Beneficiaries	7
	C.PDO Level Results Indicators	8
III.	PROJECT DESCRIPTION	8
	A.Project Components	8
	B. Project Financing	11
	C.Lessons Learned and Reflected in Project Design	12
IV.	IMPLEMENTATION	13
	A.Institutional and Implementation Arrangements	13
	B.Results Monitoring and Evaluation	14
	C.Sustainability	
v.	KEY RISKS	16
	A.Overall Risk Rating and Explanation of Key Risks	16
VI.	APPRAISAL SUMMARY	18
	A.Economic and Financial Analysis	18
	B. Technical	18
	C.Financial Management	19
	D.Procurement	20
	E. Social (including Safeguards)	21

F. Environment (including Safeguards)	23
G.World Bank Grievance Redress	25
ANNEX 1: RESULTS FRAMEWORK AND MONITORING	26
ANNEX 2: DETAILED PROJECT DESCRIPTION	43
ANNEX 3: IMPLEMENTATION ARRANGEMENTS	57
ANNEX 4: IMPLEMENTATION SUPPORT PLAN	86
ANNEX 5: ECONOMIC AND FINANCIAL ANALYSIS	89
MAPS	92

## PAD DATA SHEET

Tanzania

Tanzania: Resilient Natural Resource Management for Tourism and Growth (P150523)

# PROJECT APPRAISAL DOCUMENT

# *AFRICA* 0000009270

Report No.: PAD1905

Basic Information							
Project ID	EA Category			Team Leader(s)			
P150523	B - Partial Ass	sessment		Daniel N	Mira-Salama		
Lending Instrument	Fragile and/or	Capacity (	Constrain	its [ ]			
Investment Project Financing	Financial Inter	mediaries	[ ]				
	Series of Proje	ects [ ]					
Project Implementation Start Date	Project Impler	nentation I	End Date				
28-Sep-2017	28-Sep-2023						
Expected Effectiveness Date	Expected Clos	ing Date					
28-Dec-2017	28-Sep-2023						
Joint IFC							
No							
Practice Senior Glo Manager/Manager Director	bal Practice Country Director		Director	Regional Vice President			
Magda Lovei Karin Erika	a Kemper Bella Bird		ľ	Makhtar Diop			
Borrower: United Republic of Tanzar	nia						
Responsible Agency: Ministry of Nat	ural Resources	and Touris	sm				
Contact: Major General Ga Milanzi	udence S.	Title:	Permane	ent Secre	etary		
Telephone No.: 00255-26-2321567	7	Email:	ps@mni	t.go.tz			
Project	Financing D	ata (in US	SD Milli	ion)			
[ ] Loan [ ] IDA Grant	[ ] Guara	intee					
[X] Credit [] Grant	[ ] Other						
Total Project Cost: 150.00		Total Ban	k Financ	ing:	150.00		
Financing Gap: 0.00							

Financing	g Source									Amount
Internatio	nal Deve	lopment A	Associatio	on (IDA)						150.00
Total										150.00
Expected	Disburs	ements (i	in USD N	Tillion)						
Fiscal Year	2018	2019	2020	2021	2022	2023	2024	0000	0000	0000
Annual	1.00	15.00	25.00	35.00	35.00	30.00	9.00	0.00	0.00	0.00
Cumulati ve	1.00	16.00	41.00	76.00	111.00	141.00	150.00			
				Insti	tutional	Data				
Practice A	Area (Le	ad)								
Environm	ent & Na	tural Res	ources							
Contribu	ting Pra	ctice Are	as							
Agricultu	re, Trade	& Comp	etitivenes	s, Water						
Proposed	Develop	ment Ob	jective(s	)						
The Project Development Objective (PDO) is to improve management of natural resources and tourism assets in priority areas of Southern Tanzania and to increase access to alternative livelihood activities for targeted communities.										
assets in p										
assets in p	ommunit									
assets in p targeted c	ommunit ents	ies.						ative live	elihood ac	
assets in p targeted c	ents ent Name	e agement a	uthern Ta	nnzania an	d to incre			ative live	elihood ac	tivities for
assets in ptargeted c Compone Compone 1. Strengt	ents ent Name then mana rotected A	e agement a Areas	uthern Ta	nnzania an	d to incre	ase access		ative live	elihood ac	D Millions)
componer 1. Strengt priority Processing 2. Strengt	ents ent Name then mana rotected A then alternity to the	e agement a Areas a priority I scape mar	uthern Ta	ve infrastr For targete Areas and infras	d to incre	ase access		ative live	elihood ac	• Millions) 97.00
Compone  Compone  1. Strengt priority P	ents ent Name then mana rotected A then altern ity to the then lands ats in and managen	agement a Areas native live priority I scape man upstream	and improblement and the Ritutional statement	ove infrastr For targete Areas and infrastration	ructure in d communicatructure onal Park ing, quali	nities		ative live	elihood ac	<b>D Millions</b> ) 97.00
Componer Componer 1. Strengt priority P	ents ent Name then mana rotected A then altern ity to the then lands ats in and managem and cont	agement a Areas native live priority I scape man upstream nent, insti	uthern Ta	ove infrastr For targete Areas and infrastrantal Nations strengthen g and eval	d to incre	nities		ative live	elihood ac	97.00 17.00 27.00
Compone Compone 1. Strengt priority Pr 2. Strengt in proxim 3. Strengt investmen 4. Project assurance	ents ent Name then mana rotected A then altern ity to the then lands its in and managen and cont tic Oper	agement a Areas native live priority I scape man upstream nent, insti	uthern Ta	ove infrastr For targete Areas and infrastrantal Nations strengthen g and eval	d to incre	nities		ative live	Cost (USI	97.00 17.00 27.00
Componer Com	ents ent Name hen mana rotected A hen altern ity to the hen lands its in and managen and cont tic Oper	agement a Areas native live priority I scape mar upstream nent, instirol, and n	uthern Ta	ove infrastr For targete Areas and infrastrantal Nations strengthen g and eval	d to incre	nities		Rati	Cost (USI	97.00 17.00 27.00
Compone Compone 1. Strengt priority Pr 2. Strengt in proxim 3. Strengt investmen 4. Project assurance Systema Risk Cate	ents ent Name then mana rotected A then altern ity to the then lands ats in and managen and cont tic Oper egory I and Go	agement a Areas native live priority I scape mar upstream nent, instirol, and neations I wernance	uthern Ta	ove infrastr For targete Areas and infrastrantal Nations strengthen g and eval	d to incre	nities		Rati	Cost (USI ng tantial	97.00 17.00 27.00
Compone Compone 1. Strengt priority Pr 2. Strengt in proxim 3. Strengt investmen 4. Project assurance Systema Risk Cate 1. Politica	ents ent Name then mana rotected A then altern ity to the then lands atts in and managen and cont tic Oper egory l and Go	agement a Areas native live priority I scape mar upstream ent, instinct, and nations I vernance	and improblement a of the Ritutional should represent a factor of the Ritutional should represent the results of the Ritutional should represent the represent the representation of the Ritutional should represent the representat	ove infrastr For targete Areas and infrastrantal Nations strengthen g and eval	d to incre	nities		Ratii Subs Mod	Cost (USI ng tantial	97.00 17.00 27.00
Compone Compone 1. Strengt priority Pr 2. Strengt in proxim 3. Strengt investmen 4. Project assurance Systema Risk Cate 1. Politica 2. Macroe	ents ent Name then mana rotected A then altern ity to the then lands ats in and managen and cont tic Oper egory I and Go	agement a Areas native live priority I scape man upstreament, instirol, and neations I seamed and Police and P	uthern Ta  und impro elihoods f Protected nagement of the R itutional s nonitoring Risk- Ra	ove infrastr For targete Areas and infrastr uaha Natio strengthen g and eval	d to incre	nities		Ratii Subs Mod	ng tantial erate tantial	97.00 17.00 27.00

Substantial

6. Fiduciary

7. Environment and Social	Substantial						
8. Stakeholders			M	oderate			
9. Other							
OVERALL			Su	ıbstantial			
	Compliano	ee					
Policy							
Does the project depart from the CAS in respects?	content or in other	er significant		Yes [ ]	No [X]		
Does the project require any waivers of l	Bank policies?			Yes [ ]	No [X]		
Have these been approved by Bank mana	agement?			Yes [ ]	No [X]		
Is approval for any policy waiver sought	from the Board?			Yes [ ]	No [X]		
Does the project meet the Regional criter	ria for readiness f	or implementation	?	Yes [X]	No [ ]		
Safeguard Policies Triggered by the P	roject		Y	es	No		
Environmental Assessment OP/BP 4.01			Σ	(			
Natural Habitats OP/BP 4.04			λ	ζ			
Forests OP/BP 4.36			X	ζ			
Pest Management OP 4.09			X	<b>(</b>			
Physical Cultural Resources OP/BP 4.11			X	<b>(</b>			
Indigenous Peoples OP/BP 4.10					X		
Involuntary Resettlement OP/BP 4.12			X	ζ			
Safety of Dams OP/BP 4.37					X		
Projects on International Waterways OP	/BP 7.50				X		
Projects in Disputed Areas OP/BP 7.60					X		
Legal Covenants							
Name	Recurrent	<b>Due Date</b>		Freque	ency		
TANAPA appoints additional full- time staff to its environmental and social unit		28-Jun-201	8				
<b>Description of Covenant</b>							
TANAPA shall appoint, no later than as may be agreed with the Associatio management unit, in adequate number satisfactory to the Association, as fur	n, additional ful ers and with qual	l-time staff to its lifications and te	envir	onmental f referenc	and social e		

Agreement

Conditions

Source Of Fund	Name	Туре
	The Subsidiary Agreement has been executed on behalf of the Recipient and TANAPA	Effectiveness

#### **Description of Condition**

A Subsidiary Agreement needs to be executed on behalf of the Recipient and TANAPA, as per section 5.01 (a) of the Financing Agreement

Source Of Fund	Name	Type
IDA	Project Agreement on behalf of the Association and	Effectiveness
	Project Implementing Entity	

#### **Description of Condition**

The Project Agreement has been executed on behalf of the Association and the Project Implementing Entity, as per section 5.01 (b) of the Financing Agreement

Source Of Fund	Name	Туре
	Project Implementation Manual adopted by all project entities	Effectiveness

#### **Description of Condition**

The Recipient, TANAPA and the Project Implementing Partners, have each adopted the Project Implementation Manual, acceptable to the Association, as per section 5.01 (c) of the Financing Agreement

#### **Bank Staff**

Name	Role	Title	Specialization	Unit
Daniel Mira-Salama	Team Leader (ADM Responsible)	Senior Environmental Specialist	Environment and natural resources	GEN01
Gisbert Joseph Kinyero	Procurement Specialist (ADM Responsible)	Senior Procurement Specialist	Procurement	GGO01
Wangwe Magige Mwita	Procurement Specialist	Consultant	Procurement	GGO01
Henry Amena Amuguni	Financial Management Specialist	Sr Financial Management Specialist	Financial management	GGO31
Alexandra C. Bezeredi	Team Member	Lead Social Development Specialist	Social safeguards	GSU01
Anders Jensen	Team Member	Senior Monitoring & Evaluation Specialist	Monitoring and evaluation	GENOS
Faustina Chande	Team Member	Program Assistant	Team assistant	AFCE1

Jane A. N. Kibbassa		$\mathcal{E}$		ior rironmental cialist		Environmental safeguards		GEN01		
Jean O Owino		Team Member Finar		nce Analyst Disburs		Disburse	ements	WFALA		
Kristine Schwebach		Social Saf Specialist	eguards	Deve	tior Social velopment ecialist		Social safeguards		GSU03	
Sanjay Pahuja		Team Mei	nber	Resc	l Wat ources rialist	;	Water re manager		GWA03	
Shaun Mann		Team Mei	nber		or Pri	vate ecialist	Tourism developr		GTCCS	
Veruschka Sch	midt	Team Mei	nber		ironmental Environ		Environi specialis		GEN01	
Victor Bundi M	Iosoti	Counsel Senio		or Co	unsel	Lawyer		LEGEN		
Yesmeana N. E	Butler	Team Member Prog		gram Assistant Team as		Team as:	sistant	GEN01		
<b>Extended Tear</b>	m	·					·		1	
Name		Title			Office Phone			Location	Location	
Erkan Ozcelik		Economist		0039-3314884381		381	Rome			
Jaap van de Po	l	Agriculture Officer			0039-0657054146		Rome			
Joseph Sciortin	0	Infrastructure Engineer			356-21-581382			Malta		
Michael Carrol	1	Lead Rural Development Specialist				Uruguay				
Locations										
Country	First Administ Division					Planned	Actual	Commen	ts	
Consultants (V	Will be dis	closed in t	he Month	ly Ор	erati	onal Sumr	nary)			
Consultants Re	quired?	Consultan	ts will be i	requir	ed					

#### I. STRATEGIC CONTEXT

#### A. Country Context

- 1. The United Republic of Tanzania has had robust macroeconomic performance in the past 15 years, with Gross Domestic Product (GDP) growing annually at an average of 6.5 percent. GDP per capita (current US\$) increased from US\$307 in 2000 to US\$879 in 2016. Tanzania's assets provide unique economic opportunities compared to other African countries: as a coastal economy bordering eight countries, six of which are completely or partially land-locked, it has a strong advantage in terms of its location to be a regional hub; it is endowed with rich and diverse natural resources, both renewable and non-renewable, providing the basis for current and future economic development and people's livelihood; and it has enjoyed decades of socio-political stability.
- 2. Despite strong economic performance, 12 million people live below the poverty line, especially in rural areas. Tanzania hosts one of the largest poor populations in Africa. The poverty rate declined from 34 percent in 2007 to 28 percent in 2012, while rural poverty declined from 39 percent to 33 percent. However, with a rapidly growing country population (over 53 million in 2015, projected to increase to 74 million by 2030), per capita gains will be limited.<sup>3</sup>
- 3. Tanzania's economy depends, to a significant degree, on its rich natural resources. The tourism industry, largely biodiversity and wildlife-based, generated \$4.8 billion in revenues in 2015, or roughly 10 percent of GDP, and is the main contributor to foreign currency; agriculture consumes around 89 percent of the country's water withdrawals, and accounts for 23 percent of GDP; 90 percent of the energy needs are satisfied by hydropower and wood fuels. Most of the population lives in rural areas (around 70 percent), and depends on natural resources for their livelihoods in the form of food, fuel, and fodder. In order to maintain economic growth and make it more inclusive, strong management and stewardship of natural resources is paramount, given the interlinkages between natural resources, livelihoods and poverty. The natural resource base and geography of Southern Tanzania the area of focus for this project present a unique opportunity to contribute to these goals in what is a largely neglected, yet high potential, part of the country.
- 4. The Government of Tanzania (GoT), in its Second Five Year Development Plan (FYDP II),<sup>4</sup> has identified the tourism industry as a stable source of growth. Annual tourist numbers have more than doubled from about 500,000 in 2000 to over 1,137,182 international visitors in 2015 mostly attracted by Tanzania's unparalleled wildlife resources. The country has been very successful in attracting higher expending tourists, resulting in the highest revenue/tourist ratio in Sub-Saharan Africa (double, for example, that of Kenya). The sector generates the bulk of export revenues for the country,<sup>5</sup> represents a reliable and resilient source of revenue for the government, and provides well-remunerated direct employment to over 400,000 people. According to the World Travel &

<sup>&</sup>lt;sup>1</sup> World Development Indicators (as of September 2017).

<sup>&</sup>lt;sup>2</sup> World Bank Group (2017). Tanzania Systematic Country Diagnostic.

<sup>&</sup>lt;sup>3</sup> World Bank Group (2015). Tanzania Economic Update – The Elephant in the Room: Unlocking the potential of the tourism industry for Tanzanians. Dar es Salaam: Africa Region Macroeconomics and Fiscal Management.

<sup>&</sup>lt;sup>4</sup> Ministry of Finance and Planning (2016). *National Five Year Development Plan 2016/17-2020/21: Nurturing Industrialization for Economic Transformation and Human Development.* Dar es Salaam: The United Republic of Tanzania.

<sup>&</sup>lt;sup>5</sup> World Trade Organization (2013) indicate that since 2008, the combined export revenues from travel and tourism have exceeded those from the mining and energy sector.

Tourism Council, tourism's total contribution to GDP in Tanzania between 2015 and 2025 is expected to continue to grow at an average 6.6 percent per year.

5. Increased economic activity, population growth and climate change are exacerbating competition for water resources, threatening ecosystem services. Demand for water is growing faster than available supply, with conflicts over water resources becoming increasingly common — Tanzania is on the path of becoming a water-scarce country by 2025. Climate change is compounding these challenges, with changes in precipitation seasonality and variability. Land and water, both of which are necessary enablers for a natural resources-based economy, are becoming more scarce, impacting the development of sectors such as agriculture, tourism and power production, jeopardizing the delivery of ecosystem services (such as water resources, soil stabilization, timber, and others). Globally, progress has been made in planning for improved catchment management, however, tested models for resolving such competing demands at the local level do not exist in Tanzania. Part of the solution lies in more balanced spatial development, where investments in ecosystem services and improved landscape management can be combined with increased economic opportunities. The ambition driving the design and investments of the Resilient Natural Resource Management for Tourism and Growth project (REGROW) is to create a viable platform for growth that can better use natural endowments to transform Southern Tanzania.

#### **B.** Sectoral and Institutional Context

- 6. Tanzania's rich and diverse natural resources, especially wildlife, are the basis for tourism development. About a third of the country's total area is under protection, one of the world's highest ratios. Tanzania's 16 national parks and 17 game reserves, in addition to three marine parks, 15 marine reserves, and multiple forest reserves, are host to world renowned biodiversity, wildlife, and unique ecosystems, constituting a prime global tourism destination. The Ministry of Natural Resources and Tourism (MNRT) including the Tanzania National Parks (TANAPA), the Ngorongoro Conservation Area Authority (NCCA), and the recently created Tanzania Wildlife Management Authority (TAWA), are responsible for the management of the country's Protected Areas (PAs) and tourism promotion. TANAPA and TAWA are partially funded through revenue generated by the PAs, and tasked with their sustainable management.
- 7. The country's most visited tourism destination the "Northern Circuit" is showing signs of overstress and carrying capacity limitations. Tourism is heavily concentrated around Serengeti, Ngorongoro, and Mount Kilimanjaro, where hotels and most tourist offerings are located. The most visited PA in the North Ngorongoro Conservation Area receives over ten times the number of tourists of the most visited PA in the South Mikumi National Park (Table 1). Future expansion of visitors in some of these key attractions may be at odds with the current low-volume high-value national tourism approach.
- 8. The development of the "Southern Circuit" is the most feasible way the GoT can achieve its ambition to double the number of tourist arrivals in the next decade. If the increase in visitors continues to be focused in the North, it could undermine the successful strategy of promoting high value tourism through the delivery of a unique wildlife experience. As highlighted in a recent World Bank study,<sup>6</sup> there is a need to diversify the tourism product without diminishing its revenue potential, with model that does not compromise the natural asset base, key for attracting visitors.

\_

<sup>&</sup>lt;sup>6</sup> World Bank Group (2015). Tanzania's Tourism Futures: Harnessing Natural Assets. Washington D.C.

Table 1: Number of visitors in Protected Areas, 2015

Northern Circuit Protected A Numbers – Resident / No			Southern Circuit Protected Areas (2015 Visitor Numbers – Resident / Non-Resident)			
Lake Manyara NP	62,287	92,341	Mikumi NP	35,311	17,117	
Serengeti NP	204,998	167,988	Ruaha NP	7,403	11,558	
Tarangire NP	55,585	116,590	Udzungwa NP	6.310	2,608	
Ngorongoro Conservation Area	278,922	289,061	Selous GR	4,750	13,447	

9. Southern Tanzania is the ideal location for tourism expansion and diversification. The Southern Circuit includes several National Parks (i.e., the Katavi, Kitulo, Mahale, Udzungwa, Mikumi and Ruaha National Parks), game reserves (Selous being the largest), two rift valley lakes (Nyasa and Tanganyika), areas of cultural interest, and a gateway town, Iringa. A study commissioned by the GoT highlighted that specifically the Mikumi National Park (MINAPA), Ruaha National Park (RUNAPA), Udzungwa National Park (UMNP), and Selous Game Reserve (SGR), have the highest, most immediate potential for boosting tourism in the South, increasing jobs and strengthened local economic linkages. These four are large and unique: RUNAPA encompasses 20,226 km², representing the largest National Park in East Africa. SGR is Africa's largest Game Reserve and a UNESCO World Heritage Site, and extends over 50,000 km². MINAPA and UMNP cover 3,230 km² and 1,990 km², respectively. Combined, they cover over 75,446 km² (for reference, Switzerland covers 41,285 km²). These four areas have been selected as priority for the project, and are hereafter referred to as priority PAs (see map at the end of the document).

10. REGROW aims to position the Southern Circuit as a popular destination, turning tourism into an engine of economic growth and job creation for the region and the nation. The Southern Circuit could achieve, in the medium term, the levels of development and success witnessed in the Northern Circuit. There is an opportunity to learn from the Northern Circuit, in terms of infrastructure linkages, establishment of a "gateway" town (Arusha), attracting private investments for tour operations and accommodation, branding and marketing, and creating effective local supply chain linkages. A key lesson from the northern experience is the importance of bridging the gap between conservation and sustained economic benefits for Tanzanians. Another lesson is that supporting infrastructure between attractions (roads, airports, private sector investments, etc.), which was implemented over time, was key to further develop the Northern Circuit. Through much needed infrastructure, policy dialogue, strong community engagement and incentive-based livelihood activities, REGROW sets the vision for poverty reduction through a conservation lens, promoting local economic benefits from the expected increase in tourism.

#### 11. There are challenges to sustainably develop the Southern Circuit to its full potential:

• Limited infrastructure inside the priority PAs coupled with environmental degradation. Poor quality roads, limited wet-season access, and few entry gates are limiting factors to tourism growth. In addition, the four priority PAs cover a vast area, and existing capacity to effectively manage them is limited by human, logistical and financial constraints. Developing a viable

<sup>&</sup>lt;sup>7</sup> Dalberg Global Development Advisors and Solimar International (2015). A Strategy for Tourism Development in Southern Tanzania. USAID Tanzania

<sup>&</sup>lt;sup>8</sup> For SGR, the project will be implemented in the photographic tourism area (Matambwe sector, as defined in SGR's current General Management Plan). While 90 percent of Selous allows for consumptive tourism (trophy hunting), 10 percent is being used for non-consumptive tourism (photographic tourism). REGROW will focus on the photographic area, whereas other partners are investing in the remainder.

- Southern Circuit will therefore not only require significant investments in infrastructure to boost the incipient tourism, but also strengthening the management of the priority PAs to significantly increase conservation efforts and protection of wildlife.
- Insufficient linkages between tourism and development tourism has the potential to deliver more benefits and more jobs for the local economy. While the tourism sector has grown rapidly, it has not created enough jobs for citizens: even around the most visited areas of the North, poverty is prevalent, indicating that strong linkages with, and improved benefit-sharing instruments for, local communities need to be reinforced. A World Bank study<sup>9</sup> in Kenya showed that the safari segment of tourism not only generates greater economic growth than any other form of tourism, but also does more to address poverty problems and create rural economic opportunities. Despite the establishment of Wildlife Management Areas (WMAs)<sup>10</sup> and other benefit-sharing programs by the GoT, community-based conservation remains weak. Sustainable and successful tourism development would need to rely on stronger connections with local economic activities<sup>11</sup>. This opportunity to build new financial relationships between investors public and private and communities will be piloted by REGROW.
- Poor management of water resources upstream of the Ruaha National Park leading to water scarcity inside RUNAPA. The expansion of formal and informal irrigation and associated encroachment of the Usangu Plains upstream of RUNAPA, has denuded the watershed's ecosystem services, and reduced the once-perennial Great Ruaha River to a seasonal watercourse (Box 1). These trade-offs, which can be considered as a sample of what might happen in other basins in the medium-term (for example, Pangani or Kilombero), require integrated planning and management across users at the watershed, landscape and ecosystem levels. REGROW will deliver sound landscape and conservation practices upstream RUNAPA, to reduce impacts from low river flow into the National Park and to ensure long-term productivity of the basin.
- Climate change impacts to Tanzania's natural resource-based growth. Tanzania is already experiencing changes in its climate, and precipitation is increasingly unpredictable, with studies showing a shift in the onset of the rainy season(s). 12 Changes in timing and quantity of rainfall are forecasted by models, and water security, which is already under threat from current climate variability and social, economic and environmental change, is likely to be under greater threat. These patterns will have multi-dimensional effects on the Tanzanian economy, affecting agricultural productivity, energy use, water dynamics, and the wildlife upon which tourism depends. Efforts to promote climate resilience in these key natural asset-based sectors will have important longer-term effects on food security and livelihoods. As precipitation becomes more erratic, and extreme events such as droughts become more intense, anthropogenic pressures on

<sup>&</sup>lt;sup>9</sup> World Bank Group (2017) Standing out from the herd – An economic assessment of tourism in Kenya. Washington D.C.

<sup>&</sup>lt;sup>10</sup> WMAs are areas of communal land set aside exclusively as habitat for wildlife by member villages. Following the principles of community-based natural resource management, the key underlying assumption of the WMA concept is that providing local communities with economic benefits and involving them in management will promote both long-term health of wildlife and habitat and rural economic development. Communities will thus have a vested interest in the conservation of natural resources because they benefit directly from them.

<sup>&</sup>lt;sup>11</sup> Successful tourism means that the industry: (i) is a source of inclusive and sustainable jobs and investments; (ii) can improve the quality of life for local residents; and (iii) can ensure that the endowments that provide the asset base for tourism are sustained). Perhaps like any industry, tourism is driven by a supply side delivery system where policies, strategies, institutions, infrastructures, assets, and public, private and civil society actors all have a role to play at a national level as well as at the local destination level in attracting sufficient demand to achieve success.

<sup>&</sup>lt;sup>12</sup> World Bank Group (2015). Financing Climate-Resilient Growth in Tanzania. Dar es Salaam: Environment and Natural Resources Global Practice.

the priority PAs' resources will only increase. There is thus an even greater need to implement resilient livelihoods and concerted, multi-sectoral solutions that meet the needs of all users.

#### Box 1: The Great Ruaha River Basin - a history of degradation

The Great Ruaha River sub-basin exemplifies the challenges that the GoT faces in its multi-sector planning and investment strategies, due to the multiple, often conflicting water uses. The sub-basin is of national importance for rice production, maintaining the Ihefu wetland and ecosystems of the Usangu Plains, meeting the ecological needs of the RUNAPA, and feeding the Mtera/Kidatu dams (responsible for around 42 percent of the country's total installed hydropower). The river also supplies water to millions of people on its path to the Rufiji River and delta. With the expansion of formal and informal irrigated agriculture and subsequent degradation of the Usangu wetland, the watershed's ecosystem services have been seriously threatened, reducing the once-perennial Great Ruaha River to a seasonal watercourse. This situation is already impacting the sustainability of agriculture and irrigation investments, reducing agricultural productivity, and creating wildlife casualties, leading to increased human-wildlife conflict and undermining RUNAPA's tourism potential. Impacts on power generation from, and operational lifetime of, the two hydropower plants, are also to be expected, and there will be water supply challenges to downstream populations. The different water use trade-offs (agriculture, ecological flows, human consumption, hydropower) must be conciliated, and the sub-basin needs to be tackled in an integrated manner all along its course.

