

## Restoration of ecosystems, integrated natural resource management and promotion of SLM in Mbuluzi River Basin of Eswatini

### Part I: Project Information

**GEF ID**

10695

**Project Type**

FSP

**Type of Trust Fund**

GET

**CBIT/NGI**

CBIT No

NGI No

**Project Title**

Restoration of ecosystems, integrated natural resource management and promotion of SLM in Mbuluzi River Basin of Eswatini

**Countries**

Eswatini

**Agency(ies)**

UNEP

**Other Executing Partner(s)**

Eswatini National Trust Commission

**Executing Partner Type**

Government

**GEF Focal Area**

Multi Focal Area

**Taxonomy**

International Waters, Lake Basin, Freshwater, Invasive Alien Species, Productive Seascapes, Protected Areas and Landscapes, Productive Landscapes, Biodiversity, Community Based Natural Resource Mngt, Focal Areas, Terrestrial Protected Areas, Wetlands, Biomes, Tourism, Mainstreaming, Integrated and Cross-sectoral approach, Community-Based Natural Resource Management, Sustainable Land Management, Land Degradation, Sustainable Agriculture, Sustainable Livelihoods, Restoration and Rehabilitation of Degraded Lands, Ecosystem Approach, Food Security, Land Degradation Neutrality, Land Cover and Land cover change, Land Productivity, Species, Transform policy and regulatory environments, Influencing models, Private Sector, Stakeholders, SMEs, Gender Equality, Gender Mainstreaming, Beneficiaries, Capacity, Knowledge and Research, Knowledge Exchange, Capacity Development

**Rio Markers****Climate Change Mitigation**

Climate Change Mitigation 1

**Climate Change Adaptation**

Climate Change Adaptation 1

**Duration**

48 In Months

**Agency Fee(\$)**

372,063.00

**Submission Date**

3/17/2021

A. Indicative Focal/Non-Focal Area Elements

Programming Directions	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
BD-2-7	GET	2,000,000.00	10,000,000.00
LD-1-1	GET	1,000,000.00	10,000,000.00
LD-1-4	GET	916,950.00	5,768,500.00
Total Project Cost (\$)		3,916,950.00	25,768,500.00

## B. Indicative Project description summary

### Project Objective

Promoting ecosystem restoration for a productive Mbuluzi River landscape and effectively managed protected areas providing critical ecosystem goods and services

Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
1. Strengthening Policy, Legislative and Institutional Frameworks for Integrated Natural Resources Management (INRM)	Technical Assistance	Outcome 1: The Government of Eswatini adopts and starts enforcing an updated policy, institutional and legislative framework for SLM and ecosystem restoration.	1.1 Landscape-scale ecosystem and land use assessment conducted for Mbuluzi Basin to inform output 1.1.2 below  1.2 Institutional and legislative frameworks for SLM and ecosystem restoration in the Mbuluzi landscape revised, enacted, implemented and enforced and monitored to ascertain their effectiveness  1.3 An Integrated Land Management Strategy and Action Plan for the Mbuluzi landscape developed in a participatory and gender responsive manner and implemented.	GET	460,500.00	6,000,000.00



1.4 SLM and ecosystem restoration mainstreamed into Chiefdom Sustainable Development Plans and implemented to scale up their adoption in the basin, using participatory approaches

Component 2. Ecosystem restoration through capacity strengthening for Promotion of sustainable land management (SLM) practices	Technical Assistance	<p>Outcome 2: Reduced Land degradation through capacity strengthening for innovative SLM technologies in productive landscapes across 60,700 ha of the Mbuluzi River Basin</p> <p>[1] The term technologies is used here following the standard WOCAT definition, as in April 2014 UNCCD officially nominated the World Overview of Conservation Approaches and Technologies (WOCAT) database (hosted by CDE) as the primary recommended database on best practice and technologies of sustainable land management (SLM), including catchment-based integrated water resources management.</p>	<p>2.1 Capacity of agriculture extension workers in SLM and all staff in relevant ministries and departments strengthened</p> <p>2.2. Training of trainers at local community levels including chiefdoms conducted</p> <p>2.3 Farmer Field Schools (FFS) and SLM demonstration sites established for farmer groups and farmer open field-days organized</p> <p>2.4 SLM practices implemented in communities to improve soil fertility and reduce land degradation for</p>	GET	1,500,000.00	6,000,000.00
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improved food security  
and livelihoods  
targeting maize and  
legumes for crops and  
livestock