#### C. Higher Level Objectives to which the Project Contributes

- 12. The project directly contributes to the government's objective to reduce poverty, by supporting the National Five-Year Development Plan for the period 2016/17-2020/21. The project complements the National Plan's goal of increasing the benefits derived from tourism, by directly supporting key interventions such as diversifying the tourism product, improving infrastructure, providing training, and improving the enabling environment for the tourism sector. It also supports the National Plan's goal of strengthening natural resource management and conservation, promoting the sustainable use of terrestrial ecosystems, and addressing climate change impacts.
- 13. The project is fully consistent with the Country Assistance Strategy for Tanzania (2012-16)<sup>13</sup>, the recently published Systematic Country Diagnostic (SCD)<sup>14</sup>, and with the Country Partnership Framework (under preparation and expected to go to Board in the second quarter of Fiscal Year 2018). The SCD specifically identifies the need to enhance sustainability of natural resources through effective policy and institutional frameworks as a priority area. It also identifies the economy's dependence on natural resource-based sectors, and the growing risk of increasing pressure on these as the country develops.
- 14. The Project is designed to contribute to the World Bank Group's corporate goals of ending extreme poverty and promoting shared prosperity in a sustainable way. It recognizes the importance of nature-based tourism as a key contributor to the GDP and job creation for rural populations, who would, otherwise, have limited paths out of poverty, and which are among the poorest and most vulnerable. The improved management of key natural assets, and the associated increase in tourism brings well-known macro-economic benefits, spill-over benefits, and through appropriate linkages with the local communities, also benefits at the household level.
- 15. The project specifically targets world-renowned global public goods, some of the most iconic National Parks and Reserves in Tanzania, by improving the sustainability of pristine ecosystems.

5

<sup>&</sup>lt;sup>13</sup> Country Assistance Strategy for the United Republic of Tanzania for the period 2012-2016. May 9, 2011. Report No. 60269-TZ.

<sup>&</sup>lt;sup>14</sup> Tanzania Systematic Country Diagnostic, February 23, 2017. Report No. 110894-TZ.

The project will directly support the National Strategy to Combat Poaching and Illegal Wildlife Trade in the four priority PAs. In addition, the emphasis on landscape management in the Great Ruaha River sub-basin is aimed at better managing fresh water resources of national importance (the Rufiji basin, considered at the moment as one of the key basins in the country due to its social and environmental importance).

- 16. The project is key in fighting climate change impacts through adaptation. It is aligned with the National Climate Change Strategy (NCCS) and related sector action plans, and specifically implements some of the actions underscored in the NCCS and derived from the recently developed Integrated Water Resource Management Development Plan (IWRMDP) for the Rufiji basin, in which climate change scenarios featured prominently. The project promotes climate change adaptation in the agriculture and water sectors, by analyzing trade-offs between different uses and implementing conciliating trade-offs between them. A more resilient Greater Ruaha sub-basin will benefit farmers (with important implications for women), hydropower production, natural resources and derived tourism, and will have an important long-term effect on food security and livelihoods.
- 17. *Finally, the project has been designed in close coordination with the rest of the World Bank's portfolio in Tanzania*, and the gains achieved by this approach will, more forcefully, contribute to the goals of reducing poverty and sharing prosperity (see Box 2).
- 18. To better link the higher-level objectives of the project to the project's results framework, each of the relevant PDO and intermediate indicators has been linked to a cluster of predictive proxy indicators (PPIs). These are specific types of proxy indicators that seek to provide information about longer-term outcomes. The relevant clusters of PPIs are: (1) jobs; (2) household income; (3) resilience; and (4) biodiversity in the Southern Circuit.

#### Box 2: A robust GoT - WB partnership in Southern Tanzania to complement REGROW's goals

Realizing REGROW's long-term vision to develop the Southern Circuit to its full potential will require interventions beyond the project. The WB has current and planned investments to support the GoT in:

- *Transport Infrastructure:* The Tanzania Strategic Cities Project is developing municipal infrastructure in Iringa, the gateway to the Southern Circuit. A planned transport program is assessing the potential to finance trunk roads connecting Iringa, while the studies and designs for the regional network of airports have been completed, and are also being considered. An irrigation and water resources management project for the Usangu plains, which would improve water efficiency in the overall area upstream the Ihefu wetland, is currently being considered.
- Water and Agriculture: The recently closed Water Sector Development Program (WSDP) supported capacity building of the Ministry of Water and Irrigation's (MoWI) River Basin Organizations (RBOs), including development of Integrated Water Resources Management and Development Plans (IWRMDPs) for the country's nine river basins. REGROW will implement priority actions of the IWRMDP for the Great Ruaha Sub-basin, in collaboration with the Rufiji Basin Water Board (RBWB) and MoWI. The second phase of the WSDP, recently approved, focuses on enabling environment, water governability, cross-sector coordination and stewardship, therefore facilitating and streamlining REGROW interventions. The Southern Agricultural Growth Corridor of Tanzania project focuses on strengthening agriculture value chains in the Sothern Agricultural Corridor, bringing value added to produce and facilitating the area's inclusion in the tourism supply chain.
- Business Environment and Skills: The Private Sector Competitiveness Project is financing a new Tourism National Policy and Tourism Strategy for Tanzania. The Investment Climate Advisory Services Program focuses on increasing competitiveness and unlocking investment and job potential in the tourism sector. This program will also support REGROW in creating a conducive investment climate for southern Tanzania. REGROW also coordinates with the Education and Skills for Productive Jobs program, which strengthens the institutional capacity of the skills development system and promotes the expansion and quality of skills development opportunities in select economic sectors, one of which is tourism.

#### II. PROJECT DEVELOPMENT OBJECTIVE

#### A. PDO

- 19. The Project Development Objective (PDO) is to improve management of natural resources and tourism assets in priority areas of Southern Tanzania and to increase access to alternative livelihood activities for targeted communities.
- 20. REGROW will: cover the infrastructure gap that currently exists inside the priority PAs, by investing in new roads and upgrading the existing network, bridges, airstrips, entry gates, ranger posts, visitor's centers, and other key assets needed to promote tourism; implement an ambitious marketing and branding campaign with the goal of increasing the total number of visitors to the Southern Circuit, and turn Iringa into the gateway town for the Circuit; improve the country's capacity to conserve its wildlife as basis to attract tourists; promote conservation-friendly alternative livelihoods in local communities to increase social inclusion, create jobs and tackle unsustainable uses of natural resources; invest in the Great Ruaha River Sub-basin to mitigate impacts inside RUNAPA caused by no-flow days, which currently affect the environmental and ecological services that the river provides (ecological, agricultural, hydropower services amongst others); and it will develop an innovative water resources management model, through efficiency gains, with the potential to replicate in other key national basins.

#### **B.** Project Beneficiaries

- 21. *Direct beneficiaries:* (i) around 20,000 households located near the priority PAs through increased economic benefits; (ii) around 20,000 farmers' households located within the Great Ruaha River sub basin, upstream of RUNAPA, through more efficient irrigation and production methods; (iii) government agencies and officials working on water, agriculture and land management, wildlife, tourism, and PA management in Southern Tanzania through capacity building; and (iv) tourism operators and related businesses within and adjacent to the priority PAs through increased tourism revenue. Within the framework of the project, emphasis will be placed on providing opportunities for women and the youth.
- 22. *Indirect beneficiaries* of the project are the citizens of Tanzania, because REGROW provides the foundation for the Southern Circuit to further develop and become a source of jobs and resilient livelihoods. An increase in the tourism sector will generate economy-wide benefits (e.g., visa fees, airport usage, taxes that stay at national/treasury level). It will also indirectly benefit global citizens at large by conserving globally significant biodiversity. A number of agribusinesses and agroindustries will benefit from increased tourism activity in the Southern Circuit. The lessons learned and analytical outputs from the project will have spillover benefits across the PA management sector, and the water resources management sector, with potential replicability in areas with similar challenges in the country.
- 23. The project will mainstream gender-informed approaches in its design (Box 3), implementation and monitoring of activities, by taking account of the different needs and opportunities for women, men, and the youth, together with Vulnerable and Marginalized Groups (VMGs). Project activities, particularly those targeted at communities living near the priority PAs, will be geared towards female, youth, and VMG participation to the extent possible. In addition, project activities will

include mechanisms for effective citizen engagement through consultations, sensitizations, capacity building, and partnerships.

#### Box 3. Gender balance and youth engagement, key pillars for project success

The REGROW project recognizes the importance of engaging all segments of the local communities to achieve the PDO. Although male adults represent the bulk of the farming population, females in general, female-headed households in particular, and the landless youth play a significant role in the project areas and can greatly contribute to tackling the existing challenges to the priority PAs. As such, REGROW will ensure that inclusive and equitable development opportunities exist for females and youth to access project benefits. The project will proactively target women and youth, by providing support and training for the development of tourism-related initiatives that would generate off-farm income and employment.

The project will actively promote equal participation of men and women in the farmer field schools and will give special preference to young/youth farmers (below the age of 30) to participate and benefit from this intensive training program. Similar selection criteria will be applied by the project in providing extension support on sustainable land and water management practices to farmer communities along the rivers flowing into the Usangu plains. In the priority villages benefiting from support on improved livelihoods through tourism and wildlife conservation, the project will also promote awareness and conservation-based initiatives, as well as scholarships, internships and scout programs for young male and female graduates.

Implementation of all community-oriented activities to be supported by the project will be guided by a detailed Subproject Manual, which would specify the beneficiary selection criteria and procedures, as well as the mechanisms to ensure adequate gender balance and youth inclusion. In addition, the project's M&E system and results framework will have disaggregated indicators to reflect the targeting of female and youth beneficiaries.

#### C. PDO Level Results Indicators

24. The key PDO indicators are: (i) Area of the priority Protected Area (PA) with improved access for basic management supported by the project; (ii) Total tourist visits to the priority PAs; (iii) Households with access to alternative livelihood activities supported by the project; (iv) Land area under sustainable landscape management practices; and (v) Share of beneficiaries with rating 'Satisfied' or above on project interventions (disaggregated by sex and age).

#### III. PROJECT DESCRIPTION

#### A. Project Components

- 25. Component 1 Strengthen management and improve infrastructure in priority Protected Areas (US\$97 million). The objective of Component 1 is to improve the management and sustainability of natural resources inside the four priority PAs in Southern Tanzania. This will be achieved through infrastructure investments, policy and regulatory support, and capacity/skills development grouped under three sub-components:
  - a) Sub-Component 1.1 Improve PA infrastructure (US\$70 million). Enhance accessibility and basic infrastructure of the priority PAs to improve management and overall quality of the tourism products. Key investments include: (i) earthworks construction of new and upgrade existing roads, trails, bridges and upgrading of existing airstrips to improve connectivity and ability to patrol strategic locations; (ii) civil works construction and upgrading of ranger posts, tourist arrival amenities, entry/exit gates, visitor information centers, youth hostels, and "bandas" for official and educational purposes, maintenance workshops, and construction of research centers.

- b) Sub-Component 1.2 Strengthen management capacity and infrastructure maintenance of PAs (US\$13 million). Activities include: (i) basic light and heavy equipment for road works; (ii) infrastructure management tools and contingency plans; (iii) upgrading of communications, monitoring and patrolling equipment; (iv) improve payment systems to address delays entering PAs, and carry out sensitivity studies for entrance fees; (v) wildlife related research initiatives to inform policy dialogue and integrated management; and (vi) targeted training for PA staff on infrastructure management.
- c) Sub-Component 1.3 Strengthen "Destination Southern Tanzania" (US\$14 million). Identify and build linkages between the range of attractions including the priority PAs in Southern Tanzania and increase recognition of Southern Tanzania as a destination. Activities include: (i) an integrated tourism product development and marketing strategy for Southern Tanzania that includes wildlife, forests, beach, cultural and historic products; (ii) implement marketing and branding strategies for the priority PAs; (iii) build a destination marketing and management office in Iringa to drive destination development; (iv) identify, assess feasibility, and promote opportunities for private sector investment in and around the priority PAs; and (v) scoping studies for Southern RUNAPA, Kitulo National Park, Katavi National Park and other southern destinations for possible future investment.
- 26. Component 2 Strengthen alternative livelihoods for targeted communities in proximity to the priority Protected Areas (US\$17 million). The overall objective of this component is to provide access to improved economic opportunities to enhance livelihoods, reduce vulnerability to climate shocks, and reduce pressure on natural resources and wildlife.
- 27. Recognizing that engagement in alternative livelihoods, per se, might not reduce anthropogenic pressure on natural resources inside the priority PAs, the component will promote incentive-based approaches, to influence behaviors and establish an enabling environment for change to take place.
- 28. The total population living around the boundaries of the priority PAs is estimated to be 300,000 inhabitants (based on the 2012 National Census). During preparation, an assessment of villages adjacent to the priority PAs was conducted, and they were prioritized into 61 "hotspot villages" (with an estimated total population of 204,000 inhabitants, or 34,000 households) that would be eligible to receive assistance from the project. The methodology, names, population and location of these villages, *hereafter referred to as priority villages*, are provided in Annex 2. The project may expand its interventions to additional villages based on resources and identified impacts.
- 29. The implementation of this subcomponent would be led by the strengthened outreach units of the respective priority PAs, operationally supported by service providers, under the overall coordination of the PA management. The activities will be implemented in close coordination and consultation with the National Economic Empowerment Council (NEEC). Sub-components are:
  - a) Sub-Component 2.1 Improve the governance framework of conservation-related community-based initiatives (US\$2 million). The sub-component will, amongst others: (i) strengthen the legal and institutional framework of TANAPA's and TAWA's benefit sharing schemes; (ii) strengthen and/or develop the community outreach structures of TANAPA and TAWA, through technical assistance, capacity building and equipment; and (iii) develop a plan and/or strategy for development of cultural/historical tourism in the priority PAs.

-

<sup>&</sup>lt;sup>15</sup> Monitoring and patrolling equipment will not include weapons, firearms, or similar.

- b) Sub-Component 2.2 Enhance alternative community livelihoods by improving economic opportunities and linking them with conservation of wildlife and landscapes (US\$11 million). Through a demand-driven approach, the sub-component will support: (i) tourism-related livelihoods, such as services and agricultural products to tourism operators, and cultural tourism products; and (ii) natural resources-based livelihoods, such as conservation-based crop and livestock production, human-wildlife conflict reduction, and participatory forest management.
- c) Sub-Component 2.3 Skills development for local access to jobs in tourism and conservation (US\$4 million). The sub-component includes: (i) scholarships for community members in tourism, wildlife, conservation, and facilitating access to vocational colleges; (ii) sensitization and promotion of conservation activities at community level; (iii) strengthening of eligible WMAs, through equipment and training, to increase their effectiveness; (iv) targeted natural resources management and leadership training for local government authorities around the priority PAs; and (v) support for the development or improvement of Village Land Use Plans (VLUP) in the priority villages.
- 30. Component 3 Strengthen landscape management and infrastructure investments in and upstream of the Ruaha National Park (US\$27 million). The component will focus on short-term infrastructure measures for the restoration of dry season flows in the Great Ruaha River, which are critical for continued and expanded tourism in RUNAPA. As a secondary focus, the component will lay the ground towards mitigating future degradation of the RUNAPA resulting from climate change impacts, excessive abstraction of water upstream of the Park, deteriorated water quality, and increased sediment in inflowing rivers, through water controlling structures and water sources protection. All activities follow the conclusions of the Rufiji Integrated Water Resources Management and Development Plan. They are also fully aligned with the recommendations of the GoT's Task Force for the Great Ruaha River restoration. The sub-components are:
  - a) Sub-Component 3.1 Assess and implement infrastructure measures to augment dryseason flows to the RUNAPA (US\$9 million). Key infrastructure investments such as low weirs, enhancement of natural river pools, troughs or boreholes, inside RUNAPA and along the Great Ruaha River, will be implemented to: (i) augment dry season flows to the river through storage of wet season flows; and (ii) construct water supply sources, along the river and tributaries, that ensure increased water availability during dry season.
  - b) Sub-Component 3.2 Improve efficiency of irrigation systems (US\$14 million). This sub-component will focus on the extensive irrigation lands upstream of the Ihefu wetland, promoting water savings through: (i) implementation of water-saving farming practices to increase water availability for the Great Ruaha River through Farmer Field Schools; (ii) irrigation infrastructure improvements in selected areas to demonstrate water-efficient methods (water controlling structures, lining of canals and drainage); and (iii) revisiting water use permits and assessing incentive mechanisms for controlling use of water or increase of irrigation areas utilizing drainage water.
  - c) Sub-Component 3.3 Catchment conservation activities in selected sub-basins (US\$1.5 million). This would include: (i) surveying hotspots in the upper catchment areas where climate variability and change, together with present and future human activities, comprise

\_

<sup>&</sup>lt;sup>16</sup> Rufiji Basin IWRMD Plan for the Great Ruaha (2016). United Republic of Tanzania, Ministry of Water.

- severe risks for water sources; (ii) integrated water and land-use plans, as mandated by GoT regulations, to reduce the risks in these hotspots; and (iii) implementation of selected watershed management activities such as river boundary protection and sustainable agricultural land management practices.
- d) Sub-Component 3.4 Support the consensus-building process for land and water management and climate change adaptation in the Usangu plains (US\$2.5 million). Activities include: (i) facilitating cross-sectoral interaction and consultations at the district level, including social and physical surveillance studies when needed, for water resources management; and (ii) strengthening the monitoring and management capacity of Irrigation Organizations and Water Users Associations, including operation and maintenance training.
- 31. Component 4 Project management, institutional strengthening, quality assurance and control, and monitoring and evaluation (US\$9 million). This component will finance supplemental support for project management, to ensure coordinated and timely execution of infrastructure and other project activities. It includes project oversight and coordination; establishment and operation of a Project Coordination Unit (PCU); fiduciary management, including external/internal audits and accounting; quality control and assurance systems; environmental and social safeguards management; development and implementation of a communications and stakeholder engagement plan; and short-term training on project management. The component will also finance a monitoring and evaluation (M&E) system, which will be implemented to capture data on physical and financial progress, performance of implementing agencies and service providers, and the results achieved in terms of outputs and outcomes. The M&E system includes a baseline study, perception surveys, knowledge generation and exchange, annual networking among key project stakeholders (at local, regional and national level, including active private sector involvement) and an impact evaluation.

#### **B.** Project Financing

32. The project will be financed through an IDA credit in the amount of Special Drawing Rights SDR106,6 million (US\$150 million equivalent), and will be implemented over 6 years (Table 2).

Table 2: Project Cost and Financing (million)

Project Components	SDR	US\$ equivalent	Amount of credit allocated (in US\$)	% of expenditures financed (inclusive of taxes)
1. Strengthen management and improve infrastructure in priority PAs	68.9	97.0	97.0	100
2. Strengthen alternative livelihoods for targeted communities in proximity to the priority Protected Areas	12.1	17.0	17.0	100
3. Strengthen landscape management and infrastructure investments in and upstream of the Ruaha National Park	19.2	27.0	27.0	100
4. Project management, institutional strengthening, quality assurance and control, and monitoring and evaluation	6.4	9.0	9.0	100
Total Project Costs	106.6	150.0	150.0	100

33. The GoT will provide significant in-kind contribution to the implementation of the project, through staffing of the project coordination unit, staffing of all implementing agencies, technical staff, community outreach staff, priority PA staff, and many others.

#### C. Lessons Learned and Reflected in Project Design

34. The project design reflects lessons from analytical work, ongoing and completed operations, and international good practice. It also considers conclusions and recommendations of sector and thematic studies. Key lessons and how they have been incorporated into the design are:

- a) Project management: The projects in the WB's portfolio that have had unsatisfactory ratings typically did not have sufficient project management resources and systems. Projects that performed well had robust and professional systems in place supporting the PCUs typically with consulting resources to support fiduciary, safeguards, quality assurance and quality control, and general project management. This is particularly relevant for agencies without significant experience executing WB funded projects. For REGROW, resources are included to ensure adequate support to the PCU.
- b) Conciliating trade-offs between conservation and tourism: As highlighted in the World Bank's Tourism Portfolio Review, <sup>17</sup> common challenges to overcome include inconsistent and incomplete collection of tourism data, challenging business environments, insufficient opportunities for skills development, and inefficient marketing and promotion. The project addresses some of them directly, and is coordinating with other ongoing or future World Bank projects in Tanzania to cover gaps (Box 2).
- c) Community-based natural resource management: As highlighted by a recent World Bank study on nature-based tourism in Tanzania, <sup>18</sup> the integration of communities surrounding PAs is fundamental to the success and sustainability of conservation-based tourism initiatives. Existing benefit-sharing schemes in Tanzania were reviewed and compared with international best practice. Project implementation will also strengthen TANAPA's outreach programs, and devote the entire Component 2 to promote community development activities.
- d) Alignment with the country's policies and programs and political stability is key for project success. The project is fully aligned with Tanzania's vision of tourism expansion as an engine for development in the South. In particular, it has been designed in consultation with the MNRT teams preparing a new National Tourism Policy and National Tourism Strategy, ensuring that activities linked to the development of the already defined priority of the "Southern Circuit" are specifically included in the National Tourism Policy.

12

<sup>&</sup>lt;sup>17</sup> Ebbe, K. (2010). Tourism Portfolio Review January 2005 – December 2009: Volume I Findings, Lessons Learned, Recommendations. World Bank.

<sup>&</sup>lt;sup>18</sup> World Bank Group (2015). Tanzania's Tourism Futures – Harnessing Natural Assets. Washington D.C. Environment and Natural Resources Global Practice Policy Note

#### IV. IMPLEMENTATION

#### A. Institutional and Implementation Arrangements

- 35. The project is a multisector initiative, targeting protection of natural resources, tourism product and market development, water resources management, livelihoods and poverty alleviation. As such, a number of institutions have been involved during project preparation. The REGROW project will be implemented through two main agencies MNRT and TANAPA -, and several implementing partners (TAWA, TAWIRI, TTB, TFS, NIRC, RBWB, MALF). TANAPA will administer its own funds, whereas MNRT will administer both its own funds and funds for the other implementing partners.
- 36. The implementation of the project will follow existing government structures within ministries, agencies, regional secretariats and LGAs, and community institutions. The leading implementing agencies will be MNRT and TANAPA. All activities taking place inside the priority PAs will be implemented by TANAPA (for RUNAPA, MINAPA and UMNP) and TAWA (for SGR). Tourism marketing and promotion will be led by TTB. Wildlife research will be conducted by TAWIRI. NIRC will coordinate farmer field schools and irrigation improvements under Component 3, with significant involvement from MALF, whereas RBWB will complement NIRC with activities related to water allocation, and upstream management of catchment areas. TFS will be involved whenever subprojects are implemented in forested areas.
- 37. A Project Steering Committee (PSC), with representatives from all institutions involved, will meet at least bi-annually. It will be chaired by the Permanent Secretary (PS) of MNRT, and amongst others comprise the PS from MoWI, Chief Executive Officers of TANAPA, TAWA, TFS, TAWIRI and TTB, RBWB, NIRC, local government authorities and representatives from private sector. The PSC will: (a) ensure strategic oversight of overall project implementation, (b) ensure coordination and cooperation among all participating agencies; (c) endorse annual work plans and budgets for all project-related activities, (d) provide overall guidance during project implementation and (e) endorse financial, programmatic and monitoring reports to be presented to the World Bank and other national stakeholders to ensure and promote transparency and accountability. A detailed description of the PSC and its roles is presented in Annex 3.
- 38. A Project Coordination Unit (PCU), led by a project coordinator, has been formed to coordinate all activities under REGROW. Located within MNRT, this PCU has coordination management, oversight and reporting responsibilities for all components of the Project, and is fully staffed, as set out in the Project Implementation Manual (PIM). It will ensure integration of the financial and technical progress reports from each of the agencies being funded, and will carry out the overall M&E for the Project. The PCU will have supplemental support, in areas of financial management, procurement, monitoring and evaluation, quality assurance and control, project management, and safeguards, financed by the project.
- 39. TANAPA has a delegated Technical Coordinator and a project implementation team within the existing organizational structure. The specific members of the project implementation team are defined in the PIM, including one procurement officer and one accountant. Other involved agencies will need to have technical focal points according to their set of activities that are part of the project

13

<sup>&</sup>lt;sup>19</sup> TAWIRI: Tanzania Wildlife Research Institute; TTB: Tanzania Tourist Board; NIRC: National Irrigation Commission; RBWB: Rufiji Basin Water Board; MALF: Ministry of Agriculture, Livestock and Fisheries; TFS: Tanzania Forest Services

(and other functions, as specified in the PIM). These will coordinate the day-to-day implementation of project activities on the ground. Each entity is responsible for preparing annual work plans and budgets to be submitted to the PCU for the preparation of the project annual work plan, to be approved by the PSC and the World Bank.

40. Local government authorities will be consulted on project implementation as needed. Project beneficiaries will also be involved in participatory monitoring, providing feedback on the quality of services. There will be a special **national stakeholders' committee** to ensure full engagement and participation of Southern Circuit stakeholders, including private sector, development partners, civil society and others.

#### **B.** Results Monitoring and Evaluation

- 41. The Monitoring and Evaluation (M&E) is supported under Component 4, to ensure accountability of the use of project funds and progress towards effective management of natural resources and tourism in priority areas of Southern Tanzania, and increased access to alternative livelihood activities. Specifically, the M&E will provide the means to robustly analyze the relevant data and information to: (i) monitor the project outcome indicators as reflected in the results framework; and (ii) outline the flow of data and information from the project sites through the various stakeholders.
- 42. All implementing agencies at different levels will participate in the process of data collection, compilation, analysis and reporting of progress. These include MNRT, TANAPA, TAWA, TTB, TFS, TAWIRI, MoWI, and MALF at national level, and RBWB, NIRC, and local governments at regional and local levels.
- 43. The Project will form a Monitoring and Evaluation Technical Group (METG). The METG will meet every two months during the first year of the project, and report to the PCU. It will be chaired by the Director of the Planning and Policy Division of MNRT and will include the designated technical focal points of the different entities participating in project implementation. Other technical staff from entities involved in work plan activities will be invited to the committee on an ad hoc basis. Its main role will include, among other activities: (a) analyzing project implementation from a technical, financial and programmatic perspective; (b) coordinating data collection and reporting arrangements at all levels; (c) preparing quarterly technical progress reports as well as bi-annual reports to provide an overview of the status of achievements and the overall project performance to the PCU; and (d) developing an ongoing plan for strengthening the project's M&E function. For more detail on the role and functions of the METG, see Annex 3.
- 44. *The Project Coordination Unit (PCU)* will finalize and endorse quarterly and annual reports of each implementing agency and report to the World Bank (except for TANAPA, who will do this in parallel for their own activities). The PCU and TANAPA are required to submit quarterly technical progress reports within 45 days of the end of each fiscal year quarter, and annual reports.<sup>20</sup>
- 45. *The Project will use two sets of indicators*. The first set includes the PDO and intermediate results indicators captured in the results framework and measuring progress during the implementation towards the Project's objectives. The framework includes five PDO indicators, with one of these measuring satisfaction of target beneficiaries with project interventions. The satisfaction

\_

<sup>&</sup>lt;sup>20</sup>An outline of the quarterly technical progress report will be provided in the M&E section of the Project Implementation Manual.

indicator is disaggregated by sex and based on perception surveys that will focus on the interlinked aspects of livelihoods, environmental protection, social inclusion and water resources management. For all indicators in the results framework, the link to the higher-level objectives has been established through the use of theory-based PPIs. The PPIs have been clustered in four groups: (1) jobs; (2) household income; (3) resilience; and (4) biodiversity in the Southern Circuit. The second set focuses on assessing the efficiency of the PCU and implementers in carrying out their core functions.

- 46. The Project's M&E will build, to the extent possible, on existing country systems, however, a project management and monitoring platform to integrate the information coming from different sources and levels, will be created. The Project will use existing data sources and tools that are in use for PA management and wildlife monitoring, such as the GIS tracking tool of ranger patrols, and camera traps for wildlife monitoring. The Project will also conduct field surveys to capture the perception of satisfaction with project interventions as already highlighted above.
- 47. To identify M&E capacity needs, and to develop a capacity building plan, an assessment will be carried out for all relevant agencies after project effectiveness. The assessment will focus on capacity needs that the agency requires to carry out its responsibilities in M&E. Based on this assessment, the PCU will prepare an M&E capacity building plan which will be integrated in the overall Capacity Building plan of the project.

#### C. Sustainability

- 48. The project has been designed with the overarching objective of ensuring sustainability of Southern Tanzania's rich natural resources. The priority PAs cover, in total, a surface of over 75,446 km² (almost twice the size of Switzerland), and some of the communities around them are in remote areas, with poor connectivity with the rest of the country, and limited alternatives to moving out of poverty. Arguably one of the few sources of sustainable revenues for these areas comes from tourism. Through this project, and by strengthening the management of natural resources together with promoting tourism development, the three main pillars of sustainability would be addressed: environmental, social and financial.
- 49. Three Components address the environmental pillar: Component 1 will improve TANAPA's and TAWA's capacity to manage the natural resources and wildlife; Component 2 will reduce anthropogenic pressures on PA resources; and Component 3 will address the environmental emergency caused by zero flow of the Great Ruaha River after the "Ngiriama" point during the dry season.
- 50. The social pillar is squarely placed as a key element of the project through Component 2, in two ways: by directly engaging communities to develop alternative livelihood schemes both tourism and non-tourism related; and by strengthening the ability of TANAPA/TAWA to implement their ongoing community development and outreach programs.
- 51. Financial sustainability is being improved through increased tourism activity. Currently, the PAs of the North are generating most of the revenue used by TANAPA to run their operations in all PAs. By promoting the Southern Circuit and increasing the number of tourists visiting the priority PAs, both TANAPA and TAWA will secure additional resources and contribute to the long-term sustainability of the institutions.

52. The project is also directly addressing long-term sustainability in the specific case of the RUNAPA, where extensive, inefficient agriculture and irrigation practices have drastically reduced the dry season flow of the Great Ruaha River. The current situation, with long periods of zero river flow of a once perennial river, is unsustainable, and is already causing major impacts downstream. The project is promoting institutional strengthening in the area, direct engagement with farmers, and land use planning, laying out the building blocks towards a more sustainable situation in the basin.

#### V. KEY RISKS

#### A. Overall Risk Rating and Explanation of Key Risks

#### 53. The overall risk is rated substantial.

- a) *Political and Governance Substantial.* The government has intensified efforts to eradicate corruption with promising results. However, the governance regime remains challenging and could potentially negatively affect project activities, particularly with respect to fraud and corruption. In addition, conflicting interests regarding the irrigation expansion in or around National Parks, or wildlife crime, particularly poaching, impose additional risks. Efforts to increase political support for private sector development and creation of an enabling environment for the tourism sector are vital to avoid any impact to project implementation. To mitigate these risks, REGROW will promote dialogue and consultations, transparency, and peer to peer supervision of activities.
- b) *Macroeconomic Moderate:* Tanzania's economic performance has recently shown some signs of softening albeit real GDP growth remaining relatively high at 6-7 percent during the past decade. During the last quarter of 2016, expansion of economic activities declined to around 5.6 percent, coupled by high rates of non-performing loans and low level of growth of credit to the private sector. The economy remains exposed to variations in commodity prices on the international market, notably of food, fuel, and gold. Moreover, important risks arise from fiscal policy including: (i) low levels of revenue collection while facing increased public spending to address huge investments and human capital gaps; (ii) high level of accumulated payment arrears for both central government and SoEs; and (iii) high levels of debt service with increased non-concessional borrowing.
- c) Sector Strategies and Policies Substantial. Existing policies and strategies from sectors such as agriculture, irrigation or mining may conflict with MNRT's mandate to sustainably manage natural resources and enforce PAs' boundaries. The government's intentions to turn Tanzania into an industrialized country might pose additional stress on resources (e.g. mining and dams around/inside SGR, road development, agricultural expansion) and their announced aspiration to double the number of tourists might hurt the natural resources that are the basis for tourism. The project will promote a multi-sectoral dialogue during its implementation, and ensure that environmental concerns are represented in existing coordinating mechanisms such as the National Water Board. The focus on tourism diversification away from core attractions provides additional mitigation actions.
- d) *Technical Design of Project Moderate*. The project involves components across multiple sectors and across the jurisdiction of multiple divisions and/or ministries. Particularly, the implementation of Component 3, which aims to support the sustainable management of watersheds where competing uses exist, is potentially complex, as it requires strong

collaboration across entities. Without strong support across the landscape, there is a risk of limited impact on broader watershed management. To mitigate the risk, the Project design has therefore been focused on a participatory process, active dialogue, and close coordination of key stakeholders, which will be continued throughout project implementation.

- e) *Institutional Capacity for Implementation and Sustainability Substantial.* The envisaged implementing agencies have different capacity levels in terms of procurement, FM, social and environmental management, and monitoring and evaluation. The main implementing agency, MNRT, with TANAPA and TAWA, does not have extensive experience in implementing large projects, and will need strengthening in order to play a guiding, coordinating, and supervising role as needed. Key mitigation actions will include: (i) provision of technical assistance and capacity building; (ii) training of key staff; and (iii) close monitoring of project implementation by the World Bank through continuous support.
- f) *Fiduciary Substantial.* The GoT has intensified efforts to fight fraud and corruption with promising results. However, the continued risk with respect to fraud and corruption could potentially affect fiduciary compliance with World Bank policies. The latest available Public Financial Management Performance Report (September 2013) mentioned weak controls for payroll and salaries, low compliance with procurement regulations, weak contract management, weak internal auditing mechanisms, and poor record keeping as shortcomings. The current administration is addressing the issues raised by the Report. A strong fiduciary governance framework will need to be put in place and periodically be reviewed to enable continuous strengthening. In addition to targeted training, the risk will be mitigated by the project hiring procurement and FM advisors to support the fiduciary teams in their tasks.
- g) *Environment and Social Substantial.* Environment risks: The project involves activities such as the development of infrastructure, to be implemented within priority PAs or irrigation schemes, including Critical Natural Habitats. While these investments are intended to improve the conservation and management of these areas, there is a possibility of unintended and/or temporary negative impacts. An Environmental and Social Management Framework (ESMF) has been developed to lay out the requirements to ensure sound safeguards management of project investments. In parallel, all project-supported investments in Critical Natural Habitats must be compatible with the management plan for that area.

Social risks: The project does not intend to acquire land or implement any activity that would cause involuntary resettlement. However, in the unlikely event that GoT initiates activities inside the priority PAs, or with communities engaged by the project, which will require resettlement, the GoT has decided to follow international best practice through adopting the use of the World Bank's policy on Involuntary Resettlement (Annex 3, section 6). A Resettlement Policy Framework (RPF) has been prepared as part of project preparation, outlining guidelines, standards, and procedures to be followed. Finally, the promotion of improved PA management under the project, could potentially restrict access to the priority PAs resulting in marginal adverse impacts on livelihoods. To address this, a Process Framework has been prepared which outlines measures to assist affected persons in their efforts to improve, or at least maintain, their livelihoods, while also maintaining the sustainability of the PAs. A Grievance Redress Mechanism has also been prepared, and it will be utilized for any persons impacted by the project.

h) Stakeholders – Moderate. The multi-sector nature of the project requires strong collaboration across a variety of ministries and agencies. Different mandates that cut across the project scope, together with unclear roles and responsibilities as a result of weak coordination, could undermine the success of project activities. Project implementation will draw upon participatory processes, including through the creation of committees that comprise representatives of key stakeholder groups.

#### VI. APPRAISAL SUMMARY

#### A. Economic and Financial Analysis

- 54. The main focus of the REGROW project is the sustainable management of the Tanzania's natural resource capital to catalyze wildlife-based tourism, while reducing rural poverty around PAs. The cost benefit analysis clearly demonstrates a positive return on investment (Annex 5).
- 55. REGROW promotes investment in PA management, a core public sector service that is expected to improve the protection of the country's natural resources, which are considered public goods of global and local importance. Their management has been underfunded, and would not be supported through other sources of finance. The World Bank remains uniquely positioned to invest in this sector, while bringing its convening power to address wider issues related to water augmentation, local community development and tourism development to trigger and leverage much needed private sector investment into the areas.
- 56. A cost-benefit analysis of the REGROW project was conducted to calculate the Economic Internal Rate of Return EIRR, Net Present Values (NPV) and a Benefit-Cost Ratio (BCR). The analysis focused on the expected economic benefits generated by the priority PAs which will receive investment under the REGROW. The analysis centers on the expected benefit streams corresponding to: i) revenue generated from nature-based tourism in the priority PAs; ii) income generated by local communities in the vicinity of the priority PAs; and iii) water augmentation activities conducted in collaboration with local farmers in the Great Ruaha sub-basin. The analysis returned a positive EIRR of 17 percent (above the threshold of 10 percent), a NPV of US\$62 million and a BCR of 1.6, over a 20-year period. It should be noted that the profitability indicators are conservative as they do not fully consider: (i) demand driven activities of local communities due to the nature of self-selection during implementation; (ii) tourism demand above the rate of inflation due to any concerted effort by a strategy of the project to this effect; (iii) the value of project impact on environmental services as their value remains un-monetized, such as reduced human-wildlife conflict as a result of increased protection and conservation stemming from improved infrastructure (e.g., ranger posts); and (iv) an increase in visitor satisfaction.

#### **B.** Technical

57. The project's design has been informed by several technical studies financed by a Project Preparation Advance<sup>21</sup> and a wealth of peer-reviewed reports and in-depth studies related to

\_

<sup>&</sup>lt;sup>21</sup> "Development of Project implementation manual"; "Consultancy to conduct a curriculum development workshop and elaborate a Farmer Field School program on on-farm water and crop management in the irrigation schemes on the Usangu Plains"; "Consultancy to undertake a reconnaissance study of structural measures to augment dry season flows in Ruaha National Park"; "Consultancy on

natural resources management, tourism and poverty in Tanzania (mentioned elsewhere in this document). The REGROW design is considered technically sound, as it incorporates all relevant recommendations from the preparatory analytics, and provides the physical, financial and institutional resources to achieve the PDO. It incorporates the recommendations of the World Bank's Tanzania Economic Update ("The Elephant in the Room: Unlocking the potential of the tourism industry for Tanzanians", 2015), which identifies tourism as a key sector of the economy and calls for careful management of tourism-conservation tradeoffs, and diversification of the tourism product towards the Southern Circuit. The message is further refined and detailed in the "Tanzania's Tourism Futures: Harnessing Natural Assets" (World Bank 2015). The 2015 "Strategy for Tourism Development in Southern Tanzania", commissioned by MNRT and carried out with USAID support through an internationally renowned consulting firm, lays out the specific priorities, PAs to be developed, type of tourism, and type of preliminary infrastructure needed. The study was delivered by MNRT as an official input to the project design.

- 58. The inclusion of Component 2 into the project is especially important to highlight. The Component was included after several studies revealed that some of the poorest communities in Tanzania are located around PAs in the North. The Tourism Futures report noted that local communities around PAs in Southern Tanzania do not benefit from the tourism products, for a variety of reasons including lack of skills and capacity, and limited mechanisms that promote interaction between communities and tourism stakeholders. The entire Component can thus be considered as a proactive way to avoid past failures to address poverty through increased natural resources conservation and nature-based tourism.
- 59. Project activities on water resources management in the Great Ruaha sub-basin under Component 3 have been designed using advanced technologies and studies. These include reports prepared by the European Space Agency showing land cover evolution in the past decades using satellite images. The Component's design has been carried out in close partnership with MoWI, and includes the recommendations of the Integrated Water Resources Management Plan for the Rufiji basin, by implementing several activities suggested therein.
- 60. In addition, all project-implemented activities will be based on careful designs, conducted by selected firms, after quality and cost competition for contract awards. The selected firms have proven experience and knowledge in the different topics, and, throughout the design phase, have engaged in a proactive manner all relevant stakeholders, to ensure that views and expertise is incorporated into final designs.

#### C. Financial Management

61. An assessment of the Financial Management (FM) arrangements of the key implementing entities (MNRT and TANAPA), was conducted in August 2016 and updated in July 2017. The objective of the assessment was to determine whether the implementing entities have acceptable FM arrangements to implement the project. These include budgeting, accounting, internal controls, funds flow, financial reporting, and auditing arrangements. The arrangements are considered

locally-based tourism product development and socio-economic assessment of communities adjacent to selected protected areas in Southern Tanzania"; "Environmental and Social assessment including ESMF, RPF and PF"; "Consultancy to undertake a reconnaissance survey of agricultural water management in the Usangu Flats"; "Consultancy to undertake an assessment of current benefit-sharing models associated with natural resources and tourism and lessons learned from best practices"; and "Institutional Assessment".

acceptable if they (i) facilitate correct and complete recording of all transactions and balances relating to the project; (ii) facilitate the preparation of regular, timely and reliable financial statements; (iii) safeguard the project's assets; and (iv) are subject to auditing arrangements acceptable to the World Bank. The capacity assessment was conducted through discussions with MNRT and TANAPA preparation teams, including finance, planning, and internal auditing units.

- 62. The assessment revealed that TANAPA and MNRT have adequate FM capacity to implement the project in terms of financial systems and staffing, and both received unqualified (clean) audit reports in the last two years. The overall FM risk for the Project is assessed as substantial since both MNRT and TANAPA have no experience in implementing World Bank-financed projects. In addition, project design is relatively complex since it involves other sub-implementing agencies, as well as decentralized community driven activities under Component 2.
- 63. As risk mitigation measure, a financial management manual was prepared and agreed. The manual outlines the specific FM procedures applicable to REGROW. In addition, training on FM, disbursement, and procurement procedures has already started, and will continue to be provided on a regular basis.
- 64. The conclusion of the FM Assessment is that adequate FM arrangements are in place at MNRT and TANAPA, with the proposed actions and mitigating measures to strengthen the FM arrangements, do meet the IDA's minimum requirements under OP/BP 10. Both FM arrangements are adequate to provide, with reasonable assurance, accurate and timely information on the status of the project, as required by the World Bank.
- 65. The FM teams at MNRT and TANAPA will be responsible for the overall coordination and consolidation of project financial statements, auditing, disbursement, and submission of quarterly IFRs and monthly withdrawal applications to the World Bank. The National Audit will carry out the annual external audit, and audits will be submitted to the World Bank within 6 months after the end of the FY. Audit terms of reference were agreed upon during project preparation, as well as the flow of funds to the project implementers.
- 66. The project will use the Statement of Expenditures (SoE) disbursement method and will submit withdrawal application requests on a monthly basis. Two (2) US Dollar designated bank accounts (DA's) will be opened and maintained at the Bank of Tanzania (BOT), one for MNRT and the other for TANAPA. Replenishment of the DA's will be made on a monthly basis based on timely monthly accountability of actual expenditures. Both MNRT and TANAPA will open Project Accounts (PA) in local currency in the BOT to which funds from the respective DA will be transferred for payments.

#### **D.** Procurement

67. All procurement will be carried out in accordance with the World Bank Guidelines: Procurement of Goods, Works and Non Consulting Services under IBRD Loans and IDA Credits and Grants by World Bank Borrowers, dated January 2011, revised in July 2014; Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits and Grants by World Bank Borrowers, dated January 2011, revised in July 2014; Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants, dated October 15, 2006 and revised in January 2011 and as of July 1, 2016; and provisions stipulated in the Financing Agreement. The various items under the different expenditure categories are described in general below. For each contract to be financed by the credit, different procurement methods or

consultant selection methods, estimated costs, prior review requirements, and time frame would be agreed upon between the Government and the World Bank in the Procurement Plan. The Procurement Plan will be updated at least annually or as required to reflect the actual project implementation needs and improvements in institutional capacity. The implementing entities, as well as contractors, suppliers and consultants will observe the highest standard of ethics during procurement and execution of contracts financed under this project. "Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA and Grants" dated October 15, 2006 and revised in January 2011 and as of July 1, 2016, (the Anti-Corruption Guidelines) shall apply to the project.

68. The Public Procurement Act, 2011 as amended through The Public Procurement (Amendment) Act, 2016 will be applied for procurements below the defined thresholds involving National Procurement Procedures. The Public Procurement Act, Act No. 7 of 2011 was reviewed by the World Bank and found to be consistent with the World Bank Procurement Guidelines, except for the provisions of Section 54 and 55 of the Act, which permits application of national preference in bid evaluation under National Competitive Bidding (NCB). There should be no preference accorded to domestic suppliers and contractors under NCB for goods and works. Furthermore, in accordance with paragraph 1.16(e) of the Procurement Guidelines, each bidding document and contract financed out of the proceeds of the credit shall provide that (a) the bidders, suppliers, contractors, and subcontractors shall permit the World Bank, at its request, to inspect their accounts and records relating to the bid submission and performance of the contract, and to have said accounts and records audited by auditors appointed by the World Bank and (b) the deliberate and material violation by the bidder, supplier, contractor, or subcontractor of such provision may amount to an obstructive practice as defined in paragraph 1.16(a)(v) of the Procurement Guidelines.

69. The MNRT, TANAPA, TAWA, RBWB and NIRC will be responsible for procurement activities and also carry out the oversight function in procurement and contract management for activities under their respective components. Capacity assessments of the agencies to implement the project procurement activities were carried out in August 2016, April 2017 and July 2017. The assessment revealed that (a) MNRT, TAWA, NIRC and RBWB have inadequate space for procurement staff offices and procurement records keeping; and (b) inadequate working facilities including computers, printers, photocopiers and scanners. Furthermore, all agencies were noted to have inadequate staff with knowledge and experience in procurement under World Bank procedures and in contract management. Further strengthening of the MNRT PMU would also be required to enable the ministry to provide the support that will be required by the other agencies.

70. The mitigation measures proposed to be implemented by the respective agencies include (a) provision of more space for staff offices and for procurement records keeping; (b) provision of working facilities including computers, printers, photocopiers and scanners; (c) recruitment of a procurement expert to support the project for at least the initial two years; and (d) training of procurement staff in procurement under the World Bank procedures and in contract management. The overall unmitigated risk for the project with regards to procurement is **High** with the expectation of reducing to **Substantial** after implementation of proposed mitigation measures.

#### E. Social (including Safeguards)

71. *The project has been designed to have an overall positive social impact.* By improving natural resources management and increasing tourism revenues, the communities around the priority PAs

are expected to receive increased benefits, and take advantage of a sustainable and resilient source of income. Moreover, Component 2 has been designed to improve the sharing of benefits, facilitating the insertion of community members into tourism and non-tourism related economic activities, and providing conservation-friendly alternative livelihoods. Additionally, Component 3 will provide farmers with agricultural techniques by which to improve their livelihood while also improving water management for Ruaha National Park. The successful achievement of the projects' development objectives will lead to positive social development outcomes for the Southern Circuit area, and are likely to create spill-over effects into other PAs and areas not targeted by the project but close enough to benefit from increased tourism. Part of Component 3 activities will be carried out in the upper catchment area of the Great Ruaha Sub-basin - the specific locations have not yet been identified. During project implementation, due diligence in environmental and social screening and assessment of potential areas will be conducted, and Environmental and Social Management Plans will be prepared as areas are identified for project financing.

- 72. Increased management capacity of the priority PAs will result in better ability to curb illegal wildlife poaching, which has been identified as a key deterrent of tourism, and increased capacity to prevent degradation of resources. The four priority PAs, and their specific regulations on allowed and non-allowed activities, have been in place for many years in some cases, for several decades. The REGROW project is not designed to enforce existing boundaries or introduce new restriction of access to the PAs. However, through the construction of infrastructure such as additional ranger posts and roads, and provision of equipment, the PA authorities will have better ability to detect illegal uses of resources (illegal tree logging, waste dumping, illegal farming or grazing, etc). For this reason, a Process Framework (PF) has been prepared, and will, in part, be applied as a precautionary measure to the extent surveillance activities would marginally contribute to increasing existing restrictions of access, with a focus on communities where illegal activities (in particular poaching) are prevalent, which are the ones most likely to be affected.
- 73. Project activities include construction of tourism infrastructure including new, or upgrading of existing roads, trails, and bridges as well as youth hostels and rest houses. It is expected that new construction will occur within PA boundaries and therefore is unlikely to trigger the Involuntary Resettlement Policy. Irrigation infrastructure is expected to happen on existing schemes, since REGROW will work on efficiency, and not on new schemes. If, however, land acquisition is needed under the project, the project will work with local district authorities and communities to identify vacant state land for use to avoid negative impacts on individuals or households. A Resettlement Policy Framework (RPF) has been prepared in the unlikely event where land acquisition is unavoidable. The RPF establishes the guidelines, standards, and procedures to be followed in the preparation of a Resettlement Action Plan (RAP) which will be implemented prior to project activities affecting the identified assets.
- 74. The project area encompasses vulnerable groups. Determination of which groups in Tanzania are recognized as vulnerable is being done on a project by project basis, and is done according to the following criteria: those that may be below the food poverty line and lack access to basic social services (including those that are geographically isolated), and are not integrated with society at large and its institutions due to physical or social factors.
- 75. A rapid social assessment of vulnerable groups confirms that there are some vulnerable groups in the project area, including women-headed households, the elderly, disabled, youth, children, and persons with HIV/AIDs. The social assessment has also determined that there are no groups meeting the criteria of OP 4.10 in the project area. The specific needs of vulnerable groups in the project will

be addressed through some of the project activities and mitigation measures in the Environmental Management Plans and, where applicable, the Resettlement Action Plans

76. Based on the above, the social safeguards instruments prepared for this project include a PF, and an RPF.

### F. Environment (including Safeguards)

77. The project will support: (i) structural solutions to augment dry season flow of the Great Ruaha River (at the "Ngiriama" control point) in the RUNAPA through storage of wet season flows, river training, boreholes, ponds or enhancement of natural river pools and small surface reservoirs; (ii) construction of irrigation infrastructure in selected irrigated areas to demonstrate water-efficient irrigation; (iii) watershed management activities (demarcation of water sources, protection of streams and others), and sustainable agricultural land management practices such as terracing on hill slope farming; (iv) improving tourism infrastructure including: construction of new and upgrade existing roads, trails, and bridges to improve connectivity; upgrading of existing airstrips; construction of entry/exit gates and visitor information centers; construction of youth hostels and rest houses; and other tourism infrastructure; (v) assistance to demand-driven productive initiatives linking improved livelihoods with conservation of wildlife and landscapes. Given the nature of the activities, their scale and the overall objective of the project of improving environmental sustainability of the natural resources, the project is rated Environmental Risk Assessment Category B. Appropriate mitigation measures will be undertaken to address potential environmental and social impacts. The safeguard policies triggered for this project include: Environmental Assessment (OP/BP 4.01); Natural Habitats (OP/BP 4.04); Forests (OP/BP 4.36); Pest Management (OP/BP 4.09); Physical Cultural Resources (OP/BP4.11) and Involuntary Resettlement (OP/BP 4.12). See Table 3 for an overview.

78. Environmental safeguard instruments: All investments proposed for financing will need to comply with environmental and social safeguard policies by undergoing the required level of assessment prior to implementation. In addition, all investments inside the priority PAs were identified as part of the existing General Management Plans of each PA, prepared with due consideration to zoning, reduction of accumulated impacts and other considerations. Currently, the total number, specific location and characteristics of proposed investments are still to be determined. Therefore, specific impacts cannot be identified by appraisal and it is not possible to conduct a full Environmental and Social Impact Assessment (ESIA) of the entire project. In this case, the instrument of choice is an ESMF. The ESMF is an umbrella document, which details environmental and social screening procedures for identifying, assessing, and mitigating potential environmental and social impacts of project investments. The ESMF defines the adequate environmental and social instruments to be applied for each investment. These instruments can range from an ESIA to a simplified Environmental and Social Management Plan (ESMP). The ESMF, and all relevant environmental and social assessment instruments must follow Tanzania's relevant environmental regulations and World Bank's safeguard policies triggered for this project. The ESMF has been publicly disclosed in country and in the World Bank InfoShop prior to appraisal.

79. The implementation of the REGROW project is expected to follow existing government structures within the project-related ministries, agencies, regional secretariats and local government authorities and community institutions. Thus, overall safeguard oversight and coordination will be under MNRT's Environmental Management Unit, with close participation from TANAPA and

TAWA officials. MNRT will work closely with and provide oversight to implementing sectors and agencies in accordance with World Bank Safeguard Policies and as per requirement of the Environmental Management Act (2004).

Table 3: Safeguard Policies that apply to REGROW

Safeguards Policies	Yes	Reasons for Triggers and Proposed Mitigation Measures	No
Environmental Assessment (OP/BP 4.01)	x	The project is envisioned to support investments of infrastructure, including: structures to augment dry season flow to Ruaha river; irrigation infrastructure improvement in selected areas; catchment conservation activities and community based activities. An ESMF has been prepared to provide criteria and procedures for identifying, assessing, and mitigating potential environmental and social impacts of project investments.	
Natural Habitats (OP/BP 4.04)	х	The project will support: watershed management activities in the catchment of Great Ruaha River; and construction of infrastructure and facilities in Ruaha National Park, Mikumi National Park, Udzungwa National Park, and Selous Game Reserve. Natural habitat issues will be addressed as part of the ESIA and the ESMP for specific project investments.	
Pest Management (OP 4.09)	X	The project is not expected to involve the purchase nor the use of significant quantities of pesticides. However, Component 3 includes activities to improve the efficiency of agricultural practices and water conservation in the Great Ruaha catchment, and will include support through farmer's field schools. In this regard, the project might involve or inadvertently promote the use of pesticides during the implementation of those activities. Therefore, the policy is being triggered as a precaution, and specific instructions will be included as part of the ESMF to promote best practices in case of pesticide use or handling in the project area.	
Physical Cultural Resources (OP/BP 4.11)	X	The project is not expected to affect or impact any physical or cultural resource, or be conducted in the vicinity of them. However, there will be some infrastructure works, and therefore, as a precaution, investigations, rescue, and chance finds Procedures Plan are being included in case they are needed during implementation.	
Indigenous Peoples (OP/BP 4.10)		There are no groups in the project area that meet the criteria of OP 4.10.	X
Involuntary (OP/BP 4.12) Resettlement	х	Project activities related to construction are expected to occur mainly within priority Protected Areas' boundaries, and therefore are unlikely to trigger the Involuntary Resettlement Policy. If, however, land acquisition is needed, the project will follow the provisions set out in the Resettlement Policy Framework (RPF) in the preparation of a Resettlement Action Plan which will be implemented prior to project activities impacting the identified assets.	
Forests (OP/BP 4.36)	х	Implementation of selected watershed management activities may happen in forested areas, or may promote the reforestation of some areas or planting of woodlots as	

	catchment protection measures for erosion control. The ESIA and ESMP will provide the analysis of potential impacts and define mitigation measures to address any such adverse impacts.	
Safety of Dams (OP/BP 4.37)		X
Projects in Disputed Areas (OP/BP 7.60)		X
Projects on International Waterways (OP/BP 7.50)		X

#### G. World Bank Grievance Redress

80. Communities and individuals who believe that they are adversely affected by a World Bank (WB) supported project may submit complaints to existing project-level grievance redress mechanisms or the WB's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may submit their complaint to the WB's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate Grievance Redress Service (GRS), please visit <a href="http://www.worldbank.org/GRS">http://www.worldbank.org/GRS</a>. For information on how to submit complaints to the World Bank Inspection Panel, please visit <a href="http://www.inspectionpanel.org">www.inspectionpanel.org</a>.