2.5 Tree planting in  
degraded communal  
lands and along riverine  
areas promoted to  
reduce land  
degradation.

2.6 Capacity building of  
Community Forest  
Associations (CFAs) for  
community biodiversity  
conservation  
enhancement

3. Effective management of protected areas	Technical Assistance	Outcome 3. Capacity strengthening for Effective management of the three nature reserves of (Malolotja Nature Reserve, Mlawula nature reserve and Hawane Dam (Ramsar site) in the basin is undertaken	3.1. A protected Area network (PAN) Conservation Strategy for the Mbuluzi landscape developed and implemented  3.2. Management frameworks and governance models for PAs including Management plans revised and aligned with the PAN developed in 3.1 above and implemented	GET	1,500,000.00	8,000,000.00
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3.3 Capacity of PA  
Management staff  
strengthened to  
implement actions of  
the PAN in 3.1 and to  
implement and enforce  
provisions and  
obligations of  
Management  
frameworks and  
governance models on  
good governance  
systems for PA  
Management in output  
3.2

3.4. Protected Area  
Integrated fire  
management systems,  
that include  
participation of local  
communities, developed  
and implemented for  
Biodiversity and  
ecological infrastructure  
enhancement in  
Mbuluzi landscape.

3.5 Management  
Effectiveness of  
Mbuluzi landscape PAs  
monitored and tracked

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4. Knowledge Management , Gender and Youth mainstreaming and M&E	Technical Assistance	Outcome 4. Women and youth engagement strategy on biodiversity and land degradation developed and implemented.	4.1 Systems established for monitoring progress and outcomes of the project.	GET	270,000.00	4,480,075.00
			4.2 Documentation, publication and dissemination of best practices and lessons learnt.			
			4.3: Multi-stakeholder platforms (AFR 100) to champion INRM practices in the country established.			
			4.4 Women and youth engagement protocol adopted for the project			
Sub Total (\$)					3,730,500.00	24,480,075.00
Project Management Cost (PMC)						
				GET	186,450.00	1,288,425.00
Sub Total(\$)					186,450.00	1,288,425.00
Total Project Cost(\$)					3,916,950.00	25,768,500.00

**C. Indicative sources of Co-financing for the Project by name and by type**

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount(\$)
Recipient Country Government	Eswatini National Trust Commission	In-kind	Recurrent expenditures	7,150,000.00
Recipient Country Government	Eswatini National Trust Commission	Grant	Recurrent expenditures	2,500,000.00
Recipient Country Government	Ministry of Agriculture	In-kind	Recurrent expenditures	4,150,000.00
Recipient Country Government	Ministry of Agriculture	Grant	Recurrent expenditures	1,300,000.00
Recipient Country Government	Ministry of Tinkhundla Administration and Development	In-kind	Recurrent expenditures	1,000,000.00
Recipient Country Government	Ministry of Tinkhundla Administration and Development	Grant	Recurrent expenditures	1,000,000.00
Recipient Country Government	National Maize Corporation	In-kind	Recurrent expenditures	600,000.00
Recipient Country Government	National Maize Corporation	Grant	Recurrent expenditures	50,000.00
Recipient Country Government	Ministry of Tourism and Environmental Affairs	In-kind	Recurrent expenditures	3,500,000.00
Recipient Country Government	Ministry of Tourism and Environmental Affairs	Grant	Recurrent expenditures	1,668,000.00
Recipient Country Government	Peak Timbers	In-kind	Recurrent expenditures	100,500.00

Recipient Country Government	Peak Timbers	Grant	Investment mobilized	100,000.00
Civil Society Organization	International Centre for Research Centre in Agro-Forestry (ICRAF)	In-kind	Recurrent expenditures	500,000.00
Civil Society Organization	International Centre for Research in Agro-Forestry (ICRAF)	Grant	Investment mobilized	600,000.00
Civil Society Organization	World Vision	In-kind	Recurrent expenditures	500,000.00
Civil Society Organization	World Vision	Grant	Investment mobilized	50,000.00
Private Sector	Private Conservancies	In-kind	Recurrent expenditures	1,000,000.00
<b>Total Project Cost(\$)</b>				<b>25,768,500.00</b>

#### **Describe how any "Investment Mobilized" was identified**

Investment mobilized was defined based on amount of in-kind and grant contribution from the executing ministry, other contributing government institutions, civil society, private sector and other stakeholders active in sustainable land management and conservation initiatives. The different stakeholders were consulted on the monetary value of their contribution using market-value prices for the services they will provide. Where 'investment mobilized' has been indicated, it refers to co-financing that excludes recurrent expenditures, as defined in the guidelines. Eswatini Government investments mobilized for activities being carried out in the Mbuluzi River basin by contributing agencies and ministries are extrapolated in the MTEF project/programme-based budget allocations. Also, Funds that need to be budgeted for annually or grants received from donors are considered as investment mobilized

D. Indicative Trust Fund Resources Requested by Agency(ies), Country(ies), Focal Area and the Programming of Funds

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount(\$)	Fee(\$)	Total(\$)
UNEP	GET	Eswatini	Biodiversity	BD STAR Allocation	2,000,000	128,725	2,128,725.00
UNEP	GET	Eswatini	Land Degradation	LD STAR Allocation	1,916,950	243,338	2,160,288.00
Total GEF Resources(\$)					3,916,950.00	372,063.00	4,289,013.00

E. Project Preparation Grant (PPG)  
PPG Required true

PPG Amount (\$)				PPG Agency Fee (\$)			
150,000				14,250			
Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount(\$)	Fee(\$)	Total(\$)
UNEP	GET	Eswatini	Biodiversity	BD STAR Allocation	100,000	9,500	109,500.00
UNEP	GET	Eswatini	Land Degradation	LD STAR Allocation	50,000	4,750	54,750.00
Total Project Costs(\$)					150,000.00	14,250.00	164,250.00



Core Indicators

Indicator 1 Terrestrial protected areas created or under improved management for conservation and sustainable use

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
35,000.00	0.00	0.00	0.00



Indicator 1.1 Terrestrial Protected Areas Newly created

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
0.00	0.00	0.00	0.00

Name of the Protected Area	WDPA ID	IUCN Category	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
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Indicator 1.2 Terrestrial Protected Areas Under improved Management effectiveness

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
35,000.00	0.00	0.00	0.00

Name of the Protected Area	WDPA ID	IUCN Category	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)	METT score (Baseline at CEO Endorsement)	METT score (Achieved at MTR)	METT score (Achieved at TE)
									
Malolotje Nature Reserve		Protected area with sustainable use of natural resources	35,000.00						

Indicator 3 Area of land restored

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

700.00

0.00

0.00

0.00

Indicator 3.1 Area of degraded agricultural land restored

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
700.00			

Indicator 3.2 Area of Forest and Forest Land restored

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 3.3 Area of natural grass and shrublands restored

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

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Indicator 3.4 Area of wetlands (incl. estuaries, mangroves) restored

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 4 Area of landscapes under improved practices (hectares; excluding protected areas)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
60000.00	0.00	0.00	0.00

Indicator 4.1 Area of landscapes under improved management to benefit biodiversity (hectares, qualitative assessment, non-certified)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 4.2 Area of landscapes that meets national or international third party certification that incorporates biodiversity considerations (hectares)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Type/Name of Third Party Certification

Indicator 4.3 Area of landscapes under sustainable land management in production systems

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
60,000.00			

Indicator 4.4 Area of High Conservation Value Forest (HCVF) loss avoided

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Documents (Please upload document(s) that justifies the HCVF)

Title	Submitted

Indicator 5 Area of marine habitat under improved practices to benefit biodiversity (excluding protected areas)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 5.1 Number of fisheries that meet national or international third party certification that incorporates biodiversity considerations

Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)

Type/name of the third-party certification

Indicator 5.2 Number of Large Marine Ecosystems (LMEs) with reduced pollutions and hypoxia

Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (achieved at MTR)	Number (achieved at TE)
0	0	0	0
LME at PIF	LME at CEO Endorsement	LME at MTR	LME at TE

Indicator 5.3 Amount of Marine Litter Avoided

Metric Tons (expected at PIF)	Metric Tons (expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)

Indicator 6 Greenhouse Gas Emissions Mitigated

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)

Expected metric tons of CO <sub>2</sub> e (direct)	827477	0	0	0
Expected metric tons of CO <sub>2</sub> e (indirect)	0	0	0	0

Indicator 6.1 Carbon Sequestered or Emissions Avoided in the AFOLU (Agriculture, Forestry and Other Land Use) sector

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO <sub>2</sub> e (direct)	827,477			
Expected metric tons of CO <sub>2</sub> e (indirect)				
Anticipated start year of accounting	2025			
Duration of accounting	20			