#### ANNEX 1: RESULTS FRAMEWORK AND MONITORING

### TANZANIA: RESILIENT NATURAL RESOURCES MANAGEMENT FOR TOURISM AND GROWTH (REGROW)

### **Project Development Objectives**

PDO Statement

The Project Development Objective (PDO) is to improve management of natural resources and tourism assets in priority areas of Southern Tanzania and to increase access to alternative livelihood activities for targeted communities.

**These results are at** Project Level

### **Project Development Objective Indicators**

		Cumulative Target Values						
Indicator Name	Baseline	YR1	YR2	YR3	YR4	YR5	YR6	End Target
1. Area of the priority Protected Area (PA) with improved access for basic management supported by the project (Square kilometer(km2))	0.00	0.00	1966.00	2650.00	4090.00	5500.00	6850.00	6850.00
1.1 Selous Game Reserve (Square kilometer(km2) - Sub- Type: Breakdown)	0.00	0.00	616.00	850.00	1090.00	1300.00	1500.00	1500.00
1.2 Udzungwa National Park (Square kilometer(km2) - Sub- Type: Breakdown)	0.00	0.00	100.00	200.00	250.00	300.00	350.00	350.00
1.3 Mikumi National Park (Square kilometer(km2) - Sub- Type: Breakdown)	0.00	0.00	0.00	100.00	250.00	400.00	500.00	500.00
1.4 Ruaha National Park (Square kilometer(km2) - Sub- Type: Breakdown)	0.00	0.00	1250.00	1500.00	2500.00	3500.00	4500.00	4500.00

2. Total tourist visits to the priority PAs (Number)	98504.00		104500.00		117000.00		135000.00	135000.00
2.1 Mikumi National Park (Number - Sub-Type: Breakdown)	52428.00		56000.00		63000.00		71000.00	71000.00
2.2 Ruaha National Park (Number - Sub-Type: Breakdown)	18961.00		19500.00		22000.00		26000.00	26000.00
2.3 Selous Game Reserve (Number - Sub-Type: Breakdown)	18197.00		19500.00		22000.00		26000.00	26000.00
2.4 Udzungwa National Park (Number - Sub-Type: Breakdown)	8918.00		9500.00		10000.00		12000.00	12000.00
3. Households with access to alternative livelihood activities supported by the project (Number)	0.00	0.00	1000.00	5000.00	8000.00	15000.00	20000.00	20000.00
3.1 NRM-based (Number - Sub-Type: Breakdown)	0.00	0.00	700.00	4000.00	6000.00	11500.00	15000.00	15000.00
3.2 Tourism-based (Number - Sub-Type: Breakdown)	0.00	0.00	300.00	1000.00	2000.00	3500.00	5000.00	5000.00
4. Land area under sustainable landscape management practices (Hectare(Ha)) - (Corporate)	0.00	1000.00	3000.00	5000.00	8000.00	9000.00	10000.00	10000.00
5. Share of beneficiaries with rating 'Satisfied' or above on project interventions (Percentage)	0.00		20.00		50.00		65.00	65.00
5.1 of which female (Percentage - Sub-Type: Breakdown)	0.00		20.00		50.00		65.00	65.00
5.2 of which youth	0.00		20.00		50.00		65.00	65.00

(Percentage - Sub-Type:	li .	li .	ш	ш	li .	li .	
Breakdown)							

## **Intermediate Results Indicators**

				Cumu	lative Target V	Values		
Indicator Name	Baseline	YR1	YR2	YR3	YR4	YR5	YR6	End Target
1.1 Access roads rehabilitated inside priority Protected Areas (Kilometers)	0.00	0.00	0.00	0.00	400.00	782.00	982.00	982.00
1.1.1 Selous Game Reserve (Kilometers - Sub-Type: Breakdown)	0.00	0.00	0.00	0.00	200.00	400.00	600.00	600.00
1.1.2 Ruaha National Park (Kilometers - Sub-Type: Breakdown)	0.00	0.00	0.00	0.00	100.00	189.00	189.00	189.00
1.1.3 Mikumi National Park (Kilometers - Sub-Type: Breakdown)	0.00	0.00	0.00	0.00	100.00	193.00	193.00	193.00
1.2 Airstrips rehabilitated in selected project sites (Number)	0.00	0.00	0.00	7.00	14.00	15.00	15.00	15.00
1.2.1 Selous Game Reserve (Number - Sub-Type: Breakdown)	0.00	0.00	0.00	3.00	6.00	6.00	6.00	6.00
1.2.2 Ruaha National Park (Number - Sub-Type: Breakdown)	0.00	0.00	0.00	3.00	7.00	8.00	8.00	8.00
1.2.3 Mikumi National Park (Number - Sub-Type: Breakdown)	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00
1.3 Ranger posts constructed or/and upgraded in priority Protected Areas (Number)	0.00	0.00	0.00	11.00	15.00	15.00	15.00	15.00

·		1	1		1	1	1	
1.3.1 Udzungwa National Park (Number - Sub-Type: Breakdown)	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00
1.3.2 Selous Game Reserve (Number - Sub-Type: Breakdown)	0.00	0.00	0.00	4.00	5.00	5.00	5.00	5.00
1.3.3 Ruaha National Park (Number - Sub-Type: Breakdown)	0.00	0.00	0.00	4.00	7.00	7.00	7.00	7.00
1.3.4 Mikumi National Park (Number - Sub-Type: Breakdown)	0.00	0.00	0.00	2.00	2.00	2.00	2.00	2.00
1.4 Visitor information centers constructed and operational in priority Protected Areas (Number)	0.00	0.00	0.00	2.00	4.00	5.00	5.00	5.00
1.4.1 Selous Game Reserve (Number - Sub-Type: Breakdown)	0.00	0.00	0.00	1.00	2.00	3.00	3.00	3.00
1.4.2 Ruaha National Park (Number - Sub-Type: Breakdown)	0.00	0.00	0.00	1.00	2.00	2.00	2.00	2.00
1.5 Wildlife census conducted in priority Protected Areas (Number)	0.00		4.00		8.00		12.00	12.00
1.5.1 Udzungwa (Number - Sub-Type: Breakdown)	0.00		1.00		2.00		3.00	3.00
1.5.2 Selous Game Reserve (Number - Sub-Type: Breakdown)	0.00		1.00		2.00		3.00	3.00
1.5.3 Ruaha National Park (Number - Sub-Type: Breakdown)	0.00		1.00		2.00		3.00	3.00
1.5.4 Mikumi National Park (Number - Sub-Type: Breakdown)	0.00		1.00		2.00		3.00	3.00
1.6 Product and Market Development Strategy for Southern Tanzania is developed (Yes/No)	No	No	Yes	Yes	Yes	Yes	Yes	Yes

1.7 Destination management partnership for Southern Tanzania operational (Yes/No)	No	No	Yes	Yes	Yes	Yes	Yes	Yes
2.1 Scholarships for vocational training in nature conservation and/or tourism hospitality awarded (disaggregated by sex, age (16-29)) (Number)	0.00	0.00	32.00	80.00	120.00	160.00	160.00	160.00
2.1.1 of which women (Number - Sub-Type: Breakdown)	0.00	0.00	16.00	40.00	60.00	80.00	80.00	80.00
2.1.2 of which youth (Number - Sub-Type: Breakdown)	0.00	0.00	20.00	60.00	80.00	120.00	120.00	120.00
2.2 Households trained by the project in alternative livelihood activities (disaggregated by sex, age (16-29)) (Number)	0.00	0.00	3500.00	8000.00	15000.00	20000.00	20000.00	20000.00
2.2.1 of which youth (Number - Sub-Type: Breakdown)	0.00	0.00	1750.00	4000.00	7500.00	10000.00	10000.00	10000.00
2.2.2 of which women (Number - Sub-Type: Breakdown)	0.00	0.00	1750.00	4000.00	7500.00	10000.00	10000.00	10000.00
2.3 Households trained by the project in reduction of human-wildlife conflicts (Number)	0.00	0.00	1000.00	3000.00	5000.00	6000.00	6000.00	6000.00
2.4 Communities using project- promoted techniques to reduce human-wildlife conflict disaggregated by crop- protection and livestock- protection technique	0.00	0.00	800.00	2000.00	3600.00	4000.00	5000.00	5000.00

(Number)								
2.4.1 Crop-protection technique (Number - Sub-Type: Breakdown)	0.00	0.00	400.00	1000.00	1800.00	2000.00	2500.00	2500.00
2.4.2 Livestock-protection technique (Number - Sub-Type: Breakdown)	0.00	0.00	400.00	1000.00	1800.00	2000.00	2500.00	2500.00
3.1 Dry season water supply sources constructed by the project in Ruaha National Park (Number)	0.00	0.00	0.00	1.00	2.00	4.00	4.00	4.00
3.2 Smallholder farmers trained through Farm Field Schools (FFS) on improved farming (Number)	0.00	0.00	1500.00	5000.00	10000.00	15000.00	20000.00	20000.00
3.3 Smallholder agriculture area benefiting from improved irrigation infrastructure (Hectare(Ha))	0.00	0.00	0.00	0.00	1000.00	2000.00	2200.00	2200.00
3.4 Operational water user associations and irrigators organizations strengthened under the project (Number)	0.00	0.00	1.00	4.00	8.00	12.00	16.00	16.00

# **Indicator Description**

# **Project Development Objective Indicators**

Indicator Name	Description (indicator definition etc.)	Frequency	Data Source / Methodology	Responsibility for Data Collection
Area of the priority Protected Area (PA) with improved access for basic management supported by the project	Cumulative targets. Improved access means construction of roads and bridges, and construction new/improved infrastructure (ranger posts, entry gates) to improve basic management of the areas. The indicator captures both the management of natural resources (wildlife in particular) and tourism assets of the PDO. The indicator relates to the PPIs cluster on Biodiversity (improved basic management will contribute to the protection of biodiversity).	Annual	Review of geospatial data sets.	MNRT with support from TANAPA/ TAWA
Selous Game Reserve		Annual	Review of geospatial data sets.	MNRT with the support of TAWA.
Udzungwa National Park		Annual	Review of geospatial data sets.	MNRT with support from TANAPA.
Mikumi National Park		Annual	Review of geospatial data sets.	MNRT with support from TANAPA
Ruaha National Park		Annual	Review of geospatial data sets.	MNRT with support from TANAPA
Total tourist visits to the priority PAs	Annual targets. A tourist is a visitor to one of the priority PAs paying entry fee to enter any of the priority PAs. The baseline and target values include resident and non-resident visitors. This indicator captures the tourism aspects of the PDO. Reference to table 1 of the main body of the document for baseline data. The indicator	Biennial	Count of entry fees payed (resident and non-resident)	TANAPA/TAWA

	relates to the PPIs clusters on Jobs and Household Income (increase in the number of resident and especially non-resident visitors will contribute significantly to the employment in the service sectors and also increase demand for local produce and handicraft).			
Mikumi National Park		Biennial	Count of entry fees payed (resident and non-resident)	TANAPA
Ruaha National Park		Biennial	Count of entry fees payed (resident and non-resident)	TANAPA
Selous Game Reserve		Biennial	Count of entry fees payed (resident and non-resident)	TAWA
Udzungwa National Park		Biennial	Count of entry fees payed (resident and non-resident)	TANAPA
Households with access to alternative livelihood activities supported by the project	Cumulative targets Number of households engaged in alternative livelihood activities supported by the project (NRM like supply of produce and artisanal products for increased tourism, or production of higher value crops less water-demanding; Tourism-based such as non-skilled and skilled labor), either full time or part time. The indicator captures the access to alternative livelihood aspects of the PDO. The indicator relates to the PPIs cluster on Jobs, Household Income, Resilience and Biodiversity (increased access to alternative livelihoods will bring about a behavior change away from destructive practices in protected areas and contribute to better protection of biodiversity. In most cases, it will also contribute to an	Annual	Field Survey	TANAPA/TAWA

NRM-based	increase household income and jobs through creation of alternative livelihood strategies in NRM and livelihood strategies related to the tourism sector.)	Annual	Field Survey	TANAPA/TAWA
Tourism-based		Annual	Field survey	TANAPA/TAWA
Land area under sustainable landscape management practices	Cumulative targets. Corporate results indicator Land area includes: specific farm land area upstream of the Great Ruaha River; sustainable landscape management practices means the adoption of improved land and water management practices (techniques similar to System for Rice Intensification (SRI), or areas with improved operations and field-level practices, or improved water control through infrastructure). The indicator captures the management of natural resources (watersheds in particular) of the PDO. The indicator relates to the PPIs cluster on Resilience (increased use of sustainable landscape management practices will contribute significantly to reduction in soil erosion and soil degradation).	Annual	Field Survey	NIRC/RBWB
Share of beneficiaries with rating 'Satisfied' or above on project interventions	Biannual Targets. Perception survey will focus on the interlinked aspects of livelihoods, environmental protection, social inclusion and water resources management. It captures demand-side social accountability, citizen engagement, and both natural resource managements and	Biennial	Perception Survey	PCU/M&E

	tourism from the perspective of target beneficiaries.			
of which female		Biennial	Perception survey	PCU/M&E
of which youth		Biennial	Perception survey	PCU/M&E

## **Intermediate Results Indicators**

Indicator Name	Description (indicator definition etc.)	Frequency	Data Source / Methodology	Responsibility for Data Collection
Access roads rehabilitated inside priority Protected Areas	Cumulative targets. Access roads will be rehabilitated including the construction of new (N) roads as per the following: a) 220 b) 1000 including 50 (N) c) 989 The indicator links to PDO indicators #1 and #3 by strengthening the management of the natural resources, and to #2 by increasing access to tourist sites. The indicator relates to the PPIs cluster on Jobs, Household Income, Resilience and Biodiversity (increased access to protected areas will contribute to better protection of biodiversity. In most cases, it will also contribute to an increase household income and jobs through creation of more tourist sites and livelihood strategies related to the tourism sector).	Annual	Technical inspection upon completion of works	TANAPA/TAWA
Selous Game Reserve		Annual	Technical inspection upon completion of works	TAWA
Ruaha National Park		Annual	Technical inspection upon completion of works	TANAPA

Mikumi National Park		Annual	Technical inspection upon completion of works	TANAPA
Airstrips rehabilitated in selected project sites	Cumulative targets. Standard Airstrip is 1.2 km. The indicator links to PDO indicators #1 and #2 by strengthening the management of the natural resources and accessibility to tourists. The indicator relates to the PPIs cluster on Jobs, Household Income, Resilience and Biodiversity (increased access to protected areas will contribute to better protection of biodiversity. In most cases, it will also contribute to an increase household income and jobs through creation of more tourist sites and livelihood strategies related to the tourism sector.)	Annual	Technical inspection upon completion of works	TANAPA/TAWA
Selous Game Reserve		Annual	Technical inspection upon completion of works	TAWA
Ruaha National Park		Annual	Technical inspection upon completion of works	TANAPA
Mikumi National Park		Annual	Technical inspection upon completion of works	TANAPA
Ranger posts constructed or/and upgraded in priority Protected Areas	Cumulative targets. New (N) ranger posts will be constructed, and existing ones will be upgraded (U). The indicator links to PDO indicators 1 and 3 by strengthening the management of the natural resources. The indicator relates to the PPIs cluster on Biodiversity (increasing the number of ranger posts that function will contribute to improving basic management that in turn will contribute significantly protection of biodiversity).	Annual	Technical inspection upon completion of works	TANAPA/TAWA

Udzungwa National Park		Annual	Technical inspection upon completion of works	TANAPA
Selous Game Reserve		Annual	Technical inspection upon completion of works	TAWA
Ruaha National Park		Annual	Technical inspection upon completion of works	TANAPA/TAWA
Mikumi National Park		Annual	Technical inspection upon completion of works	TANAPA/TAWA
Visitor information centers constructed and operational in priority Protected Areas	Cumulative targets. Operational means visitor centers are staffed, equipped, and in use. The indicator links to PDO indicator #2 by improving the tourism infrastructure. The indicator relates to the PPIs clusters on Jobs and Household Income (improving visitor information centers will contribute to an increase in the number of resident and especially non-resident visitors will contribute to the employment in the service sectors and also increase demand for local produce and handicraft).	Annual	Technical inspection upon completion of works	TANAPA/TAWA
Selous Game Reserve		Annual	Technical inspection upon completion of works	TAWA
Ruaha National Park		Annual	Technical inspection upon completion of works	TANAPA
Wildlife census conducted in priority Protected Areas	Cumulative targets. Censuses of elephants, rhinos, and big cat populations. The indicator links to PDO indicator #1 by strengthening the management of the natural resources. The indicator relates to the PPIs cluster on Biodiversity (wildlife census is part of improved planning which will contribute	Biennial	Review of wildlife census reports	TAWIRI

	to improving basic management that in turn will contribute significantly protection of biodiversity).			
Udzungwa		Biennial	Review of wildlife census reports	TAWIRI
Selous Game Reserve		Biennial	Review of wildlife census reports	TAWIRI
Ruaha National Park		Biennial	Review of wildlife census reports	TAWIRI
Mikumi National Park		Biennial	Review of wildlife census reports	TAWIRI
Product and Market Development Strategy for Southern Tanzania is developed	Cumulative targets. Product and Market Development Strategy. The indicator links to PDO indicator #2 by promoting tourism in Southern Tanzania.	Annual	Review of Product and Market Development Strategy	MNRT with support from TTB
Destination management partnership for Southern Tanzania operational	Annual targets. The partnership will include TTB, relevant private sector, TAWA, TANAPA, NGOs, and communities. Operational means regular regional meetings to be held, annual work plan developed and implemented, promotion familiarization trips conducted etc. The indicator links to PDO indicator #2 by promoting tourism in Southern Tanzania.	Annual	Review of minutes of meetings, work plan and trip reports	ТТВ
Scholarships for vocational training in nature conservation and/or tourism hospitality awarded (disaggregated by sex, age (16-29))	Cumulative targets. The indicator links to PDO indicators 1, 3 and 5 by promoting community-based natural resources management, and improving livelihoods. The indicator relates to the PPIs cluster on Jobs, Household Income, Resilience and Biodiversity (provision of training in	Annua	Review of scholarship award letters	MNRT/TANAPA/TAWA

	alternative livelihoods will lead to increased access to alternative livelihoods that will bring about a behavior change away from destructive practices in protected areas and contribute to better protection of biodiversity. In most cases, it will also contribute to an increase household income and jobs through creation of alternative livelihood strategies in NRM and livelihood strategies related to the tourism sector.)			
of which women		Annual	Review of scholarship award letters	MNRT/TANAPA/TAWA
of which youth		Annual	Review of scholarship award letters	MNRT/TANAPA/TAWA
Households trained by the project in alternative livelihood activities (disaggregated by sex, age (16-29))	Cumulative targets. The indicator links to PDO indicators #3 and #5 by promoting community-based natural resources management, and improving livelihoods. The indicator relates to the PPIs cluster on Jobs, Household Income, Resilience and Biodiversity (provision of training in alternative livelihoods will lead to increased access to alternative livelihoods that will bring about a behavior change away from destructive practices in protected areas and contribute to better protection of biodiversity. In most cases, it will also contribute to an increase household income and jobs through creation of alternative livelihood strategies in NRM and livelihood strategies related to the tourism sector.)	Annual	M&E system based on service providers' reports	MNRT/TANAPA/TAWA

of which youth		Annual	M&E system based on service providers' reports	MNRT/TANAPA/TAWA
of which women		Annual	M&E system based on service providers' reports	MNRT/TANAPA/TAWA
Households trained by the project in reduction of human-wildlife conflicts	Cumulative targets. The indicator links to PDO indicators #3 and #5 by promoting community-based natural resources management, and reducing negative impacts of human-wildlife conflict. The indicator relates to the PPIs cluster on Biodiversity (provision of training in reduction of human-wildlife conflicts will be part of improving basic management that in turn will contribute to protection of biodiversity).	Annual	M&E system based on service providers' reports	MNRT/TANAPA/TAWA
Communities using project-promoted techniques to reduce human-wildlife conflict disaggregated by crop-protection and livestock-protection technique	Cumulative targets. Community here means group of households that jointly implement project techniques The indicator links to PDO indicators #3 and #5 by promoting community-based natural resources management, and reducing negative impacts of human-wildlife conflict. The indicator relates to the PPIs cluster on Biodiversity (provision of assistance to reduce human-wildlife conflicts will be part of improving basic management that in turn will contribute to protection of biodiversity).	Annual	M&E system based on service providers' reports  Review of service provider's reports	MNRT/TANAPA/TAWA
Crop-protection technique		Annual	M&E system based on service providers' reports	MNRT/TANAPA/TAWA
Livestock-protection technique		Annual	M&E system based on service providers' reports	MNRT/TANAPA/TAWA

Dry season water supply sources constructed by the project in Ruaha National Park	Cumulative targets. Dry season water supply sources means the design and construction of structural measurements that are able to increase water availability during the dry season in RUNAPA. The indicator links to PDO indicators #1, #2 and #4 by strengthening the management of the natural resources. The indicator relates to the PPIs cluster on Resilience (increased use of sustainable landscape management practices as dry water supply will contribute significantly to reduction in soil erosion and soil degradation).	Annual	Technical inspection upon completion of works	TANAPA
Smallholder farmers trained through Farm Field Schools (FFS) on improved farming	Cumulative targets. Improved farming means efficient water use and management of irrigation schemes. The indicator links to PDO indicator #4 by promoting sustainable landscape management practices. The indicator relates to the PPIs cluster on Resilience (training of farmers on improved farming will increase the use of sustainable landscape management practices that in turn will contribute to reduction in soil erosion and soil degradation).	Annual	Review of reports from FFS	NIRC/RBWB
Smallholder agriculture area benefiting from improved irrigation infrastructure	Cumulative targets. Improved means with lining and intact structures. The indicator links to PDO indicator 4 by promoting sustainable landscape management practices. The indicator relates to the PPIs cluster on Resilience (improved irrigation management is one of the sustainable landscape management practices that will	Annual	Technical inspection upon completion of works	NIRC

	contribute significantly to reduction in soil erosion and soil degradation).		
Operational water user associations and irrigators organizations strengthened under the project	Cumulative targets. Strengthened means: Operational and Maintenance in place, and received training. The indicator links to PDO indicators 1 and 4 by promoting sustainable landscape management practices. The indicator relates to the PPIs cluster on Resilience (strengthening of the respective institutions will contribute to an increased use of sustainable landscape management practices that will contribute to reduction in soil erosion and soil degradation).	Review of training providers' report	RBWB/NIRC

#### **ANNEX 2: DETAILED PROJECT DESCRIPTION**

# TANZANIA: RESILIENT NATURAL RESOURCE MANAGEMENT FOR TOURISM AND GROWTH (REGROW) PROJECT

1. The project will be implemented through four distinctive components, which are described below.

# Component 1 – Strengthen management and improve infrastructure in priority Protected Areas (US\$97 million)

- 2. **Background:** Despite Tanzania's endowment in unique natural assets, the tourism industry in Southern Tanzania is relatively underdeveloped and attracts a low volume of visitors in comparison to the North. A 2012 report<sup>22</sup> showed that, while the country attracts more than a million visitors a year, the South accounts for less than 10 percent of those visitors, and less than 1.5 percent of PA revenue. Recent figures shown in Table 1 prove that the situation has not changed much. Southern Tanzania's tourism products, including accommodation options and activities, are fewer in number, limited in variety and have poor market penetration.
- 3. Challenges that specifically affect tourism in Southern Tanzania include the vast size and the remoteness of the region, which together restrict access, and more significantly, the operating environment for business is poor, poaching is rampant, and there has been little investment in infrastructure or marketing of tourism in the south.
  - Tanzania a) Southern has significant infrastructure needs, requiring efficient travel hubs, robust road networks. and reliable electricity improve

Table 4: Approximate Travel Distance by Road

From/To	Ruaha	Selous Game Reserve
Dar es Salaam	625km (11 hours)	230km (6 hours)
Arusha	335km (5 hours)	1,000 (14 hours)
Selous Game Reserve	855km (17 hours)	-

tourist's experience and reduce the cost, both in terms of time and cost. The RUNAPA, with its 20,226km² area, is Tanzania's largest national park. However, most tourists fly directly into the park, with round trips from Dar es Salaam averaging US\$600, as road access is limited (see Table 4). The high cost of access has resulted in a primarily high-end market for visitors, particularly those who appreciate and seek out remote wilderness. Similarly, the Selous Game Reserve is one of Africa's largest PAs, covering about 50,000 km² and home to exceptional wildlife, however, accessibility is equally challenging.

b) Rampant poaching has caused a dramatic decline in the wildlife populations, especially elephants and rhinos, whose numbers have dropped dramatically. For example, the Selous Game Reserve's elephant population fell by 66 per cent in just over four years, from around 39,000 in 2009 to 13,000 in 2013. In the Ruaha-Rungwa ecosystem, the population declined by 37 per cent from around 32,000 to 20,000 over the same period. The cause of such die-off is illegal harvesting, with poachers responsible for 60 to 90 percent of elephant

43

<sup>&</sup>lt;sup>22</sup> United Republic of Tanzania (2012). Tanzania Tourism Statistical Bulletin. Dar es Salaam, Ministry of Natural Resources and Tourism

- deaths in Tanzania's wildlife reserves. Addressing the wildlife poaching crisis is indeed at the core of the challenge the tourism sector is facing in Tanzania.
- 4. *Objective:* The objective of Component 1 is to improve the management and sustainability of natural resources inside the priority PAs in Southern Tanzania, and to build enabling infrastructure for tourism development. This will be achieved through investments, policy and regulatory support and capacity/skill development activities which are grouped under three sub-components:
- 5. Sub-Component 1.1 Improve PA infrastructure (US\$70 million). Enhance accessibility and basic infrastructure of the priority PAs to improve management and overall quality of the tourism products. Key investments include: (i) earthworks construction of new and upgrade existing roads, trails, bridges and upgrading of existing airstrips to improve connectivity and ability to patrol strategic locations; (ii) civil works construction and upgrading of ranger posts, tourist arrival amenities, entry/exit gates, visitor information centers, youth hostels, and "bandas" for official and educational purposes, maintenance workshops, and research centers.
- 6. This sub-component is entirely devoted to the implementation of key infrastructure inside the four priority PAs, to facilitate accessibility, connectivity, and diversification of the tourism product. It will follow the guidelines of the general management plans for each protected area. By improving the road network, the areas that can be safely visited by tourists is expanded, therefore increasing the potential total number of nights that tourists can stay in each PA. Some of the infrastructure will also facilitate inter-connectivity between PAs, increase safety of air operations, and enable TANAPA and TAWA to better manage the natural resources.
- 7. Sub-Component 1.2 Strengthen management capacity and infrastructure maintenance of PAs (US\$13 million). Activities include: (i) basic light and heavy equipment for road works; (ii) infrastructure management tools and contingency plans; (iii) upgrading of communications, monitoring and patrolling equipment;<sup>23</sup> (iv) improve payment systems to address delays entering PAs, and carry out sensitivity studies for entrance fees; (v) wildlife related research initiatives to inform policy dialogue and integrated management; and (vi) targeted training for PA staff on infrastructure management.
- 8. Both TANAPA and TAWA carry out frequent maintenance of roads, airstrips and other facilities inside the PAs. This is important, particularly due to the marked seasonality and intensity of the rains. This sub-component will provide key equipment, preparation of maintenance plans, and contingency plans (for fires, medical emergencies, and others), and training for operators so that infrastructure can last longer and be operated in a safe environment. The sub-component will also support TANAPA and TAWA with equipment to monitor the PA, especially targeted towards illegal wildlife poaching. Resources are also available to design an effective payment system for entrance to the PAs delays with current systems are a frequent source of complains by visitors. The project will also purchase the equipment, install, test and provide training for the new system. Finally, it will conduct wildlife censuses and other targeted research, through the Tanzania Wildlife Research Institute (TAWIRI), to monitor wildlife conservation outcomes.
- 9. Sub-Component 1.3 Strengthen "Destination Southern Tanzania" (US\$14 million). Identify and build linkages between the range of attractions including the priority PAs in Southern Tanzania and increase recognition of Southern Tanzania as a destination. Activities include: (i) an integrated tourism product development and marketing strategy for Southern

<sup>&</sup>lt;sup>23</sup> Monitoring and patrolling equipment will not include weapons, firearms, or similar.