Indicator 6.2 Emissions Avoided Outside AFOLU (Agriculture, Forestry and Other Land Use) Sector

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO <sub>2</sub> e (direct)				
Expected metric tons of CO <sub>2</sub> e (indirect)				



Anticipated start year of accounting
Duration of accounting

Indicator 6.3 Energy Saved (Use this sub-indicator in addition to the sub-indicator 6.2 if applicable)

Total Target Benefit	Energy (MJ) (At PIF)	Energy (MJ) (At CEO Endorsement)	Energy (MJ) (Achieved at MTR)	Energy (MJ) (Achieved at TE)
Target Energy Saved (MJ)				

Indicator 6.4 Increase in Installed Renewable Energy Capacity per Technology (Use this sub-indicator in addition to the sub-indicator 6.2 if applicable)

Technology	Capacity (MW) (Expected at PIF)	Capacity (MW) (Expected at CEO Endorsement)	Capacity (MW) (Achieved at MTR)	Capacity (MW) (Achieved at TE)
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Indicator 11 Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Female	50,000			
Male	50,000			

**Total**

100000

0

0

0

## Part II. Project Justification

### 1a. Project Description

#### 1a. *Project Description*. Briefly describe:

##### 1.1) The global environmental and/or adaptation problems, root causes and barriers that need to be addressed (systems description);

The Kingdom of Eswatini is a small land locked country of 1.15 million people, of which 53% are women. The country covers a total land mass of 17,364 square kilometers bordering South Africa and Mozambique. It is divided into four administrative regions, namely: Hhohho in the north, Manzini in the center of the country, Shiselweni in the south and Lubombo in the east. Politically, the country is headed by a constitutional monarchy, assisted by a parliamentary system responsible to the King. At the sub-national level, the country is administered through a traditional leadership system which is represented by 55 tinkundla (equivalent of counties) and 385 chiefdoms (equivalent of sub-counties), which exercise authority over land and other resources on behalf of the monarch.

Eswatini's economy is predominantly agriculture-based with 77% of the population residing in rural areas where they derive their livelihoods through rain-fed subsistence agriculture. Poverty levels are estimated at 63% with high income inequality. Unemployment stood at 47.1% for the overall population in 2013 with the majority of the unemployed being women and the youth. Poverty in rural Eswatini is closely correlated to the extent of food insecurity, which is caused by unsustainable farming techniques, low rainfall and limited access to good arable land.

The country is divided into four distinct agro-ecological zones, based on elevation, landforms, geology, soils, and vegetation, as shown in Figure 1. Each of the three regions, the Highveld, the Middle-veld, and the Lowveld, occupy about one-third of the country, whilst the Lubombo Range occupies less than one-tenth of the country. The Highveld is characterized by a humid to a near temperate climate where a variety of crops are grown, and higher yields are usually obtained due to the high rainfall and moderate temperatures. Maize is the dominant crop and other crops grown include sweet potato and a variety of legumes. The Middle-veld climate is subtropical and is suited for growing of maize, beans, and cowpeas, groundnuts, pineapples, and sweet potato. Drought tolerant crops such as cassava, sorghum and cotton are grown in the dry Middle-veld. The Lowveld has a semi-arid to arid climate and very prone to drought and crops grown here include cotton, citrus, while sugarcane is grown as an industrial crop under irrigation. The Lubombo plateau has a climate like that of the Middle-veld. The main crops grown include maize, grain legumes, sorghum, sweet potato, cassava and cotton. Livestock production is major agricultural activity and cattle are the prime investment asset in much of Eswatini with households deriving both income and food from their free-range animals<sup>[1]</sup>.

There are four ecosystems in Eswatini: (1) montane grasslands, (2) savanna-woodland mosaic, (3) forests and (4) aquatic systems. The savanna-woodland mosaic is the dominant ecosystem, covering the central and lower parts, followed by the montane grasslands (mainly in the Highveld); together, both these ecosystems comprise 94% of the country. Considering its small size, Eswatini is very rich in biodiversity, and species composition varies greatly between ecosystems. To date<sup>[2]</sup>, over 820 species of vertebrates and 2,414 species of plants have been recorded, including 18 endemic species of plants and one endemic vertebrate<sup>[3]</sup>.

[1] Mncube, T.L., Mloza-Banda, H.R., Kibirage, D., Khumalo, M.M., Mukambwe, W.O. & Dlamini, B.P. 2017. Composition and management of weed flora in smallholder farmers' fields in Swaziland. African Journal of Rural Development.