Tanzania that includes wildlife, forests, beach, cultural and historic products; (ii) implement marketing and branding strategies for the priority PAs; (iii) build a destination marketing and management office in Iringa to drive destination development; (iv) identify, assess feasibility, and promote opportunities for private sector investment in and around the priority PAs; and (v) scoping studies for Southern RUNAPA, Kitulo National Park, Katavi National Park and other southern destinations for possible future investment.

- 10. The priority PAs in Southern Tanzania are part of a landscape that includes multiple potential tourism attractions. Just as tourism has diversified beyond the core PA attractions (Serengeti, Ngorongoro, Lake Manyara, Tarangire, and Kilimanjaro in northern Tanzania to include multiple linkages to community-based and cultural tourism, agro-tourism, walking trails through forested areas, bird-watching, handicrafts, beaches and marine based activities), the endowment base exists in Southern Tanzania to attract investors and tourists who can transform the economy. 40 years ago, Arusha was a small dusty town with just two government-owned hotels, today it is a thriving tourism "gateway" town with over 100 different accommodation facilities. This vision of the government, as described in the New National Tourism Policy is develop tourism in Tanzania through a zonal approach, building around gateway towns such as Arusha in the north, Mwanza covering the Lake region, and Iringa in Southern Tanzania. It is envisioned that these gateway towns will provide centers for decentralized government services such as licensing, regulation and standards, inspections, data collection, tourist and investor information provision, promotion and marketing, tourism services training, regional tourism planning and broad stakeholder coordination (including across different government agencies) - in essence "Destination Management". Global best practices for destination management usually involve a functioning and integrated stakeholder partnership that is well coordinated and meets regularly to provide the services and oversight outlined above.
- 11. This sub-component will support activities that identify and build linkages between the range of attractions including the priority PAs in Southern Tanzania and increase recognition of Southern Tanzania as a destination. It will also support the establishment of a Destination Management Partnership based in Iringa that will, among other activities, support and oversee:
  - (i) The development of an integrated tourism product and market development strategy for Southern Tanzania that includes wildlife, forests, beach, cultural and historic products: Building on consultancies carried out during project preparation, this critical output will: (a) conduct market research with foreign tour operators supplying Tanzania in at least the top 10 source market countries in order to provide market context and potential for tourism in Southern Tanzania, with a focus on the target protected areas, but also keeping the perspective of the rest of Southern Tanzania as a destination; (b) identify – and to the extent possible, quantify - specific domestic, regional, and international market segments that have potential to grow from the existing, and potential future, tourism product base across Southern Tanzania and in particular the four priority PAs; (c) building on the work already completed during preparation, conduct an extensive tourism product inventory of Southern Tanzania (qualified by two typologies - "market ready" and "not market ready"); (d) based on the market analysis, conduct value chain analyses across 4-6 priority market segments (e.g. cultural and community tourism itinerary), to identify gaps in the offering that is currently in place in Southern Tanzania; (e) formulate, together with relevant stakeholders, action plans and recommend interventions in each of the priority PAs that can strengthen

the value proposition for the priority market segments; (f) define integrated market development strategies (print, digital and social media) for identified priority market segments and relate these to action plans in each priority PA; (g) develop draft Terms of Reference for the implementation of a 2-year action plan for Southern Tanzania but focused on marketing and promotion strategies for each priority PA. The objective of this output is to define a clear path for integrated product and market development. While this task will be carried out by consultants, it will serve to build the Destination Management Partnership as the involvement of these stakeholders will be a critical success factor of the emerging strategy.

- (ii) Implement marketing and branding strategies for the priority PAs; building from the work above, activities here will focus on: (a) the development of brand concepts, content collection and packages of collaterals and marketing and promotion materials for each of the four priority PAs as well as the umbrella brand concept for Southern Tanzania; (b) the development of targeted local and international media campaigns that facilitate professional and commercial coverage of Southern Tanzania and build on the specific interventions in the priority PAs to ensure national and global awareness of the emerging Southern Tanzania destination; and (c) co-funding of tour operator and media relationship building and joint promotions. This is envisioned as a two-part assignment to be evaluated and modified at the mid-term of the project.
- (iii) Supporting and developing capacity to drive destination development and management activities will focus on: (a) providing office space and equipment in Iringa, transport and technical assistance to facilitate the provision of key destination management services such as licensing, regulation and standards, inspections, data collection, tourist and investor information provision, promotion and marketing, tourism services training, regional tourism planning and broad stakeholder coordination; and (b) technical support to design appropriate data collection, management and information systems to both support project M&E systems and data collection and analysis to inform planning and destination management.
- (iv) Identify, assess feasibility, and promote opportunities for private sector investment in and around the priority PAs. Initially an investment identification study will be undertaken to define a long list of investment opportunities that support the overall strategy of developing a Southern Circuit. From this long list, investment readiness criteria will be applied to each opportunity together with a priority ranking. The top 6-8 opportunities will be further defined through land surveying, initial due diligence, local consultations, selecting and drawing up an appropriate legal contracting document lease, concession, etc. A small prospectus around each one will be developed to present the offer to the market. In the case of the WMA opportunities, there might have to be additional work to establish an appropriate special purpose vehicle (SPV) to be an investment partner with the private sector.
- (v) Scoping studies for Southern RUNAPA, Kitulo National Park, Katavi National Park and other southern destinations for possible future investment. It is envisioned that PAs beyond the targeted ones in the project will require investment. These scooping studies are intended

to define investment gaps and market potential of other PAs in the Southern Tanzania landscape.

# Component 2 – Strengthen alternative livelihoods for targeted communities in proximity to the priority Protected Areas (US\$17 million)

- 12. *Background:* Despite the national economic importance and recent growth of tourism, at the local level, communities in proximity to PAs are some of the poorest in the country. While in other African countries (such as Namibia, Mozambique and parts of Kenya), tourism is providing an important source of revenue and employment to local communities, Tanzania's current policies aiming to promote local benefits from tourism, have not been as effective. Rather, local populations, which are highly dependent on natural resources for food, fodder and fuel, generally consider wildlife to be worth more dead than alive.
- 13. There is a need to strengthen linkages with the local economy and develop policies and incentives to share benefits with the poorest, who often live close to tourist attractions. Recognizing that engagement in alternative livelihoods, per se, might not reduce anthropogenic pressure on natural resources inside the priority PAs, the component will need to identify and implement incentive-based approaches, to influence behaviors and establish an enabling environment for change to happen. These incentives will necessarily link alternative livelihood engagement with specific conservation outcomes and public good benefits to wildlife. Sustainable tourism development will need to rely on a stronger connection with local economies through training and job creation, supply chain development, and other forms of benefit sharing.
- 14. Community-based natural resource management will need to play an important role to better conserve and manage the natural assets that are core to the benefits. Tanzania's community-based conservation model is anchored around Wildlife Management Areas (WMAs), areas of communal land set aside as habitat for wildlife by member villages. The concept assumes that providing local communities with economic benefits and involving them in management will promote both long-term health of wildlife and habitat and rural economic development. However, while significant progress has been made over the past decade in terms of creating a basic legal and institutional framework for WMAs, supporting communities to establish the basic management structures and land use patterns required to form and oversee the WMAs, and attracting support for this conservation model, major challenges, particularly economic and governance-related, are hampering the full conservation potential, particularly in the Southern Circuit, where tourism-related income is still limited. In addition, the government, through TANAPA, supports communities adjacent to the PAs through (i) its Support for Community Initiated Projects (SCIP), which extends financial support focusing on education, health, transportation and water supply; and (ii) the TANAPA Income Generating Projects (TGIPs).
- 15. Reconciling biodiversity conservation, tourism and livelihood of the people is critical to sustaining biodiversity (and their services) and promoting tourism in mega-biodiverse countries like Tanzania. In most cases, areas set aside for conservation, spaces for tourism and land for livelihood activities share the same landscapes. Therefore, successful interventions in tourism and conservation require a clear understanding of the socio-economic characteristics of the communities living adjacent to the priority PAs, and the right type of incentive-disincentive mechanisms. For communities around the priority PAs, it is necessary to develop strategies that

<sup>&</sup>lt;sup>24</sup> Tanzania currently has 17 WMAs with additional 22 in various stages of development.

can better link these communities to tangible economic benefits that come from, or are related to, the PAs. As such, there is a need to strengthen and reinforce the link communities have and the benefits they gain from their affiliation with the PAs. This comes in the form of employment, ownership in tourism or non-tourism businesses and enhanced agricultural activities that improve their livelihoods and reduce their impact on wildlife and the landscape.

- 16. The overall objective of this component is to provide access to improved economic opportunities within targeted communities living in the proximity of the priority PAs the priority villages- to enhance livelihoods, reduce vulnerability to climate shocks, and reduce pressure on natural resources and wildlife.
- 17. By focusing on enhancing partnerships between priority PAs and communities, the project will be anchored around improved policy and governance frameworks, productive initiatives linking improved livelihoods with tourism, conservation of wildlife and landscapes, and a strong focus on community and LGA education and training linked to the achievement of specific training goals.
- 18. The REGROW priority PAs cover a vast extension of land (RUNAPA encompasses 20,226 km², SGR extends over 50,000 km², MINAPA covers 3,230 km² and UMNP covers 1,990 km² combined, they cover over 75,000 km² for reference, Switzerland covers 41,285 km²). For this reason, REGROW will not be able to tackle all communities surrounding the priority PAs, and will need to prioritize in order to be effective (the total population living in villages located around the priority PAs is estimated to be around 300,000 inhabitants based on the 2012 National Census), with the possibility of widening the scope in future operations. To do this prioritization, during preparation the Government of Tanzania carried out an assessment of the villages in the proximity of the priority PAs, and applied core selection criteria by which villages were prioritized for project engagement. The assessment included meetings and field visits with districts and villages adjacent to the four priority PAs.
- 19. The main selection criteria applied during the assessment included:
  - i. Villages whose inclusion in REGROW would help enhance landscape-scale biodiversity conservation (ensure habitat/PAs connectivity and protection of buffer zones/dispersal areas and wildlife migratory corridors). These are villages that have engaged and/or contributed land in the management of Wildlife Management Areas, Village Land Forest Reserves, bee reserves, situated along the wildlife migratory corridors and/or wildlife dispersal areas;
  - ii. Villages known as hotspots for illegal activities with the objective of both reducing illegal use of PA resources (with a particular focus on illegal wildlife poaching), and mitigating any ancillary impacts resulting from the curbing of such activities;
  - iii. High potential for engaging in conservation-friendly livelihood activities: All villages surrounding the PAs have the potential for implementing conservation-friendly livelihood activities. The inclusion/exclusion criterion for engagement in conservation-friendly activities was guided by the word 'high potential'. The inclusion of these villages in the REGROW project would contribute to increased production, value addition, market linkages, and diversification of livelihood activities (e.g. beekeeping due to availability of forested lands, fish farming, poultry, horticultural activities, organic farming);
  - iv. Existence of tourist attractions and facilities: Existence of tourist local products (handicraft products, traditional dances and tourist facilities such as campsites, lodges, etc.).

- 20. Additional secondary criteria considered:
  - i. Existence of village land use plans;
  - ii. Presence of financial institutions (Banks, SACCOS, Village Community Banks/Conservation Community Banks (VICOBA)/COCOBA);
  - iii. Presence of the private sector in supporting tourism and non-tourism activities;
  - iv. Presence of infrastructure (railway, roads, etc.) to facilitate access;
  - v. Knowledge and skills in implementing tourism and non-tourism activities;
  - vi. Ongoing projects by other international and national organizations/donors (including TANAPA/ TAWA);
  - vii. Number of beneficiaries: how many people are likely to benefit from the projects;
  - viii. Potential to participate in block interventions.
- 21. Using the above combination, the villages surrounding the REGROW priority PAs were classified into three groups:
  - A: High Potential Villages: at least two core selection criteria and at least five other additional criteria (combined); plus all villages, irrespective of their classification, identified as hotspots for illegal activities inside the priority PAs;
  - B: Medium Potential Villages: at least one core selection criteria and at least three other selection criteria (combined), plus the potential of a village to engage in implementation of medium to large scale projects that targets a block and not individual villages (e.g. engagement in semi-improved irrigation schemes)
  - C: Less Potential Villages: a village with no core selection criteria, and less than three additional selection criteria (combined).
- 22. REGROW Component 2 activities will first focus on villages that were screened as High Potential as described above. The project may expand its interventions to additional medium potential villages based on resources and identified impacts. In total, 61 "hotspot villages" (with an estimated total of 34,000 households) were classified as High Potential, and thus would be eligible to receive technical and financial assistance from the project. The names, population and location of these prioritized villages, **referred to as priority villages**, are provided in Table 5.

Table 5. Priority villages, eligible for support by the project

#	Village	Hab. (2012)	#	Village	Hab. (2012)	#	Village	Hab. (2012)
SE	LOUS GAME RESERVE		Ml	KUMI NATIONA	AL PARK	RU	JAHA NATIONAI	. PARK
	RUFIJI DISTRICT			MVOMERO DI	STRICT	]	IRINGA RURAL DI	STRICT
1	Kipo	1250	25	Doma	3388	46	Makuka	1667
2	Kipugira	1121	26	Maharaka	5254	47	Mboliboli	5023
3	Nyaminywili	2147	27	Mkata	552	48	Kinyika	2697
4	Mtanza-Msona	1651	28	Sewe Kipera	412	49	Itunundu	5113
5	Mwaseni/Mibuyu saba	1247	KI	LOSA DISTRICT		50	Kisanga	N/A
6	Mloka	3493	29	Mikumi	14792	51	Malinzanga	N/A
	KILOMBERO DISTRICT		30	Ihombwe	2141	52	Mahuninga	2630
7	Msolwa station	8083	31	Kilangali	3364	53	Idodi	3550
8	Nyange	510	32	Tindinga	5041	54	Tungamalenga	3176
9	Magombera	947	M(	OROGORO RURAI	L	55	Isele	1823
10	Katurukila	2780		4 villages - in SGR		56	Mafuruto	2413
			UD	ZUNGWA	MOUNTAINS			
11	Kanyenja	1724	NA	TIONAL PARK		57	Makifu	1701
12	Kikwawila	4300		KILOLO DIST	FRICT		MBARALI DIST	RICT
	KISARAWE DISTRICT		33	Msosa	1955	58	Mapogoro	4613
13	Panga la Mwingireza	771	34	Ikula	1711		CHAMWINO DIST	ГRICT
14	Kitongachole	348	35	Wotalisoli	1343	59	Ilangali	3364
15	Kisangire	380	36	Udekwa	2562	60	Manda	5488
16	Gwata	2132		KILOMBERO D	ISTRICT	61	Chinugulu	5216
17	Vikumburu	1215	37	Kiberege	10977		-	-
18	Mtunani	373	38	Mang'ula B	5454			
	MOROGORO RURAL DISTR	RICT	39	Mwaya	10418			
	Kisaki station- shared with					Τo	tal Priority Village	s: 61
19	Mikumi NP	4889	40	Msifuni	1477	•	un i i i i i i i i i i i i i i i i i i i	.5. 01
1	Gomero- shared with	.007	,,,		2.,,	Т	tal inhabitanta. 20	5 211
20	MINAPA	2760	41	Kidatu	7299	10	tal inhabitants: 20	3,411
20	Kichangani shared with	2700	71	muu	1277			
21	MINAPA	1654	42	Mkamba	17207			
21	Nyarutanga - shared with	1054	72	1.1Kuiiiou	1/20/			
22	Mikumi NP	4785	43	Kanolo	1135			
23	Dakawa	2143	44	Mkula	1840			
24	Magogoni	2000	45	Msolwa Ujamaa	5712			
	Magogom		73		7 11 D			

\*Source: Modified from CARDNO "Provision of Consultancy Services on Locally-Based Tourism Product Development and Socio-Economic Assessment of Communities Adjacent to Selected Protected Areas in Southern Tanzania"

- 23. The implementation of Component 2 would be led by the strengthened outreach units of the respective priority PAs, operationally supported by service providers, under the overall coordination of the PA management. The specific instruments, procedures and responsibilities for the delivery of technical and financial support to beneficiaries would be included in a Subproject Field Manual, which will need to be prepared by MNRT and approved by the World Bank before the onset of activities. The ToR for the preparation of the Manual will be jointly developed, with active participation of TANAPA and TAWA. Specific sub-components are:
- 24. Sub-Component 2.1 Improve the governance framework of conservation-related community-based initiatives (US\$2 million). The sub-component will, amongst others: (i) strengthen the legal and institutional framework of TANAPA's and TAWA's benefit sharing schemes; (ii) strengthen and/or develop the community outreach structures of TANAPA and TAWA, through technical assistance, capacity building and equipment; and (iii) develop a plan and/or strategy for development of cultural/historical tourism in the priority PAs.
- 25. Sub-Component 2.2 Enhance alternative community livelihoods by improving economic opportunities and linking them with conservation of wildlife and landscapes (US\$11 million).

Through a demand-driven approach, the sub-component will support: (i) tourism-related livelihoods, such as services and agricultural products to tourism operators, and cultural tourism products; and (ii) natural resources-based livelihoods, such as conservation-based crop and livestock production, human-wildlife conflict reduction, and participatory forest management.

26. Sub-Component 2.3 – Skills development for local access to jobs in tourism and conservation (US\$4 million). The sub-component will focus on targeted skills development and training to facilitate access to tourism jobs, and to create new or strengthen existing mechanisms for improved natural resources management. The sub-component includes: (i) scholarships for community members in tourism, wildlife, conservation, and facilitating access to vocational colleges (e.g., wildlife and tourism related skills); (ii) sensitization and promotion of conservation activities at community level, including education sessions, village game scout programs, joint community patrolling, and others; (iii) strengthening of eligible WMAs, through equipment and targeted training, targeted towards increasing their wildlife management effectiveness; (iv) targeted natural resources management training for local government authorities around the priority PAs; and (v) support the development or improvement of Village Land Use Plans (VLUP) in the priority villages.

# Component 3 – Strengthen landscape management and infrastructure investments in and upstream of the Ruaha National Park (US\$27 million)

- 27. *Background:* The Great Ruaha River, flowing through the Ruaha National Park (RUNAPA) in Southern Tanzania, has seen a decreasing trend of water flows during the last decades and a growing number of days during the dry season with zero flows. Drying of the Great Ruaha River threatens the ecological values of RUNAPA and the tourism activities, most of which are geographically located along the river. An accelerated development of the irrigation areas and human activities in the Usangu plains, which comprise part of the catchment areas for Great Ruaha River, has been shown to be the cause of the decreasing flows.
- 28. The Great Ruaha River sources its water from the highlands in the south-western part of Tanzania, specifically, the Kipengere mountains. The area is fairly natural, with relatively few water outtakes for human activities compared to the total river flows. Hydrologically, these areas are mostly vegetated and have deep soils, which make these rivers perennial, i.e. they carry river runoff even in the dry season. The rivers from the Kipengere Mountains flow into the Usangu plains, before entering the Ihefu wetland. The Usangu plains, which in their natural state are seasonally flooded, have seen a large expansion of irrigation. The Ihefu wetland is also fed by the Ndembera River from the east, which similarly to the southern rivers, has perennial flows that partly is utilized by irrigation. The Ihefu wetland is inundated year around although the area fluctuates much between dry and wet seasons because of its flat topography. At the wetland's outlet, a natural geological formation at N'giriama functions as a weir damming the wetland. This natural weir is the start of the Great Ruaha River.
- 29. A combination of perennial inflows and the storage created by the Ihefu wetland, in their natural state, provide an unusually (for the region) high dry season flow in the Great Ruaha River. This flow is utilized by the wildlife in the RUNAPA, which migrates to the river during the dry season. The rivers flowing in from the western and north-western catchment areas into the park to join the Great Ruaha River are distinctly different than the southern and eastern catchment areas, with much less rainfall and ephemeral sand rivers which are completely dry for much part of the year. These sand rivers require sustained rainfall to have river runoff, since the sand layers are first

filled up. These rivers thus do not deliver any significant flows during the first months of the rainy season when rainfall is more erratic. As a consequence, the wildlife of RUNAPA is totally dependent on the river flows in the main Great Ruaha River during a large part of the year.

- 30. After having passed the RUNAPA, the Great Ruaha River flows into the manmade Mtera reservoir, which was built in the 1980s. The reservoir functions as the regulation storage for the Mtera and Kidatu hydropower plants. These two power plants provide a large part of the electricity in Tanzania: currently, thermal generation represents 63 percent of the total installed capacity, while hydro plants contribute 37 percent<sup>25</sup> of which the Mtera-Kidatu system represent 42 percent of installed capacity. Moreover, the Mtera-Kidatu system is crucial for power grid control. By hydropower's unique ability to start and stop power production within seconds, these two plants are crucial to avoid failure in the national transmission system that will cause power interruptions.
- 31. Since 1980s the total irrigation area, mainly for wet season rice cultivation, in the Usangu plains and in the Ndembera River catchment has increased to more than 100,000 ha. This has resulted in an annual outtake of water for irrigation of almost 50 percent of the natural inflows. Although partly the reduction of inflows into the Usangu plains and the Ihefu wetland has reduced natural evaporation losses, this has resulted in significantly reduced annual average flow in the Great Ruaha River in the RUNAPA) and into the hydropower plants at Mtera and Kidatu.
- 32. This reduced inflow to Ihefu during the wet season due to rice irrigation has shrunk the wetland, which is now considerably smaller in its inundated area during the wet season than it used to be. Moreover, because of the characteristics of the natural weir at N'giriama, this has caused the water levels during the dry season in Ihefu wetland to drop below the silt level of the geological formation with zero inflows to the Great Ruaha River for a period of up to 3-4 months every year. Though the artificial water outtake for rice irrigation occurs during the wet season, the natural characteristics of the Ihefu wetland create a water deficit during the end of the dry season and the early parts of the rainy season (normally September to January). During this period the inflow from the western tributaries in the RUNAPA is essentially zero, which means that the Great Ruaha River in the national park is completely absent of flows. The once perennial river has become ephemeral. The river, by its topography, includes a number of pools that remain with water but which slowly dry up. Massive short local rainfall during the onset of the rainy season may temporarily fill up these pools. Because of natural variability in rainfall between years, the period of no water in the river thus varies considerably from year to year. However, the trend in number of zero flows is clear and recent model exercises indicate that this trend can be explained by the increased water outtake by rice irrigation. Zero flows at Ngiriama do occur also during some years in natural conditions. However, the frequency is significantly increased because of the expanded irrigation.
- 33. Recent analytical studies have shown that a combination of measures, each acceptable from a social, environmental and economic perspective, is likely to be the best way forward. The combination of water efficiency improvements in upstream catchments, modest reduction of irrigation areas, improved productivity through agriculture management, and structural measures in RUNAPA to enhance dry season flows, will significantly reduce the number of days of zero flows and will result in limited impact on agricultural production.

<sup>&</sup>lt;sup>25</sup> As per information disclosed by Tanzania Electric Supply Company Limited (TANESCO)

34. Acknowledging that improving land and water management in the Usangu plains and the upper catchments feeding into Ihefu wetland and the Great Ruaha River is a long process that will only show results in improved quantity and quality of flows in the long-term, the priority of Component 3 is to implement structural solutions in RUNAPA to improve water availability during the dry season. A secondary priority is to initiate a process to improve land and water management upstream of the RUNAPA through piloting cross-sectoral coordination, efficient farming and irrigation procedures and conservation of upland water sources, to demonstrate the benefits and methods for subsequent up scaling. To address these objectives, Component 3 is sub-divided in four subcomponents.

35. Sub-Component 3.1 - Assess and implement infrastructure measures to augment dry-season flows to the RUNAPA (US\$9 million). The objective of this sub-component is to increase water availability during the dry season in RUNAPA on a relative short term basis. Based on the results of the reconnaissance study of structural measures to augment dry season flows in RUNAPA, conducted during the Project design as a consultancy financed under the PPA, <sup>26</sup> the Project will finance the design and construction of a number of selected structural measures to restore natural flows and increase water availability during the dry season. The selection of structural measures is based on feasibility to construct, efficiency to augment dry season water deficits, capital costs, operating costs (O&M), and environmental impacts to have as little effects on the ecology of the RUNAPA. The first structural measures the project will support are, for example, structural measures on the natural weir at Ngiriama to control outflow from the Ihefu wetland, boreholes and ponds or enhancement of natural river pools. After having completed the final designs and cost estimates of the first batch of structural measurements, based on the remaining funds available and experiences obtained, the project will be able to support the design and construction of a number of additional structural measurements to further restore natural flows and increase water availability during the dry season in RUNAPA.

36. As these structural measures will be implemented within the park, TANAPA will be the responsible organization for implementing these activities. Based on a preliminary expected number of different types of structural measures a total budget of 9 million dollars has been allocated for the design and construction of these measures.

37. Sub-Component 3.2 – Improve efficiency of irrigation systems (US\$14 million). The objective of this sub-component is to demonstrate improved irrigation and on-farm water management efficiency and water savings in a selected number of irrigation schemes with a total irrigated area of 10,000 ha that could result in increased water inflow to the Ihefu wetland as result of reduced intake of irrigation water or increase of drainage water channeled back to the river. Based on the results of the reconnaissance survey of agricultural water management in the Usangu Flats, the irrigation schemes for demonstrating improved irrigation efficiency and water savings will be selected.<sup>27</sup> Examples of possible improved irrigation and on-farm water management efficiency practices are, among other, improved field leveling, upgrading/ construction and operation of proper field intakes and drainage infrastructures to better control water levels in the field, proper maintenance of irrigation and drainage canals and promotion of the System Rice Intensification (SRI). To assist farmers in the targeted irrigation schemes in adapting irrigation

24

<sup>&</sup>lt;sup>26</sup> See final report of the Reconnaissance Study of Structural Measures to Augment Dry Season Flows in Ruaha National Park, Southern Tanzania prepared by WREM International.

<sup>&</sup>lt;sup>27</sup> Initiated during the Project design as a consultancy financed under the PPA. First results of the reconnaissance study are expected to become available after project approval.

efficiency and water savings practices in their present cultivation practices the project will support three activities. For the first two activities under sub-component 3.2 the National Irrigation Commission (NIRC) of the Ministry of Water and Irrigation (MoWI) will be the responsible organization. For the last activity under sub-component 3.2 the RBWB will be the responsible organization.

38. The core activity of sub-component 3.2 is the development and implementation of an intensive Farmer Field School (FFS) program.<sup>28</sup> Main objective of the FFS program is to raise awareness and knowledge of farming and water management methods to increase crop yields and reduce water use. Based on the results of the consultancy "to conduct a curriculum development workshop and elaborate a FFS program on on-farm water and crop management in the irrigation schemes on the Usangu Plains" a detailed FFS program has been developed. Through NIRC the project will contract a service provider to train more than 200 lead farmers selected from the targeted Water Users Associations and Irrigators Organizations (WUA/IO) as FFS facilitators and 65 responsible extension officers in mentoring/technically backstopping the FFS facilitators. These FFS facilitators will be supported to initiate and facilitate every cropping season with one FFS on water use efficiency with a group of on average 25 farmers, situated alone one irrigation canal. During the FFS participating farmers will meet every week on one of their fields and discuss and practice together all needed water, soil, pest and crop management practices to grow a good rice crop and to experiment with alternative/improved practices, as for example improved land leveling and SRI. As a group, depending for water from the same irrigation canal, the FFSs will also discuss related canal, field intake and drainage operations and maintenance issues. Although the main objective of the FFS program is to improve water use efficiency, as an incentive the FFSs will also be focused on improving crop yields and farm income. The FFS program is targeting to provide extension support to a total of 20,000 farmers (800 FFSs with 25 farmers each).

39. In addition to the FFSs, each FFS group will be requested to prepare a proposal for project support to improve their current irrigation and drainage infrastructure. This could include, among others; field intakes, field leveling, lining of secondary canals, and drainage. Based on their proposed plans to improve their irrigation and drainage infrastructure to improve water use efficiency and their willingness to contribute labor, the project will contribute to the design, building materials and hiring of equipment up to a maximum of US\$300 per hectare irrigated. To facilitate this process, the project has prepared a manual spelling out the procedures, formats for proposals/plans, farmers' contributions, etc. In addition to these farmer-driven improvements, the project will also support structural improvements on the main river intakes, primary canal, division structures and construction/improvements of main drainage canal systems.

40. The project will also support the Rufiji Basin Water Board in revisiting water permits and assessing incentive mechanisms for controlling excessive use of water or increasing of irrigation areas utilizing drainage water. At the moment, Irrigation Organizations (IOs) have to pay water

<sup>&</sup>lt;sup>28</sup> Farmer Field Schools (FFS) bring together a group of farmers to engage in a process of hands-on, field-based learning over a season/production cycle. This basic learning cycle, a FFS, is a time-bound activity, with a beginning and an end. For crop-based FFS, activities will cover 'seed to seed." The emphasis of the basic learning cycle is to strengthen farmers' skills and knowledge for critical analysis and to test and validate new practices to make informed decisions on field management. The new practices are often based on information generated by research, and are science-based. The learning process in the FFS reinforces understanding of complex ecological relations in the field. The basic learning cycle also aims at enhancing group cohesion of participants to better work as a group and to prepare for follow-up action once the FFS finishes. Through group dynamics exercises and discussions, FFS helps create a basic understanding of how groups function. The FFS also includes activities that encourage participants in critical analysis and evaluation, and planning for further action once the FFS basic learning cycle is completed.

fees based on area irrigated. Calculations of the needed flow of water at the intake are still based on the needed irrigation water during the peak water demand stages of growing rice. During other stages the crop needs less or even no irrigation water. With improved irrigation scheduling and phased cultivation of rice, the average water use per second per hectare can easily be reduced. Unfortunately, most of the irrigation intakes do not have water control mechanisms to measure or regulate water inflow into the irrigation canals. Even some of the informal irrigation schemes, which are officially registered and pay water fees, do not have mechanisms to close the intakes.

- 41. Sub-Component 3.3 Catchment conservation activities in selected rivers (US\$1.5 million). Siltation of the rivers feeding into the Usangu Flats is a growing problem. Filling up of the natural river beds results in more shallow rivers with a reduced storage capacity and water flow. This leads, in some cases, to rivers never reaching the wetlands. Another impact of the reduced water flow is increased evaporation loses. RBWB will be the responsible organization for implementing the activities under sub-component 3.3.
- 42. The project will support a survey of all the areas in the upper catchment where present and future human activities pose severe risks for water sources and river banks. Based on the outcome of the survey the project will select a few rivers for further support, with the target of reducing siltation of the rivers and erosion of slopes. After identification of areas and issues, a number of watershed management activities such as terracing, slope stabilization, river boundary protection and sustainable agricultural land management practices will be implemented.
- 43. Sub-Component 3.4 Support the consensus-building process for land and water management and climate change adaptation in the Usangu plains (US\$2.5 million). For long-term solutions for the different, but related, land and water issues in and upstream of the park, there is need for joint discussions and planning among all the important actors and stakeholders (TANAPA, LGA, MoWI, MALF, WUAs, IOs, private sector, livestock keepers, amongst others). Currently, there is little coordination between all these different actors and stakeholders.
- 44. The project will support active facilitation of cross-sectoral interaction and consultation at district level and, if needed, at higher levels. In close consultation with the authorities of the relevant districts the project will support district level meetings with all concerned actors and stakeholders to discuss land and water management issues in the Usangu plains. This cross-sectoral interaction and process will be facilitated by the RBWB.
- 45. It is expected that during the joint discussions of the land and water management issues in the Usangu plains the need to conduct additional social and physical surveillance studies to provide the factual basis for informed decisions will be identified. To be able to address this need the project will allocate some budget to conduct these studies.
- 46. The authorities and involved ministries can only supervise and provide technical support, but the actual daily management of the irrigation schemes is the responsibility of the respective Irrigation Organizations and Water Users Associations. To improve daily management of the irrigation schemes in the USANGU plains the project, through MoWI, will organize training support to strengthen the monitoring and management capacity of Irrigation Organizations and Water Users Associations.
- 47. Component 4 Project management, institutional strengthening, quality assurance and control, and monitoring and evaluation (US\$9 million). This component will finance supplemental support for project management, to ensure coordinated and timely execution of

infrastructure and other project activities. It includes project oversight and coordination; establishment and operation of a Project Coordination Unit (PCU); fiduciary management, including external/internal audits and accounting; quality control and assurance systems; environmental and social safeguards management; development and implementation of a communications and stakeholder engagement plan; and short-term training on project management. The component will also finance a monitoring and evaluation (M&E) system, which will be implemented to capture data on physical and financial progress, performance of implementing agencies and service providers, and the results achieved in terms of outputs and outcomes. The M&E system includes a baseline study, perception surveys, knowledge generation and exchange, annual networking among key project stakeholders (at local, regional and national level, including active involvement from the private sector) and an impact evaluation.

#### **ANNEX 3: IMPLEMENTATION ARRANGEMENTS**

- 1. The implementation of the project will follow existing government structures and procedures, and will be carried out through the relevant ministries, agencies, regional secretariats, local government authorities, and community institutions. Implementation will involve three levels: (i) national, (ii) regional, zonal and district /local government level, and (iii) ward and village level, with the main focus being on the priority PAs and LGAs.
- 2. The main organizing principle for field implementation will be the priority PAs, and their surroundings, as all major activities are aimed at developing and securing the natural assets in these PAs. This includes developing tourism and sustaining the interest of the local population in conservation.
- 3. The detailed organizational structure and the overall implementation arrangements at the different levels will be part of the Project Implementation Manual. The following sections contain specific information on the project's implementation arrangements.

#### 1. NATIONAL LEVEL INSTITUTIONAL ARRANGEMENTS

- 4. *The Project Steering Committee (PSC)* is the main implementation oversight organ of the project, and is coordinated by MNRT. It comprises the Permanent Secretaries or highest authorities of MNRT, MoWI, PO-RALG, and MALF; Directors of the implementing government agencies and institutions (TANAPA, TAWA, TTB, TFS, TAWIRI, NIRC, RBWB), private sector representatives, and non-state actor representatives. As it is difficult to have many meetings with such inclusive representation, the PSC will have an executive committee consisting of three members, which can be consulted flexibly and make decisions if required. The full PSC will meet twice a year, whereas the executive committee will meet at least quarterly.
- 5. The PSC will be the highest-level governing body of the project and will provide strategic leadership and governance oversight. It will have the delegated authority from national stakeholders to make decisions that are in line with the objectives, approach and scope of the project as set out in the Project Appraisal Document (PAD) and described in the PIM.
- 6. The PSC is expected to make key policy decisions, guide the implementing entities and responsible parties in the execution of the project, and ensure effective and strategic oversight through receiving regular reports and reviewing the results of project evaluations that will take place during its life cycle. It will also be tasked with ensuring good governance. The PSC can ask for additional participation coming from the private sector, multi-bilateral agencies and notable citizens, however, these participants will have a voice but no vote.
- 7. The Project Coordinator will act as the technical secretary of the PSC, prepare briefing papers and progress reports, and provide all the necessary information and evidence needed to make informed decisions.
- 8. The PSC members will be chosen based on their ability to provide strategic leadership. The PSC will:
  - a) Provide advice to the National Sector Stakeholders Meeting (NSSM) with regard to implementing the project (see next paragraph for details on the NSSM);

- b) Provide policy guidance and guidance on the overall direction of the project together with general oversight;
- c) Coordinate the participating ministries and agencies and stakeholders;
- d) Ensure smooth implementation support from all actors involved;
- e) Approve the annual work plan and budget ensuring that resources are deployed to their most efficient use. If necessary, the PSC will advise the World Bank about potential changes to allocations to individual interventions that would help to make the project more effective in delivering its intended outcome and impacts;
- f) Discuss and approve suggestions on adaptations and learning in the project made by the Project Coordination Unit (PCU);
- g) Review and approve the recommendations for implementation of interventions;
- h) Review periodic monitoring and evaluation reports and advise the PCU accordingly;
- i) Monitor the implementation of the Project ensuring that any strategic changes are undertaken in a timely manner so that the project achieves its goals; and
- j) Ensure that the Project is coordinated with other relevant Government of Tanzania, donor and private sector interventions.
- 9. The governance procedures of the PSC will include the following:
  - a) The quorum for the PSC will be achieved by simple majority;
  - b) Members must be committed and must ensure continuity in participation in all meetings. Changes in individual participations will be penalized by affecting future participation of that particular institution to the PSC. The PSC will aim to achieve consensus on decisions made. In the event this proves impossible, decisions may be made by a simple majority vote amongst participating members. In the event of a tie, the Chairperson will have an additional casting vote;
  - c) The PSC is expected to meet biannually and members will need to devote some additional time reviewing project documentation;
  - d) The PSC secretary (project coordinator) will carry out the following tasks:
    - o Invite members for meetings;
    - o Circulate relevant material to members in advance for preparation for each meeting;
    - o Draft agendas for agreement with the Chairperson; and
    - o Keep minutes and recording of decisions made.
  - e) The authority of the PSC will be final on all operational matters.
- 10. *The National Sector Stakeholders Meeting (NSSM)* will be an inclusive stakeholder forum, which provides broad oversight and policy guidance for the implementation of the project. It would be coordinated by MNRT and meet annually. It involves the ministers and permanent secretaries of the participating sector ministries, regional authority secretaries from participating regions, directors and senior government officers, development partners, selected LGAs from project related subject matters, agencies, private sector representatives, non-state actors, and other project related stakeholders.
- 11. *The Project Coordination Unit (PCU)* at the national level is the main management organ of the whole project across components and levels of implementation. The responsibilities of this

'implementation unit' are project planning, coordination, implementation, monitoring and reporting, specifically:

- a) Coordinating the preparation and development of the regular work plans and budgets;
- b) Facilitating implementation progress across levels and between institutions;
- c) Monitoring project progress and quality of implementation, and distilling and documenting lessons for improvement;
- d) Preparing monthly, quarterly and annual reports;
- e) Ensuring transparent information and report sharing and soliciting and providing of effective feedback from and to the implementation entities;
- f) Ensuring effective communication internally within the project teams and externally with the project stakeholders;
- g) Preparing project guidelines, manuals, briefs and publications for awareness and publicity;
- h) Coordinating capacity development in the project;
- i) Coaching the project implementation teams at PA and LGA level for continuous performance improvement (e.g., team development, organizational development, learning from and conceptualization of project experiences, injecting ideas and possible solutions to be tried out for problems arising); and
- j) Ensuring smooth day to day running of project activities.
- 12. The PCU will have a secretariat and be a permanent body with employed staff. It will consist of the project coordinator/director, an M&E specialist, who will serve as the deputy project coordinator, a communication specialist, a knowledge management specialist, procurement specialist, a FM specialist, environmental and social safeguards specialist, and admin staff. The staff of the PCU should be selected to ensure the highest possible competence and performance. In addition, the PCU will competitively recruit, for the first two years of the project, a Procurement Advisor and an FM Advisor with experience in multilateral donor-funded projects.
- 13. *Priority PA-level Implementation Teams:* The main project areas are the four priority PAs and their surroundings, which cut across regions and LGAs. Therefore, each PA will have an implementation team which will implement, together with the relevant LGAs in their area, the project activities of the respective components (e.g., Ruaha National Park implementation team will implement Components 1, 2 and 3 in and around the RUNAPA), the Selous Game Reserve implementation team will implement Component 1 and 2 in and around the Selous Game Reserve). Close collaboration will need to be ensured with the PCU.
- 14. The main responsibilities of the PA-level implementation teams will be:
  - a) Plan and implement the project activities for their PA-related area in close collaboration with the PCU;
  - b) Develop, enter into agreement, and sign performance contracts/compacts with stakeholders;
  - c) Monitor and assure quality implementation to achieve the overall project objectives;
  - d) Review activities, develop monthly work plans and develop coherence across the stakeholders, including service providers, through regular meetings;

- e) Learn lessons from successes and failures of project implementation, document them and continuously suggest and implement improvements and alternative ways of overcoming bottlenecks;
- f) Follow up on performance contracts and compacts of all actors;
- g) Prepare project implementation progress reports;
- h) Follow up and supervise the contracted service providers and assure quality of implementation;
- i) Administrate project resources allocated for each PA and procure service providers;
- j) Ensure LGAs, beneficiaries and other actors comply with laws and regulations related to the implementation of project; and
- k) Ensure excellent communication with local communities and CBOs and manage conflicts.

#### 2. FINANCIAL MANAGEMENT

- 15. A Financial Management (FM) assessment was undertaken to evaluate the adequacy of the project arrangements in accordance with the World Bank's minimum requirements in OP/BP 10.00. The assessment covered MNRT and TANAPA, and complied with the Financial Management Manual for World Bank-Financed Investment Operations that became effective on March 1, 2010, as well as with the Africa Financial Management Assessment and Risk Rating Principles. The overall FM was assessed to be adequate, and risk rating was assessed as *substantial*.
- 16. Country Public Financial Management: The Public Expenditure and Financial Accountability (PEFA) Assessment for Mainland Tanzania issued on September 2013 revealed that Tanzania has continued to make progress in PFM reforms in key areas such as planning and budget, accounting and reporting, external and internal auditing, Integrated Financial Management System (IFMS) as well as procurement through Public Financial Management Reform Program (PFMRP) funded by the GoT and Development Partners, including the World Bank. The GoT has continued to improve debt management, cash management, budget preparation and execution, and has strengthened the National Audit Office (NAO) and Oversight bodies.
- 17. According to the PEFA report, apart from the ongoing PFM reforms, challenges remain including weak internal controls particularly on non-salary expenditures, fiscal risk to the budget posed by public entities, unreliable cash forecasting, multiple budget reallocations, execution of the budget through a monthly cash rationing system, ineffective commitment control and little effort by the executive to follow-up on closure of audit recommendations included in CAG reports.
- 18. Recently, corruption and collusion have been highlighted as a significant risk in the majority of the sectors in Tanzania. The risks particularly relate to procurement. In addition, weaknesses in internal control and financial monitoring and oversight, combined with capacity weaknesses, increase the inherent risk of miss-use of funds for approved purposes.
- 19. As one of the mitigation measures, the World Bank is supporting the GoT under the Open Government Partnership (OGP) initiative and through an Open Government and Public Financial Management (OGPFM) Development Policy Operation. The OGPFM is a three-year development policy operation that seeks to support the Government to establish open data to increase access

and use of service delivery information as well as to improve budget credibility and execution through better cash management, public investment management and procurement.

20. *Risk Assessment and Mitigation:* The inherent risk to the project from the financial environment is assessed as substantial before mitigation and moderate after mitigation. The project specific FM control risk, taking into account the risk mitigation measures that are to be implemented for the project, is assessed as moderate.

Risk	Risk Rating	Brief Explanation	Risk Mitigation Measures Incorporated into Project Design	Condition of Negotiation, Board or Effectiveness (Y/N)	Residual Risk Rating
Inherent Risk					
Country Level	S	Takes into account overall country governance environment, corruption concerns in major sectors.	Issues are being addressed at country level through the country's governance action plan, strengthening of the public FM system supported by the (i) World Bank through Open Government and Public Financial Management (OGPFM) Development Policy Operation. (ii) other Development partners through Public Financial Management Reform Program (PFMRP)	N	S
Entity level:	S	MNRT and TANAPA are well established and have adequate capacity to manage World Bank funded projects. However, have no experience in implementing World Bank project.	Training for project staff on World Bank financial and disbursement procedures and guidelines has started, and will continue throughout implementation.	N	M
Project level:	S	Project design relatively complex since it involves other agencies under umbrella of TANAPA and MNRT	Clearly defined activities and funds flow and accountability and reporting will be documents in the project implementation manual	N	S
Overall Inherent Risk	S				S
Control Risk					
Budgeting	M	Budget system deemed adequate for the purpose of the project	Detailed project budgets and cost table to be prepared and agreed. Regular reporting including variance analysis will be	N	M

Risk	Risk Rating	Brief Explanation	Risk Mitigation Measures Incorporated into Project Design	Condition of Negotiation, Board or Effectiveness (Y/N)	Residual Risk Rating
			done on quarterly basis through IFRs		
Funds Flow	S	Funds will flow from the IDA to the designated accounts maintained at BOT and to project accounts in BOT under TANAPA and MNRT. Risk of delays due to numerous subimplementing agencies	Clearly defined activities and funds flow mechanism have been agreed upon. Each implementing entity will open a dollar designated account. Proper coordination through PCU. Hire of FM advisor to provide TA.	N	S
Staffing	M	Both TANAPA and MNRT have in place adequate staff in accounting and internal audit units who have appropriate experience and qualifications.	Both MNRT and TANAPA have allocated qualified accountants to handle project financial affairs. Hire of FM advisor to further enhance capacity	N	M
Accounting Policy & Procedures	S	There are adequate accounting policy and procedures including computerized accounting system. However, multiple sub-implementers may put strain on accounting capacity	Hire of FM advisor to enhance FM capacity	N	S
Internal Controls	S	The internal control arrangements at both TANAPA and MNRT are deemed satisfactory. However, additional risk for Component 2 for livelihood activities	A financial management manual, applicable to REGROW, has been developed Hire of service providers	N	S
Internal Audit	M	Internal audit function is well established with adequate and experienced staff both at MNRT and TANAPA. Project funds will be subjected to normal internal audit review of the implementing entities.		N	M
External Audit	М	Audit reporting arrangements deemed adequate.	Annual Financial Audit of the project's financial statements will be carried by independent auditors the National Audit Office.	N	M

Risk	Risk Rating	Brief Explanation	Risk Mitigation Measures Incorporated into Project Design	Condition of Negotiation, Board or Effectiveness (Y/N)	Residual Risk Rating
Reporting, Monitoring & Information Systems	M	Adequate capacity in TANAPA and MNRT for financial reporting. However, risk of delays in financial reports from multiple decentralized sub-implementers	Regular capacity building training Hire of FM advisor	N	М
Overall Control Risk	M				M
Overall FM Risk	S				M

H= High; S= Substantial; M= Moderate; L= Low.

- 21. FM Implementation Arrangements: Project implementation will be fully integrated into the respective institutional FM systems. MNRT and TANAPA will have overall fiduciary responsibility over the project financial matters relevant to the project components that they are implementing. The Chief Accountant (MNRT) and Director of Finance (TANAPA) will be responsible for the overall coordination and consolidation of project financial statements, auditing, disbursement, and submission of quarterly IFRs and monthly withdrawal applications to the World Bank. The budget for the project will be included in TANAPA's and MNRT's overall budgets, and will be approved by the Parliament.
- 22. The specific FM arrangements are as follows:
  - a) Staffing at MNRT and TANAPA: Both entities have financial functions that are adequately staffed with experienced staff in accounting and reporting. Few are Certified Public Accountant (CPAs), or have MBAs, and the majority have post graduates and first degrees in accounting and finance. These are assessed as having the capacity to undertake the project. MNRT and TANAPA have designated financial officers to handle project accounting and reporting. These officers have adequate qualifications and relevant experiences to fulfill fiduciary requirements consistent with IDA requirements. Since both implementing entities lack experience in managing IDA funded projects, training for project staff on World Bank FM and disbursement procedures and guidelines is being provided on a regular basis.
  - b) *Budgeting:* The budgeting for IDA funds will be done as part of TANAPA and MNRT's annual budgeting process, which is deemed adequate. Detailed cost tables have been prepared and approved by the World Bank, and they provide the basis for the annual work plans. These plans will be prepared by project implementing units. These work plans will be submitted to TANAPA and MNRT for consolidation. The consolidated work plans will be approved by MNRT and TANAPA Board and then submitted to the World Bank for no objection. Project budgeting will follow GoT policies and procedures.
  - c) Accounting: The current accounting systems in use at TANAPA and MNRT are adequate.
  - d) *Internal Controls:* The internal control arrangements at both TANAPA and MNRT are deemed satisfactory. The approval and authorization controls over payments are considered

sufficient. Each implementing entity will be responsible for ensuring that an adequate internal control framework and internal controls are in place and operating during the project implementation. Additional fiduciary controls will be required for the decentralized livelihood activities under Component 2. The additional procedures have been captured as part of the financial manual, which will be revised from time to time as needs arise.

- 23. *The FM anti-corruption measures will incorporate the following actions* to address the high inherent risks of the project and to strengthen the project specific risks:
  - a) Project implementation arrangements combine a mix of centralized responsibility and decentralized implementation arrangements to support effective, efficient and accountable execution of contract management and monitoring of project outcomes.
    - Clearly delineated roles and responsibilities for project FM personnel included in the PIM.
    - Project processes and procedures documented in the PIM, which should be reviewed annually.
  - b) Building strong FM teams as part of the project team with effective tools: FM staff must be selected based on skills and expertise, provided with further training and supported by highly qualified experts.
    - Training in FM and reporting, including World Bank FM requirements.
  - c) Integration of financial monitoring within the results orientated M&E framework: the financial reports will form part of the project progress and results reporting to support effective tracking of progress and early identification of issues for resolution.
    - Project Steering Committee will monitor and sign off on the project M&E indictors which will include appropriate and relevant FM indicators.
  - d) Enhanced disclosure and transparency: public dissemination of project related information including financial information and the annual financial statements and audit reports of the project.
    - Through the MNRT and TANAPA websites, the following will be made publicly available: all annual audit reports and audit management letters prepared in accordance with the financing agreements for the project, and all formal responses and follow actions. The disclosure of the audit reports must be completed within 30 days after receipt of the reports by the project management.
  - e) Complaints handling Mechanisms: the complaints handling system will include processes for acting on all project complaints (including those related to FM and assets) in a professional and timely manner with integrity.
- 24. *Audit Committee:* The audit committee is in place and meets on a quarterly basis to review implementation of audit issues (internal and external audit). However, the government is reviewing the set of these management oversight committees under the ongoing PFM reform initiatives with a view to enhancing their effectiveness.
- 25. *Institutional Risk Management Policy Framework (IRMPF):* The GoT has issued a treasury circular, which makes it mandatory for all public institutions in Tanzania to develop and implement a Risk Management Framework. The exercise is spearheaded by the office of Internal Auditor General of the Ministry of Finance and Planning (MoFP). IRMPF is being rolled out as part of the ongoing PFM reforms.

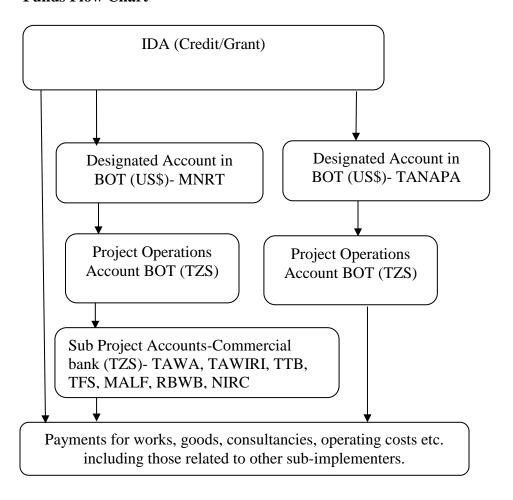
26. *Internal Audit:* There is an effective internal audit function within the MNRT and TANAPA. As part of normal functions these units will carry out regular internal audit reviews for all project financial affairs. The review indicated that the units have adequate qualified and experienced internal auditors with a well-developed auditing manual following risk based approach.

#### 3. DISBURSEMENTS

# **Funds Flow and Disbursement Arrangements**

- 27. *Disbursement Methods:* These are defined in the disbursement letter (DL) and include reimbursement, advance, direct payment and special commitment.
- 28. Reporting on Eligible Expenditures Paid from the Designated Accounts: Withdrawal applications reporting eligible expenditures paid from the designated account will be submitted monthly.
- 29. *Designated Accounts:* It is proposed that 2 designated accounts in BOT details as follows:
  - a) Designated Account A: Account holder is MNRT.
  - b) <u>Designated Account B:</u> Account holder is TANAPA.
- 30. **Project Accounts**: Each implementing agency (MNRT and TANAPA) will open a local account in BOT to receive funds from US Dollar Designated Account for the activities carried with payments in local currency.
- 31. **Sub-project bank accounts:** There are no sub-project implementers under TANAPA hence all in-country eligible project payments will be made from the main project account. However, MNRT has several sub-implementers including TAWA, TAWIRI, TTB, TFS, RBWB, NIRC and MALF. Each of these will open a sub-project bank account in a commercial bank acceptable to IDA from which eligible project payments will be made.
- 32. **Accounting for funds by sub-implementers:** Each sub-implementer will submit an annual work-plan to MNRT for approval. The sub-implementers will receive advance from MNRT equivalent to 6 months forecast. They will be expected to submit financial reports at regular intervals of not more than 3 months on the basis of which they will be replenished.

#### **Funds Flow Chart**



#### 4. FINANCIAL REPORTING AND MONITORING

- 33. *Quarterly Interim Financial Reports (IFRs)* will be prepared by MNRT and TANAPA for monitoring of financial performance. The format of the IFR has been agreed with the implementing agencies.
- 34. MNRT and TANAPA will be required to submit unaudited IFRs to the World Bank within 45 days of the end of each quarter. The IFRs will cover all project activities, including counterpart funding. The format of the IFR has been agreed with the implementing agencies.
- 35. Annual Project Financial Statements: Each implementing agency will prepare annual financial statements covering the portion of the project components and activities for which they are responsible, i.e. there will be annual financial statements from MNRT and TANAPA, and the financial statements must be prepared on IPSAS / a modified cash basis in accordance with international and national accounting standards.
- 36. The Project Financial Statements will consist of:

- a) A Statement of Sources and Uses of Funds / Cash Receipts and Payments which recognizes all cash receipts, cash payments and cash balances controlled by the entity; and separately identify payments by third parties on behalf of the entity.
- b) The Accounting Policies Adopted and Explanatory Notes. The explanatory notes should be presented in a systematic manner with items on the Statement of Cash Receipts and Payments being cross referenced to any related information in the notes. Examples of this information include a summary of fixed assets by category of assets, and a schedule of credit / grant withdrawals, listing individual withdrawal applications; and
- c) A Management Assertion that World Bank funds have been expended in accordance with the intended purposes as specified in the relevant World Bank legal agreement.
- 37. The annual financial statements are required to be audited and submitted to the World Bank within 6 months of the end of each financial year.
- 38. *Audit Arrangements:* The Project annual financial statements will be audited in accordance with international auditing standards by National Audit Office (NAO). The audited financial statements and audit reports will be submitted to the World Bank within six months of the end of each financial year, and the date of closing of the project.
- 39. For each set of financial statements, the auditor would express a single audit opinion covering the Project Accounts, the use of SoEs and the Designated Accounts. In addition, a management letter addressing any internal control weaknesses of the implementing agencies will also be provided by the auditor together with the audit reports.
- 40. The annual financial statements and audit reports will be made publicly available through the MNRT and TANAPA web-site.

Audit Report	Due Date
MNRT: Project Specific Financial Statements	31 December
Management Letter	
TANAPA:	31 December
Project Specific Financial Statements	
Management Letter	

41. *Supervision Plan:* As the FM risk is assessed as substantial, supervision of project FM will be performed at least twice a year. The supervision will review the project's FM system, including but not limited to operation of Designated Account, SoEs, internal controls, reporting and follow up of audit findings and mission findings. The FM supervision will be conducted by Bank's FM specialists.

#### **FM Action Plan**

Action	Responsibility	Completed (Yes / No)
Personnel Confirm the appointment and qualifications of the finance staff responsible for the project, acceptable to IDA	TANAPA and MNRT	Yes
Financial Manual and Training Prepare a FM manual for the project (annex to the Project Implementation Manual), which sets out in detail the structure, procedures, reporting and coordination between different levels of project in financial management aspects	TANAPA and MNRT	Yes
Training on IDA regulation, requirement on financial management and disbursements		Started, ongoing
Sub-Project Grant Manual Develop specific provisions inside the FM manual for sub- projects under Component 2	TANAPA and MNRT	Yes

#### 5. PROCUREMENT

42. All procurement will be carried out in accordance with the World Bank Guidelines: Procurement of Goods, Works, and Non-Consulting Services under IBRD Loans and IDA Credits and Grants by World Bank Borrowers, dated January 2011, revised in July 2014; Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits and Grants by World Bank Borrowers, dated January 2011, revised in July 2014; and provisions stipulated in the Financing Agreement. The various items under the different expenditure categories are described in general below. For each contract to be financed by the credit, different procurement methods or consultant selection methods, estimated costs, prior review requirements, and time frame would be agreed upon between the Government and the World Bank in the Procurement Plan. The Procurement Plan will be updated at least annually or as required to reflect the actual project implementation needs and improvements in institutional capacity. The implementing entities, as well as contractors, suppliers and consultants will observe the highest standard of ethics during procurement and execution of contracts financed under this project. "Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA and Grants" dated October 15, 2006 and revised in January 2011 and as of July 1, 2016 (the Anti-Corruption Guidelines) shall apply to the project.

43. The Public Procurement Act, 2011 as amended through The Public Procurement (Amendment) Act, 2016 will be applied for procurements below the defined thresholds involving National Procurement Procedures. The Public Procurement Act, Act No. 7 of 2011 was reviewed by the World Bank and found to be consistent with the World Bank Procurement Guidelines, except for the provisions of Clause 54 and 55 of the Act, which permits application of national preference in bid evaluation under National Competitive Bidding (NCB). There should be no preference accorded to domestic suppliers and contractors under NCB for goods and works. Furthermore, in accordance with paragraph 1.16(e) of the Procurement Guidelines, each bidding document and contract financed out of the proceeds of the credit shall provide that (a) the bidders, suppliers, contractors, and subcontractors shall permit the World Bank, at its request, to inspect their accounts

and records relating to the bid submission and performance of the contract, and to have said accounts and records audited by auditors appointed by the World Bank and (b) the deliberate and material violation by the bidder, supplier, contractor, or subcontractor of such provision may amount to an obstructive practice as defined in paragraph 1.16(a)(v) of the Procurement Guidelines.

- 44. **Procurement of Civil and Building Works**. Civil works and building works to be procured under this project will include: (i) construction of new and upgrade existing roads, trails, and bridges to improve connectivity; (ii) upgrading of existing airstrips including airstrips that are serving the PA management to transport supplies and connect remote locations;; (iii) construction of entry/exit gates and visitor information centers; (iv) construction of youth hostels and rest houses; (v) other tourism infrastructure, solid drifts and box culverts to connect the PA management headquarters with ranger posts, airstrips, and other strategic locations; (vi) construction and upgrading of ranger posts; (vii) construction of garages/workshops for vehicle maintenance; (vii) construction of research centers to strengthen monitoring efforts. (viii) construction of irrigation infrastructure in selected irrigation areas to demonstrate water-efficient irrigation (water controlling, lining of canals and drainage)
- 45. *Procurement of Goods*. Goods to be procured under this project are for: (i) services and agricultural products to tourism operators; (ii) developing cultural tourism products; (iii) promoting low-environmental impact micro-enterprises; (iv) conservation-based production and participatory forest management; and (v) fish farming, poultry, and livestock management. Procurement will be done under ICB or NCB procedures using the World Bank's Standard Bidding Documents for all ICB and National Standard Bidding Documents agreed with or satisfactory to the World Bank. Small value goods may be procured under shopping procedures. Direct contracting may be used where necessary if agreed in the procurement plan in accordance with the provisions of paragraph 3.7 to 3.8 of the Procurement Guidelines.
- 46. Selection and Employment of Consultants. Consultancy services would include those for studies including: (i) conducting social and physical surveillance studies to provide factual basis for informed decisions; (ii) facilitating cross-sectoral interaction and consultations at the district level for water resources management; (iii) strengthening the monitoring and management capacity of Irrigation Organizations and Water Users Associations, (iv) supervision of infrastructure works, technical assistance; (v) marketing and product development strategy; and others. The default selection method will be Quality and Cost Based Selection (QCBS) method whenever possible. Contracts estimated to cost less than US\$300,000 equivalent per contract may be contracted through Consultant Qualification Selection (CQS) method. The following additional methods may be used where appropriate: Quality Based Selection, Selection under a Fixed Budget (FBS), and Least-Cost Selection (LCS).
- 47. Short lists of consultants for services estimated to cost less than the equivalent of US\$ 300,000 per contract may be composed entirely of national consultants in accordance with the provisions of paragraph 2.7 of the Consultant Guidelines. However, if foreign firms express interest, they will not be excluded from consideration.
- 48. Single Source Selection may be employed with prior approval of the World Bank and will be in accordance with paragraphs 3.8 to 3.11 of the Consultant Guidelines. All services of Individual Consultants (IC) will be procured as per the provisions of paragraphs 5.1 to 5.6 of the Guidelines.

- 49. *Operating Costs*. Operating costs shall consist of operations and maintenance costs for vehicles, office supplies, communication charges, utility charges, per diem and travels costs, office rental, training costs, workshops and seminar and associated costs, among others. Operating costs will not include salaries of civil servants.
- 50. *Training and Workshops*. Training and workshops will be based on a capacity needs assessment. Detailed training plans and workshop activities will be developed during project implementation, and included in the project annual plan and budget for World Bank's review and approval. This will cover among others: (i) scholarships for community members in tourism, wildlife, conservation, and facilitating access to vocational colleges (e.g., wildlife and tourism related skills); (ii) sensitization and promotion of conservation activities at community level, including education sessions, Community Conservation Award Schemes, village game scout programs, joint community patrolling, study tours, and others; (iii) strengthening of eligible WMAs, through equipment and targeted training, targeted towards increasing their wildlife management effectiveness; and (iv) project management and fiduciary training.
- 51. **Procurement Risk Assessment**. The MNRT, TANAPA, TAWA, RBWB and NIRC will be responsible for implementation of the project. Each agency will be responsible for the implementation of procurement activities under its sub-projects, carrying out the oversight functions in procurement and contract management. Procurement activities will be carried out by the respective Procurement Management Units (PMUs) of the agencies.
- 52. A capacity assessment of the agencies to be responsible for implementation of the project procurement activities was carried out in August 2016 for TANAPA, in April 2017 for MNRT and TAWA, and in July 2017 for NIRC and RBWB. The assessment reviewed the organizational structure for implementing the project, functions, staffing skills and experiences, adequacy for implementing the project, and the interaction between the project staff responsible for procurement activities and the relevant government agencies. The assessment revealed that (a) MNRT, TAWA, NIRC and RBWB have inadequate space for procurement staff offices and procurement records keeping; and (b) inadequate working facilities including computers, printers, photocopiers and scanners. Furthermore, all agencies were noted to have inadequate staff with knowledge and experience in procurement under World Bank procedures and in contract management. Further strengthening of the MNRT PMU would also be required to enable the ministry to provide the support that will be required by the other agencies.
- 53. The overall unmitigated project risk for procurement is High which after mitigation will reduce to Substantial. The proposed mitigation measures are summarized in the table below:

S/No	Risk	Mitigation Measure	Responsible Agency
1.	Inadequate space for office and	Provide more space for office and	MNRT/ TAWA/
	keeping of procurement records	procurement records keeping	NIRC/RBWB
2.	Inadequate office facilities	Provide working facilities such as computers,	MNRT/TANAPA/
		printers, photocopiers and scanners;	TAWA/RBWB
3.	Inadequate staff with	Recruit a Procurement Advisor to support the	MNRT
	knowledge and experience in	project during the initial two years of project	
	procurement under World Bank	implementation	
	procedures	Train procurement staff in procurement	MNRT/TANAPA/T
		under World Bank procedures and in	AWA/NIRC/RBWB
		contract management	

54. *Prior-Review Thresholds*. The Procurement Plan shall set forth for those contracts which shall be subject to the World Bank's Prior Review. All other contracts shall be subject to Post Review by the World Bank. A summary of prior-review and procurement method thresholds for the project are indicated in the table below.

Thresholds for Prior Review, Procurement Approaches and Methods

Thresholds for Prior Review A. Goods, Works and Non-Co		Approacnes and Met	noas				
	Daion Donion	Procurement Approach	nes and Method	s (US\$ millions)			
Category	Prior Review (US\$ millions)	Open International	Open National	Request for Quotation (RfQ)			
Works	≥ 5	≥ 15.0	< 15	≤ 0.2			
Goods, IT, and non-consulting services ≥ 1.5		≥5 <5		≤ 0.1			
B. Consulting Services							
Category	Prior Review (US\$	Short List of Nation	nal Consultants	(US\$ million)			
	millions)	<b>Consulting Services</b>	_	Engineering and Construction Supervision			
Consultants (Firms)	≥ 0.5	≤ 0.3		≤ 0.3			
<b>Individual Consultants</b>	≥ 0.2	NA.		NA.			

**Notes:** (i) Terms of Reference: Terms of Reference for all contracts shall be cleared by the World Bank, regardless of whether the assignment is for prior or post review; and (ii) Advertisement: All ICB contracts for goods, works and non-consultancy services and for consultancy service for contracts estimated to cost US\$300,000 equivalent and above per contract shall be advertised in UNDB online in addition to advertising in National News Paper(s) of wide circulation and/or Regional News Paper(s).

- 55. **Record Keeping.** The implementing entities will be responsible for records keeping and filing of procurement records for ease of retrieval of procurement information. In this respect, each contract shall have its own file and should contain all documents on the procurement process.
- 56. *Monitoring*. Monitoring and evaluation of procurement performance will be carried out through World Bank Supervision and post procurement review missions.
- 57. **Procurement Plan.** The borrower has developed a Procurement Plan for the first 18 months of the project implementation which provides the basis for the procurement methods. The Procurement Plan was agreed between the borrower and the World Bank during negotiations. It will be available in the project's database and on the World Bank's external website. The Procurement Plan will be updated in agreement with the Project Team annually or as required to reflect the actual project implementation needs and improvements in the institutional capacity.
- 58. *Frequency of procurement Supervision:* In addition to the prior review supervision to be carried out from the World Bank offices, the capacity assessment of the implementing entities

recommends one supervision mission every six months to visit the field to carry out post review of procurement actions.

# 6. SOCIAL AND ENVIRONMENT (INCLUDING SAFEGUARDS)

# **6.1 SOCIAL (INCLUDING SAFEGUARDS)**

- 59. The REGROW project has been designed to have an overall positive social impact. By improving natural resources management and increasing tourism revenues, the communities around the priority PAs are expected to receive increased benefits, and take advantage of a sustainable and resilient source of income. Moreover, the entire Component 2 has been designed to improve the sharing of benefits, facilitating the insertion of community members into tourism and non-tourism related economic activities, and providing conservation-friendly alternative livelihoods. Additionally, Component 3 will provide farmers with improved agricultural techniques by which to improve their livelihood while also improving water management for RUNAPA. The successful achievement of the projects' development objectives will lead to positive social development outcomes for the Sothern Circuit area, and are likely to create spill-over effects into other PAs and areas not targeted by the project but close enough to benefit from increased tourism.
- 60. The four priority PAs, and their specific regulations on allowed and non-allowed activities, have been in place for many years - in some cases, for several decades. The REGROW project is not designed to enforce existing boundaries or introduce new restriction of access to the PAs. However, through the construction of infrastructure such as additional ranger posts and roads, and provision of equipment, the PA authorities will have better ability to detect illegal uses of resources (illegal tree logging, waste dumping, illegal farming or grazing, etc.). For this reason, a Process Framework (PF) has been prepared, and will, in part, be applied as a precautionary measure to the extent surveillance activities would marginally contribute to increasing existing restrictions of access, with a focus on communities where illegal activities (in particular poaching) are prevalent, which are the ones most likely to be affected. The PF also details the participatory process by which stakeholders are involved and receive benefits from the project. The framework identifies measures to be used in an effort to improve livelihoods of priority villages living near the priority PAs while also maintaining the sustainability of the PAs. The PF also identifies arrangements for implementing and monitoring the process by which priority villages benefit. The methodology for selection of the priority villages, together with other specifics, are provided in Annex 2, under the detailed description of Component 2.
- 61. Project activities include construction of tourism infrastructure such as roads, trails, and bridges as well as youth hostels and rest houses. It is expected that new construction will occur within PA boundaries and therefore, is unlikely to trigger the Involuntary Resettlement Policy. If, however, land acquisition is needed the project will work with local district authorities and communities to identify vacant state land for use to avoid negatively impacting individuals or households. A Resettlement Policy Framework (RPF) has been prepared in the unlikely event where land acquisition is unavoidable. The RPF establishes the guidelines, standards, and procedures to be followed in the preparation of a Resettlement Action Plan which will be implemented prior to project activities impacting the identified assets.

- 62. The project area encompasses vulnerable groups. Determination of which groups in Tanzania are recognized as vulnerable is being done on a project by project basis, and is done according to the following criteria: those that may be below the food poverty line and lack access to basic social services (including those that are geographically isolated), and are not integrated with society at large and its institutions due to physical or social factors.
- 63. A rapid social assessment of vulnerable groups confirms that there are some vulnerable groups in the project area, including women-headed households, the elderly, disabled, youth, children, and persons with HIV/AIDs. The social assessment has also determined that there are no groups meeting the criteria of OP 4.10 in the project area. The specific needs of vulnerable groups in the project will be addressed through some of the project activities and mitigation measures in the Environmental Management Plans and, where applicable, the Resettlement Action Plans.
- 64. *Social Safeguards Instruments:* A Resettlement Policy Framework was prepared for the project which establishes the standards and procedures to be followed if it is determined the project will need to acquire land for project activities. As the project might marginally increase restriction to the priority PAs, the aforementioned Process Framework was prepared. The two safeguards documents were publicly disclosed in-country, at national, regional, and district level, including relevant local governments, as well as in the World Bank's InfoShop, prior to project appraisal.
- 65. **Ruaha National Park Extension Legacy:** In 2006, the GoT began the process of protecting critical habitat which entailed increasing the area of RUNAPA. With the newly formed boundaries, several households found themselves within RUNAPA. As a result, the GoT began relocating households as the laws of Tanzania do not allow for people to live within national parks. The compensation and relocation process began in 2008. People were provided with cash compensation as well as an option of moving to land that had been identified for relocation. Many households chose to move to various locations throughout Tanzania based on individual household decisions.
- 66. During the compensation process in 2008, nearly 2000 complaints were received by GoT claiming that the compensation did not cover lost assets. Due to the number of complaints, the GoT suspended all resettlement activities to address grievances. Of the complaints received, 971 were determined by GoT to be valid complaints which required additional compensation. The GoT calculated the amount needed to top up outstanding compensation. The top-up amount used the 2008 valuation amounts with an additional amount based on interest rates that would have been accrued between 2008 to 2016. The funds were released to TANAPA in August 2016 which was then provided to the Mbarali District, from where it will finally be disbursed to households through deposits into bank accounts which can also be utilized through mobile banking.
- 67. As the redrawn boundaries that were enacted in 2008 tended to cut through existing communities and villages, the total number of households remaining within the newly established RUNAPA are unknown. A GoT Task Force not related or supported by REGROW will conduct a rapid assessment to identify households within the park. From this information, a recommendation will be made to the GoT as to whether or not park boundaries should be redrawn to allow households to remain in their current location. The GoT will assess these recommendations to determine what actions must be undertaken. If it is determined, however, that TANAPA must protect critical habitat where people currently reside, the government may choose to resettle selected households.
- 68. The REGROW project will not fund or cause activities which may cause household relocation. However, in order to minimize likely negative impacts and maximize overall positive ones, while

at the same time reducing the likelihood of future complaints, the GoT, in addition to Tanzanian policies, decided to follow international best practice by following the World Bank's policy on Involuntary Resettlement by applying the Resettlement Policy Framework, which establishes the guidelines and standards to be followed if it is determined there is land acquisition and/or relocation of households. The World Bank REGROW project will provide technical assistance with review and comment of Resettlement Action Plans during the life of the project.

69. *Preparation and consultation:* To ensure communities are better able to benefit from PA activities, a Stakeholders Consultation and Disclosure Plan has been prepared. This plan includes awareness raising seminars to present the Environmental and Social Framework, Resettlement Policy Framework, and Social Framework, preparation of briefs on issues raised and agreed actions, and regular dissemination of information. The plan also ensures that stakeholders have access to information. All consultation events will be well documented including minutes of these meetings of information provided and concerns raised by stakeholders and impacted persons.

## 6.2 ENVIRONMENT (INCLUDING SAFEGUARDS)

- 70. The project is designed to improve the conservation and management of natural resources in Tanzania, through key interventions such as diversifying the tourism product towards the Southern Circuit, improving basic infrastructure inside PAs, providing training, and improving the enabling environment for the tourism sector. The project activities support the government's efforts in strengthening natural resource management, and promote conservation, sustainable river management, protecting, restoring, and promoting the sustainable use of terrestrial ecosystems, halting biodiversity loss, and addressing climate change. The project also contributes to the government's response to the poaching crisis by supporting efforts outlined in the National Strategy to Combat Poaching and Illegal Wildlife Trade, and is targeted at improving rural livelihoods through enhanced community-based management of natural resources.
- 71. Given the nature of activities, the overall positive environmental impact expected, and the size and type of investments being considered, the project is rated Environmental Risk Assessment Category B. Appropriate mitigation measures will be undertaken to address potential environmental and social impacts. The safeguard policies triggered for this project include: Environmental Assessment (OP/BP 4.01); Natural Habitats (OP/BP 4.04); Forests (OP/BP 4.36); Pest Management (OP/BP 4.09); Physical Cultural Resources (OP/BP 4.11), and Involuntary Resettlement (OP/BP 4.12).
- 72. All investments proposed for financing will need to comply with environmental and social safeguard policies by undergoing required level of assessment prior to implementation. Moreover, and to reduce accumulation of impacts, project interventions inside the priority PAs will happen following the General Management Plans of the PAs. Currently, the total number, specific location and characteristics of proposed investments are still to be determined. Therefore, specific impacts cannot be identified and it is thus not possible to conduct a full Environmental and Social Impact Assessment of the entire project. For the REGROW case, thus, the instrument of choice has been an Environmental and Social Management Framework (ESMF). The ESMF is an umbrella document, applicable to all project activities. Its main objective is to establish environmental and social screening procedures for identifying, assessing, and mitigating potential environmental and social impacts of projects investments. The ESMF defines the adequate environmental and social instruments to be applied for each investment. These instruments can range from an Environmental

and Social Impact Assessment (ESIA) to a simplified Environmental and Social Management Plan (ESMP). In addition, the ESMF establishes the principles and procedures to undertake consultations and to implement grievance mechanisms, as required; a monitoring and evaluation system; and a reporting system. It also establishes institutional responsibilities (implementation, supervision, monitoring and evaluation, and reporting) on environmental and social management along the lifetime of any project activities (design, construction and operation). Overall, the ESMF for REGROW facilitates the assessment of impacts, the identification of measures and plans to reduce, mitigate and/or offset adverse impacts and enhance positive impacts, as well as the provisions for estimating and budgeting the costs of such measures. The ESMF, and all relevant environmental and social assessment instruments that it contains, follow Tanzania's relevant environmental regulations and World Bank's safeguard policies triggered for this project.

- 73. Regarding infrastructure activities inside the priority PAs, and as mentioned earlier, each PA has a General Management Plan (GMP) in place, which, through a comprehensive approach, guides the day-to-day management of the areas in view of ecosystem and tourism management, park operations, and community outreach. The tourism strategies under the GMPs aim at enhancing visitor access and use, while at the same time minimizing disturbance to key habitats and wildlife populations. Ongoing tourist activities are, for example, regulated based on high, low, and wilderness zones, to minimize negative impacts, and environmental impacts of tourism facilities are monitored and regulated. For new tourism products, the GMP provides clear measures to mitigate any negative impacts. The REGROW design follows the recommendations of the GMPs, which through the above described measures, regulate and mitigate cumulative, indirect, and induced impacts from increased tourist arrivals and infrastructure interventions. In addition, environmental assessments for the project will not be carried out for individual, isolated pieces of infrastructure, but rather on infrastructure systems (for example, the road network inside each PA). As such, the impact assessment will be able to provide insights on the consequences of the entire investment.
- 74. Environmental safeguard Instruments: An ESMF has been prepared by GoT. It provides criteria and procedures for screening project investments, and guides the preparation of site-specific safeguards instruments. The ESMF facilitates the assessment of impacts and the identification of measures, and lays out the principles for plans to reduce, mitigate and/or offset adverse impacts and enhance positive impacts, as well as the provisions for estimating and budgeting the costs of such measures. REGROW's ESMF is an umbrella document, applicable to all project activities, and it establishes environmental and social screening procedures for identifying, assessing, and mitigating potential environmental and social impacts of REGROW activities. In addition, the ESMF establishes the principles and procedures to undertake consultations and to implement grievance mechanisms, as required; a monitoring and evaluation system; and a reporting system. It also details the institutional responsibilities (implementation, supervision, monitoring and evaluation, and reporting) on environmental and social management along the lifetime of any project activities (design, construction and operation). The ESMF was publicly disclosed both in-country and in the World Bank's InfoShop, prior to the appraisal of the project.
- 75. Capacity to manage environmental and social safeguards. Overall safeguard oversight and coordination will be under MNRT. Additional coordination for safeguards will be carried out with close participation from TANAPA, TAWA, NIRC, RBWB, TFS and TAWIRI officials. During project implementation, respective sector and agency Environmental Management Units will be

responsible for compliance with environmental and social safeguard policies. Implementing entities will ensure application, monitoring and reporting on the implementation of safeguard instruments. Although a few of the key project implementers such as TANAPA, have established arrangements for managing environmental and social issues, it will be important to enhance capacity of all levels of the project to implement environmental and social safeguard instruments, and the project will provide space to do so. In order to implement the ESMF and RPF adequately, each implementing entity will designate or hire personnel responsible for environment and social management oversight according to their level of skills and experience and how they relate with the local or decentralized agencies. Specific safeguards capacity needs, recommended training and required budget will be outlined in the ESMF.

# 76. Safeguard Policies Triggered

- a) World Bank Operational Policies (OP) and World Bank Procedures (BP) Environmental Assessment (EA) (OP 4.01) require environmental assessment of projects that are considered to have potential adverse impacts upon the environment. Environmental assessment aims at improving decision making and minimizing negative impacts, while maximizing positive ones, to ensure that project options under consideration are sound and sustainable, and that potentially affected people have been properly consulted. Under the EA policy, the Borrower is required to undertake environmental screening of each proposed project to determine the appropriate extent and type of EA. The environmental screening process, included in the ESMF, applies to all subprojects to be funded by REGROW. The screening provides clear criteria and guidance to decide, for each subproject, the level of EA that is required. According to the type, location, sensitivity, scale of the subproject and nature and magnitude of its potential environmental impacts, the following type of EA will be required:
  - **Subprojects needing full ESIA**. These are subprojects that may have diverse and significant environmental impacts.
  - **Subprojects needing a limited ESIA**. These subprojects may have specific environmental impacts, which need to be understood and dealt with.
  - Subprojects likely to have minimal or no adverse environmental impacts. For most of these subprojects, a (simplified) ESMP will be sufficient.

For any investment that will require a full ESIA, the environmental assessment (including social and socio-economic aspects) itself will follow a number of steps, including impact assessment - based on screening and scoping exercise; analysis of alternatives - to enhance the design of a subproject, including do nothing alternative; predictions — to provide information on the potential implication of the proposed subproject; evaluation of significance — to determine the predicted or measured change in an environment and social attribute; identify mitigation measures — to reduce adverse environmental and social impacts; and public consultations — with project-affected groups, local stakeholders, civil society, and NGOs during screening, scoping and preparation of Terms of Reference (ToR) and ESIA report. The EA package (including Environmental Management Plan (ESMP) and Monitoring Plan (MP)) will be prepared in accordance with the environmental policy, legislations, and regulations of Tanzania, plus the World Bank's safeguard policies. The ESIAs will finally be publicly disclosed in country and at the World Bank's InfoShop.

It will be mandatory for each subproject proposal to include its assigned level of environmental assessment (full ESIA, limited ESIA, (simplified) ESMP). For subprojects requiring a full or limited ESIA, the proposal shall include the ESIA report and proof of its approval by the respective National Environmental Authority and the World Bank. For less contentious subprojects that do not require the preparation of a separate ESIA, the completed environmental and social checklist will be attached to the subproject proposal.

Since the total number, specific location and characteristics of proposed investments to be financed by REGROW are still to be fully determined (with most of them related to small infrastructure inside Protected Areas, and natural resources management interventions in the Great Ruaha watershed), the appropriate instrument is the ESMF. The ESMF will allow the implementing agencies to identify, assess and mitigate potential negative environmental and social impacts of subprojects, and to ensure that proper mitigation measures, and monitoring plan are in place, and are an integral part of the subproject cost.

- b) Natural Habitats (OP 4.04): This policy aims at the conservation of natural habitats, like other measures that protect and enhance the environment. The policy is essential for long term sustainable development. The World Bank therefore supports the protection, maintenance, and rehabilitation of natural habitats. Natural Habitats are land and water areas where the ecosystems' biological communities are formed largely by native plant and animal species, and human activity has not essentially modified the area's primary ecological functions. The policy recognizes the important role of biological, social, economic, and existence value of natural habitats, including natural arid and semi-arid lands, mangrove swamps, coastal marshes, and other wetlands; estuaries, sea grass beds, coral reefs, freshwater lakes and rivers. For REGROW, the Natural Habitats policy is triggered because some of the investments proposed under the project will occur inside Protected Areas, and they may have potential impacts that need to be understood and managed. By triggering the policy, it is required that any activities that will have any (temporary) adverse impact on ecosystems are successfully mitigated, so that the balance of the ecosystems are maintained or enhanced. Specific measures to enhance ecosystem functions must include provision for monitoring and evaluation to provide feedback on conservation outcomes and to provide guidance for developing or refining appropriate corrective actions. The specific requirements under this policy have been included as part of the overall ESMF that applies to the entire project.
- c) **Pest Management (OP 4.09):** The project is not expected to involve the purchase nor the use of significant quantities of pesticides. However, Component 3 includes activities to improve the efficiency of agricultural practices and water conservation in the Great Ruaha sub basin, and will include support through farmer's field schools. In this regard, the project might involve or inadvertently promote the use of pesticides during its implementation. Therefore, the policy is being triggered as a precaution, and specific instructions are included as part of the ESMF to promote best practices in case of pesticide use or handling in the project area. This includes applicable good practice procedures for pesticide use and storage, and prohibit use of pesticides excluded under OP 4.09.
- d) *Physical Cultural Resources (OP 4.11)*. The project is not expected to be carried out in or around any known physical or cultural resources. However, specific procedures for chance findings, which might occur during implementation, have been defined in the ESMF.

- e) Involuntary Resettlement (OP 4.12): This policy aims to ensure that projects avoid negatively impacting economic and social standards of individuals and households. The policy recognizes that unmitigated impacts may contribute to (a) severe economic, social and environmental risks; (b) weakening of production systems, community institutions, social networks, kin groups, and cultural identity; (c) impoverishment if productive assets or income sources are lost; or (d) people are relocated to areas where productive skills may be less applicable. This policy provides safeguards to address and mitigate impoverishment risks. Although the policy promotes avoiding resettlement, where it is not feasible to avoid resettlement, then measures must be taken to enable impacted persons to share in project benefits, be meaningfully consulted, and provided opportunity to participate in planning and implementation of resettlement program. The policy is triggered when a project causes either (a) involuntary taking of land, (b) loss of income sources or means of livelihood, whether or not the affected person(s) must move, or (c) involuntary restriction of access to legally designated PAs. To address impacts, the borrower is expected to prepare a resettlement action plan when impact area is known, or resettlement policy framework, when location of impact area is unknown at the time of project preparation (which was REGROW's case), to address involuntary land acquisition and a process framework, when location of impact area is unknown at the time of project preparation. An RPF has been prepared to address involuntary land acquisition, and a PF has also been prepared to mitigate marginal increase in restricted access to PAs.
- f) Forests (OP 4.36): This policy aims to reduce deforestation, enhance the environmental contribution of forested areas, promote afforestation, reduce poverty, and encourage economic development. The policy recognizes the role forests play in poverty alleviation, economic development, and for providing local as well as global environmental services. The policy applies to the World Bank-financed investment projects that have or may have impacts on the health and quality of forests, projects that affect the rights and welfare of people and their level of dependence upon or interaction with forests and projects that aim to bring about changes in the management, protection, or utilization of natural forests or plantations, whether they are publicly, privately, or communally owned. For the specific case of REGROW, no activity is expected to generate any negative impact on forests, whereas positive results are expected to be achieved, through increased conservation, improved management of the Great Ruaha sub-basin, and the overall landscape approach promoted by Component 3. The safeguard is being triggered as some of the catchment management activities may involve planting of trees to stabilize slopes as well as reduce erosion rate and siltation to the river. Other activities might involve reforestation of parts of the catchment targeted towards water conservation.

#### 7. MONITORING & EVALUATION

# 7.1. MONITORING & EVALUATION GUIDING PRINCIPLES

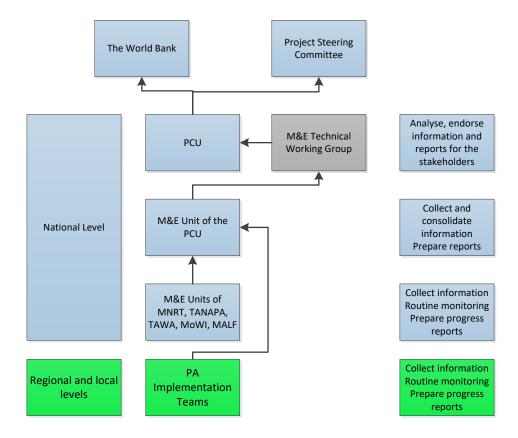
77. Monitoring & Evaluation (M&E) is essential for a results-based approach to program management. Aside from being a key component of project design, M&E is incorporated into all facets of the project cycle, from initiation through to completion. The M&E system will enable the management team to clearly demonstrate to the key stakeholders whether the project is achieving the stated goal, outcomes, and outputs in accordance with the targeted timeframe.

- 78. The M&E should provide the means to robustly analyze the relevant data and information to:
  - a) Monitor the project outcome indicators as reflected in the results framework.
  - b) Outline the flow of data and information from the project sites through the various stakeholders, both for the use of the general public and to inform decision-making.

#### 7.2. M&E ARRANGEMENTS

79. The project's M&E will build, to the extent possible, on existing country systems to minimize the need for a parallel M&E framework. All implementing agencies at different levels, including MNRT, TANAPA, TAWA, MoWI and MALF at national level, and PO-RALG at regional and local levels, will participate in the process of data collection, compilation, analysis and reporting of progress. The organizational scheme with respect to M&E is shown below.

Proposed M&E Organizational Arrangements, Data and Reporting Flows



- 80. The Project will form a Monitoring and Evaluation (M&E) Technical Group (METG). It will be chaired by the Director of the Planning and Policy Division of MNRT and will include the designated technical M&E focal points of the different entities participating in project implementation. Representatives from other entities involved in work plan activities will be invited to the committee on an ad hoc basis.
- 81. The METG will ensure implementing entities are aligned with strategies and 'best practice' in view of developing effective systems to monitor and evaluate the project. It brings together a group

of individuals from the different implementing institutions who are well versed in M&E as well as the programmatic needs and implications to advise on, and advocate for an improved M&E function.

- 82. Its main roles will include, among other activities:
  - a) Supporting coordination/harmonization of M&E activities (data collection, analysis, dissemination) among implementing institutions;
  - b) Identifying and prioritizing critical action steps for country, regional and local M&E work to assure that action is taken by the relevant group(s) to achieve quality M&E in a timely fashion;
  - c) Providing technical assistance and strategic information to the PCU to support the overall M&E function;
  - d) Identifying and recommending strategies for addressing the needs for capacity building in M&E at all levels;
  - e) Analyzing project implementation from a technical, financial and programmatic perspective;
  - f) Promoting the use of results-based systems at country level to enable good monitoring and to strengthen M&E frameworks;
  - g) Developing and maintaining consensus around M&E strategies across partners and institutions;
  - h) Developing and providing technical guidance on selection and definition of indicators the coordination of data collection and reporting arrangements at all levels;
  - i) Where gaps and new ways of analyses are identified, identifying the means through which this new information can be obtained and utilized;
  - j) Finalizing and submitting monthly M&E reports to the PCU and other corresponding authorities; and
  - k) Developing a plan for strengthening the project's M&E function.
- 83. The METG, will meet every two months during the first year of the project. As the project progresses, the METG will meet on a quarterly basis. Extraordinary meetings will be held depending on specific needs.
- 84. The METG reports to the PCU and, during the first year of the project, is required to produce monthly M&E reports which consolidate and summarize findings from M&E focal points at all levels. In addition, the reports will summarize lessons learned and actionable recommendations to close implementation gaps. Additional details on the functioning of the METG will be described in the PIM.
- 85. The Project Coordination Unit (PCU) endorses quarterly and annual reports of each implementing agency and report to the World Bank (exception for TANAPA, who will do this in parallel for their own activities). The PCU and TANAPA are required to submit quarterly technical progress reports within 45 days of the end of each fiscal year quarter. In addition, the PCU will submit an annual progress report to provide an overview of the status of achievement of each performance indicator at impact, outcome and output level and summarize the results of related monitoring and impact studies. The performance targets are not expected to change every quarter,

but the progress of performance will be summarized and any challenges that may affect the achievement of project targets will be highlighted in each quarterly report.

- 86. These reports will include the following table of contents:
  - a) Context data including the quarter/year and geographical area corresponding to the reported data;
  - b) Introduction;
  - c) An executive summary;
  - d) A summary of progress in work-plan implementation, including a review of any challenges encountered;
  - e) Summary of expenditures relative to project disbursement targets;
  - f) Summary of results being achieved, including a copy of the Results Framework (RF) listing performance targets and accomplishment as well as two additional columns showing performance as a percentage and the absolute variation with respect to the target (expressed as the difference between the target and the actual performance);
  - g) A list of lessons learned; and
  - h) Recommendations and action plans with deadlines and staff in charge of implementing them.
- 87. *The M&E officer* will participate in the joint implementation support missions, which are targeted at assessing project implementation progress every six months. Reference surveys and data collection will include: (i) baseline, mid-term and end-of-project surveys; (ii) the use of data from secondary sources; and (iii) other ad hoc surveys and analyses.
- 88. The M&E officers of MNRT, TANAPA, TAWA, MoWI, MALF, TAWIRI, TAWA, TTB, RBWB, and NIRC will have the responsibility for overall M&E of the project with the support of the PCU. The Technical Coordinators / Focal Points and/or the M&E officers will collect and process information necessary for tracking project outcomes and outputs. More specifically, their role is to:
  - a) Provide technical support including institutionalization of M&E processes within the implementing agencies and coordinate performance management system;
  - b) Organize annual data collection to monitor results for the Project and prepare periodic performance / progress reports to be transmitted to PCU for endorsement;
  - c) Organize national and regional M&E workshops;
  - d) Undertake the baseline survey to collect data for key performance indicators for surveys at mid-term and project end;
  - e) Prepare an Implementation Completion Report (ICR) for the Project at the end of project; and
  - f) Oversee implementation of impact studies implemented and monitor performance of the implementing agency; and compile, analyze and prepare progress reports and submit to PCU for subsequent finalization and transmission of periodic Project's performance summaries.
- 89. All this information and arrangements will be compiled in the project's monitoring and evaluation plan, (to be developed, implemented and followed up on by the PCU Coordinator, PCU

M&E Officer, Technical Coordinators and Technical Focal Points), which will contain the following sections:

- a) Indicator Definitions and Measurement;
- b) Routine Data Collection;
- c) Data Management;
- d) Program Review, Evaluation, and Surveys;
- e) Data Quality Assurance Mechanisms and Related Supportive Supervision;
- f) M&E Coordination;
- g) Capacity Building;
- h) M&E Costed Work Plan & budget; and
- i) Information Products, dissemination and use.

#### 7.3. M&E INDICATORS

90. The project will use two sets of indicators with different scopes: the indicators included in the results framework, which are aimed at measuring project progress against specific baseline and target values at different levels of the results chain; and indicators not captured in the results framework, designed to measure the performance of the implementation unit. For all indicators in the results framework, the link to the higher level objectives has been established through the use of theory-based PPIs. The PPIs have been clustered in four groups: (1) jobs; (2) household income; (3) resilience; and (4) biodiversity. The objective of the second set of indicators is to assess the efficiency of the PCU and implementers in carrying out their core functions.

Indicators to measure the performance of the PIU (not limited to)

Indicator	Unit of measurement	Baseline	Target	Frequency
Percentage of key PIU positions filled in a timely manner	Percentage	0	100%	Annual
Number of ToR submitted for no objection in accordance with the PIP	Number	0	100%	Quarterly
Percentage of planned IFRs completed and submitted on time	Percentage	0	100%	According to IFR frequency
Percentage of procurement processes by category started on time	Percentage	0	90%	Quarterly
Percentage of quarterly financial execution	Percentage	0	100%	Quarterly
Percentage of quarterly programmatic execution (executed activities divided by planned activities for a specific period)	Percentage	0	100%	Quarterly

91. The results framework indicators are detailed in Annex 1.

#### 7.4. M&E System

92. While the project's M&E system will build, to the extent possible, on existing country systems to minimize the need for parallel M&E framework, it is anticipated that a project management and monitoring platform will be needed to integrate the information coming from different sources and levels, while using the results chain as its backbone to generate adequate reports.

93. Thus, the PCU should consider the acquisition of the afore-mentioned platform to capture data on physical and financial progress, the performance of implementing agencies and service providers, and the achievements of outcomes and impact vis-à-vis the project development objectives and to guarantee that the following management functions can be carried out.

#### 7.5. M&E Activities

94. The set of M&E activities to be carried out during the life span of the project is summarized in the following illustration.

#### M&E activities



- 95. Capacity Needs Assessment and Capacity Building Plan of M&E Stakeholders. The M&E capacity needs assessment will be carried out for all relevant agencies. The assessment will focus on specific capacity that the agency requires to carry out its responsibilities in M&E. Based on this assessment, the PCU will prepare an M&E capacity building plan which will be integrated in the overall Capacity Building plan of the project.
- 96. This activity should be complemented with adequate training in the use of the developed M&E system, which will build on existing capacities of the country but will also require a comprehensive system to integrate data from different sources. This training, which would not only involve M&E staff but also that of other areas like finance, procurement and management would focus on the following:

- a) Analysis of the M&E requirements included in the Project Appraisal Document, the M&E Plan and the PIM;
- b) Preparing the strategy to achieve Results Framework's targets;
- c) Case Studies and Exercises using the M&E platform; and
- d) Practical exercises using real project data to determine variations with respect to the achievement of targets or with respect to baselines.
- 97. *M&E Start-up Workshops at National and Regional Level*. For project M&E to start up and progress effectively, it is vital that the key stakeholders become acquainted with the project Results Framework, outcomes, outputs and their measurement. They must gain a shared understanding of the work, the implementation strategy, management and their respective roles and responsibilities. This will be done through national and regional dedicated workshops.
- 98. *Joint Implementation Support Missions*. The project will undertake regular joint implementation support missions and reviews. These reviews will be facilitated and coordinated by the PCU. The review teams will encompass government representatives and all implementing entities. Field visits will be part of the joint implementation support missions.
- 99. A Baseline Survey will be undertaken during the first year of project implementation, to establish benchmarks against which the outcomes and impact on the beneficiaries will be assessed. Information will be collected for the indicators specified in the RF and M&E plan. Baseline surveys will be carried out by an independent consultant/firm, under the responsibility of the M&E Unit.
- 100. **Beneficiary Satisfaction Surveys.** Beneficiary satisfaction surveys on perceived improvement in economic opportunities will be carried out as part of the midterm (year 3) and at the end of project (early year 6). The methodology of the qualitative monitoring of beneficiary groups will be primarily developed from participatory M&E techniques, such as Community Score Card or/and other types of participatory survey methods such as focused group interviews.
- 101. *Mid-Term Review*. A mid-term Review of the project will be undertaken after 24 months of operation by the implementing agencies and World Bank. The main purpose of this review will be to: (i) determine whether satisfactory progress is being made towards meeting the PDO; (ii) evaluate the outcomes of the project on the beneficiaries; (iii) assess the project design and the efficiency of implementation arrangements; (iv) draw lessons from implementation; and (v) introduce necessary changes to improve implementation progress towards the achievement of the PDO and intermediate results. Further to a more detailed analysis of information collected and stored in the project database, the mid-term review process may include the commissioning of specific studies by external consultants.
- 102. *Final Impact Evaluation*. To assess the impact of the project, a final impact evaluation will be conducted after Year 6 of the project.
- 103. *Implementation Completion and Results Report* (ICR). The Government will prepare and submit the World Bank an ICR prior to the Projects' closing date and the World Bank will prepare its own ICR within six months after the closing date.

# 7.6. M&E Work Plan and Timeline

The M&E Work Plan for M&E activities will be updated at least twice; first, at the beginning of implementation during the national M&E Start-up Workshop, and by year 3 during the MTR Workshop to stay relevant to the M&E needs of the project. The detailed timeline is provided below.

M&E Activities	PY	Y1		P	Y2		P	Y3		P	Y4		P	Y5		P	76	
M&E Start-up Workshops																		
Baseline studies																		
Training in Results Based M&E																		
METG meetings																		
Quarterly progress monitoring reports																		
Annual Progress Monitoring Reports																		
MTR Survey																		
MTR Workshop																		
MTR Progress Report																		
Beneficiary / Satisfaction Surveys																		
Design Impact Evaluation (IE)																		
Conduct Impact Evaluation																		
ICR Stakeholder workshop/ ICR Report																		

PY= Project Year

#### ANNEX 4: IMPLEMENTATION SUPPORT PLAN

# TANZANIA: RESILIENT NATURAL RESOURCE MANAGEMENT FOR TOURISM AND GROWTH (REGROW) PROJECT

### **Strategy and Approach for Implementation Support**

1. The strategy and approach for implementation support will focus on mitigating the risks identified at various levels, and include formal supervision, including field visits to the areas where project activities will be carried out, and ad-hoc support through technical discussions and visits<sup>29</sup>.

# **Implementation Support Plan**

- 2. Implementation support will primarily focus on assessing progress towards achieving the PDO and overall implementation progress, and effectively responding to issues and challenges as they arise. Specifically, the implementation support strategy will include: (i) semi-annual implementation support missions to be conducted in coordination with other development partners; (ii) a mid-term review that will include a comprehensive assessment of the progress achieved after three years of project implementation, and serve as a platform for addressing any issues associated with the project design including identification of needed adjustments; (iii) a project impact assessment; and (iv) implementation completion, where an independent assessment of the project will be undertaken to draw lessons to inform future or similar operations. The strategy, as articulated above, will include a concerted plan of technical, fiduciary, and safeguards support needed to ensure due diligence over the course of project implementation.
- 3. **Technical support**. At the technical level, the World Bank team will assemble the appropriate technical skills mix and experience needed to support implementation of this complex and large operation.
- 4. *Fiduciary support.* Given the substantial fiduciary risk rating, FM reviews will be regularly conducted by the World Bank's FM and procurement specialist to ensure that fiduciary capacity and systems remain adequate during project implementation in accordance with the World Bank's fiduciary requirements. World Bank will require that quarterly IFRs be submitted to the World Bank together with annual external audit reports for review. The government's internal control, oversight, and reporting systems will be reviewed periodically, including through annual, unannounced project-site visits. Required actions that result from audit reviews, external audit reports, management letters, internal audits, and other reports, will be followed-up on. Fiduciary capacity building will be conducted on a regular basis, with additional training to be carried out during project implementation as needed.
- 5. *Environmental and social safeguards support:* The World Bank's safeguards team will consist of social and environmental specialists who will guide the project team in applying the agreed safeguard instruments and reviewing compliance during implementation support missions.

<sup>&</sup>lt;sup>29</sup> This annex reflects the World Bank's anticipated support to the REGROW project.

Focus of project implementation support

Time	Focus	Skills Needed	Resource Estimate		
First twelve months	<ul> <li>Project effectiveness and implementation start-up</li> <li>Establishment of the PCU</li> <li>Safeguards instruments application/compliance</li> <li>M&amp;E system in place</li> <li>Fiduciary advisors recruited</li> <li>Fiduciary training provided</li> <li>Sub-project implementation manual developed</li> </ul>	<ul> <li>Water Resources         Management Specialist</li> <li>Agronomist</li> <li>Infrastructure Specialist</li> <li>Private Sector Specialist</li> <li>Community Development         Specialist</li> <li>Social Safeguards Specialist</li> <li>Environmental Safeguards         Specialist</li> <li>Procurement Specialist</li> <li>Financial Management         Specialist</li> <li>Monitoring and Evaluation         Specialist</li> <li>Legal Counsel</li> <li>Disbursement Officer</li> </ul>	US\$150K – 200K (est.)		
12-48 months	<ul> <li>Implementation of planned activities</li> <li>Monitoring and reporting against targets</li> <li>Implementation support missions conducted</li> <li>Mid-term review conducted (in year 3)</li> <li>First impact assessment conducted</li> </ul>	Same as above	US\$150K – 200K/year (est.)		
49-72 months	<ul> <li>Implementation of planned activities</li> <li>Monitoring and reporting against targets</li> <li>Implementation support missions conducted</li> <li>Second impact assessment conducted</li> <li>Project completion and ICR preparation</li> </ul>	Same as above	US\$150K – 200K/year (est.)		

Skills Mix Required

Skills Needed	Number of Staff Weeks	Number of Trips
Water Resources Management	10	4
Specialist		
Agronomist	10	4
Infrastructure Specialist	10	4
Private Sector Specialist	6	4
Community Development	6	4
Specialist		
Social Safeguards Specialist	10	3
Environmental Safeguards	5	4
Specialist		
Procurement Specialist	10	4
Financial Management Specialist	10	4
Monitoring and Evaluation	5	4
Specialist		
Legal Counsel	2	
Disbursement Officer	2	

# ANNEX 5: ECONOMIC AND FINANCIAL ANALYSIS TANZANIA: RESILIENT NATURAL RESOURCE MANAGEMENT FOR TOURISM AND GROWTH (REGROW) PROJECT

- 1. A cost-benefit analysis of the REGROW project was conducted to calculate the economic internal rate of return (EIRR), the net present values (NPV), benefit-cost ratio (BCR) and switching values. It predominately focuses on the economic benefits generated by the priority PAs that will receive support from REGROW. The analysis centers on the benefit streams expected from REGROW that correspond to: i) revenue generated from nature-based tourism in the PAs, ii) income generated by local communities in the vicinity of the PAs and iii) water efficiency activities conducted in collaboration with local farmers.
- 2. REGROW promotes investment in protected areas management a core public sector service-resulting in public goods of global and local importance that have remained underfunded and which would not be generated through other sources of finance. The World Bank remains uniquely positioned to invest in the sectors relevant to the project, including sustainable use of natural resources, while bringing its convening power to address wider issues related to water augmentation, local community development and tourism development to trigger and leverage much needed private sector investment into the areas.
- 3. The analysis returned a positive EIRR of 17 percent (above the threshold of 10 percent), a NPV of US\$62 million, switching values for benefit and cost of -61 percent and 38 percent, respectively and a BCR of 1.6, over a 20-year period. It should be noted that the profitability indicators are conservative as they do not fully consider: i) an increase in spending per tourist, just an increase in tourist numbers and income; ii) a highly discounted Tanzanian Shilling (TZS) against the US\$; iii) demand driven activities of local communities due to the nature of self-selection during implementation; iv) tourism demand above the rate of inflation driven by a specific yet to be developed marketing strategy of the project; v) the value of project impact on environmental services as their value remains un-monetized, such as reduced human wildlife conflict (HWC) as a result of increased protection and conservation stemming from improved infrastructure (e.g., ranger posts); and vi) an increase in visitor satisfaction.

#### NPV values and EIRR

	NPVs @ 10%
Project benefit stream	165,925,548
Project cost stream	103,319,996
Project net incremental benefits	62,605,553

EIRR 17%

Switching values	Appraisal	Switching value	% change
Incremental benefits	165,925,548	103,319,996	-38%
Incremental costs	103,319,996	165,925,548	61%
BCR	1.61		

- 4. Sensitivity analysis suggests that the probability of a negative return is likely to occur 4 percent of the times that such a project is run. This likelihood is considered low and within an acceptable level of risk. The switching values that determine the point at which the project would achieve a negative return are robust with incremental benefits needing to decline by 38 percent and for incremental costs to increase by 61 percent, for the project to reach such a point. The BCR is above the all-important threshold of 1 at 1.61. The project remains positive up to a discount period of 15-years and above. Over a 20-year period, the project's net benefit is three times the cost of the initial investment cost.
- 5. For the purpose of this analysis a financial discount rate of 12 percent was used for the calculation of the financial IRR and NPV values, and to reflect the opportunity cost of capital, given that: i) the 7-year Tanzanian Government bond yield was, according to the World Bank, 10.08 percent as of June 2016; and ii) the interest rate spread (that is the margin that banks charge) averaged just under 7 percent over the past five years. In the economic budgets a social discount rate of 10 percent was determined by using (i) the Tanzania 7-year Treasury Bond Interest Rate (June 2016) to reflect the cost of sovereign debt, and as a guide; (ii) the Ramsey formula, where economic growth for Tanzania over the past 10 years averaged 6.69 percent between 2002-2016, and an additional figure to factor in the risk of operating in remote rural and poverty prone areas for the marginal utility of consumption by using a factor less than 1.5.
- 6. The modeling mirrors the activities of the project where possible and for this reason it is centered on the Mikumi, Ruaha and Udzungwa National Parks and the Selous Game Reserve. Figures on the number of tourist visitors, tourist income, staffing and personnel costs, investment and operating costs were collected from both TANAPA and TAWA to present the most accurate information available, based on figures for the past available three years. Sales figures were increased at a fluctuating rate between 0-35 percent p.a. to reflect an uneasy operating environment from one year to the next.
- 7. The exchange rate for converting TZS to US\$ was calculated using the average discount rate of two intervals the past 5 years and 10 years to arrive at an average of 6.61 percent p.a. This discount rate is conservative since alternative forecast methods noted a discount rate of between 3-4.5 percent p.a.
- 8. Funding levels for each of the project components is distributed (within the project) to reflect the spatial needs of the natural resources of the priority PAs. The Selous Game Reserve alone is, for instance, larger than Switzerland.<sup>30</sup> The three main components of project implementation include: Component 1 investments in park infrastructure buildings for the priority PAs that include: i) around 90 different structures and facilities, including entry and exit gates with visitors' information centers, ranger posts, student hostels, cottage bandas, rest houses and guides lodging inside the priority PAs; ii) improved roads stretching over 500 km along all four priority PAs; and iii) new or improved (lengthened/all-weather ready) airstrips, as well as light and heavy equipment for road maintenance (component total is US\$97 million). Component 2 includes investments in local communities in proximity to the priority PAs (total US\$17 million), yet given the demand-driven and self-selection nature by the local community members, no actual modeling was completed for the interventions at this stage. Component 3 involves water efficiency activities

-

<sup>&</sup>lt;sup>30</sup> Although the project will invest in only the northern sector, called Matambwe.

along the Great Ruaha River among 20,000 rice growers (total budget US\$27 million). The average size of farms is estimated at 0.5 ha, covering an area of 10,000 ha within the project area. The adoption rate in year 10 is 60 percent, when aggregated. Again this is intended to remain within a conservative set of calculations for the project. All project costs, including project management under Component 4 were factored into the calculations at the project cost level and not individually at each park level. Disaggregation of investments among the PAs was not final at the time of the assessment. This method also ensures all costs are captured only once and not double counted at both park and project level analysis.

# Profitability indicators at PA level

Priority Protected Areas (PAs)	NPV (USD)	FIRR
Mikumi National Park	14,843,941	48%
Ruaha Natioanl Park	49,487,594	65%
Udzundwa National Park	3,719,202	149%
Selous Game Reserve	29,227,878	68%

- 9. The revenue at PAs fluctuates from year to year without the project and not all revenue streams are fully explored, including concessions, flexible ticketing and marketing of various segments of the tourist market. A concerted strategy to address certain shortcomings in operations and a more strategic approach might see some quick gains and longer term planning, such as automated ticketing, online purchasing and multi-entry ticketing options. A marketing campaign and clear destination management will produce further strengthening of the PAs' ability to leverage its strengths in favor of sustained growth.
- 10. Rice production is the main model for agricultural production and acts as a proxy measure for realizing the benefits of water efficiency around the Great Ruaha River, where it is the major cash crop. While the conversion factors for rice were calculated, the rice is not for export and touches on only a small percentage of farmers in the area (circa 5-10 percent of cultivated land or 10,000 hectares or 20,000 farmers, using a 60 percent adoption rate by rice farmers participating in the project). The economic NPV for rice per hectare was calculated at US\$856 with a discount rate of 10 percent while the return on family labor was US\$97 per hectare.

# **MAPS**