[2] GFA Consulting Group. 2010. Strategic Environmental Assessment of the NAS.

**Figure 1: Agro-ecological zones in Eswatini**





exploitation of vegetation for domestic use; improper soil management; improper management of annual, perennial and scrub and tree crops; disturbance of water cycle; overgrazing, any other (run-off). (E) Lubombo (E) area: Drivers are improper soil management; improper management of annual, perennial and scrub and tree crops; disturbance of water cycle; deforestation, overgrazing, any other (Invasion by Alien Plant Species, mainly *Chromolaena odorata*).

The State of the Environment Report, 2013 highlights three ecosystems that are degraded and these are Indigenous forests, and Rangelands. This proposed project will be targeting rangelands and indigenous forests within Mbuluzi river basin landscape. With regard to indigenous forests, the current deforestation and degradation of the natural forest and woodland areas is caused by a combination of factors such as conversion of land for agriculture and settlements, infrastructure development and uncontrolled extraction of timber and non-timber forest products, including fruits, edible plants and vegetables, fuelwood, wood for utensils and craft, medicinal plants, materials for traditional attire. With regard to Rangelands, over-exploitation of resources has occurred as a result of unsustainable crop production systems and grazing practices, where high grazing densities on communal rangelands leads to erosion and degradation. The Eswatini vulnerability assessment and analysis report of 2017 states that pastures condition in the Lowveld and dry Middleveld is at the average to poor condition as evidenced by the reduction in vegetation cover.

**Mbuluzi River Basin:** The Mbuluzi River Basin is one of the five major river basins in Eswatini. The basin is shared with Mozambique (see figure 2) with the Swazi portion covering a total land area of 3,200 square kilometers or 18% of the country land area. It is the third largest basin in Eswatini after the Komati-Lomati and the Usutu basins.

All four of the agro-ecological zones in Eswatini are found in the Mbuluzi catchment. Altitude ranges from 125 m in the Lowveld to more than 1500 m in the Highveld. Except for the semi-arid lowveld most of the catchment has a sub-humid temperature climate. The catchment receives most of its rainfall during the summer season from October to March. Mean Annual Precipitation (MAP) rarely exceeds 700 mm in the lowveld, while it may be in excess of 1200 mm in some parts of the highveld. Temperatures vary by altitude. The lowveld is the hottest region in the catchment and the Highveld the coolest part.

Major land cover and land uses consist of a combination of grasslands and bushvelds which are either under community grazing or converted to subsistence agriculture in the upper and middle sections of Mbuluzi basin. The lower parts are dominated by large-scale intensive irrigated sugarcane plantations with all activities associated with the sugar industry such as milling while the plateau is covered mainly by bushvelds. A number of protected areas are also found in the basin, with the parts of the Malolotje Nature Reserve in the headwaters of the Mbuluzi River and the Lubombo Conservancy (comprises of Mlawula Nature Reserve, Shewula Nature Reserve, Mbuluzi Game Reserve, Hlane National Park and Inyoni Yami Swaziland Irrigation Scheme (IYSIS) on the Lebombo Plateau as the river enters Mozambique

The Mbuluzi river basin is a major source of water for agricultural activities as well as rural and urban water supplies. The Hawane dam is located along the Mbuluzi river and supplies water to Mbabane city. Water from the river is also used in various ways by communities along its course. The river is of critical importance in the economy of the entire country as it provides water supplies to Ngomane, Tambankulu and Simunye sugar cane irrigation schemes and various urban areas through the Mnjoli dam. [1]

Water demand within the basin has been increasing over the years to such an extent that it is now causing water shortages in Mozambique where the river is a major source of water for the city of Maputo where it enters the ocean at Maputo Bay. Mozambique has registered its concerns about water shortages in the Mbuluzi river with Eswatini authorities in recent years. Under various climate change scenarios, competition for water in the basin will increase, possibly leading to conflict in the basin. [2]

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[1] Marker, M.; Dlamini, D.; Matondo, J.; Rudolphi, G. & Schulze, R. 2001. Soil Erosion Modelling in the Mbuluzi River Catchment (Swaziland, South Africa).

[2] Global Water Partnership: IWRM Survey and Status Report for Eswatini; A. Manyatsi and R. Brown and Manyatsi, (2009).

Figure 2: Mbuluzi River Basin

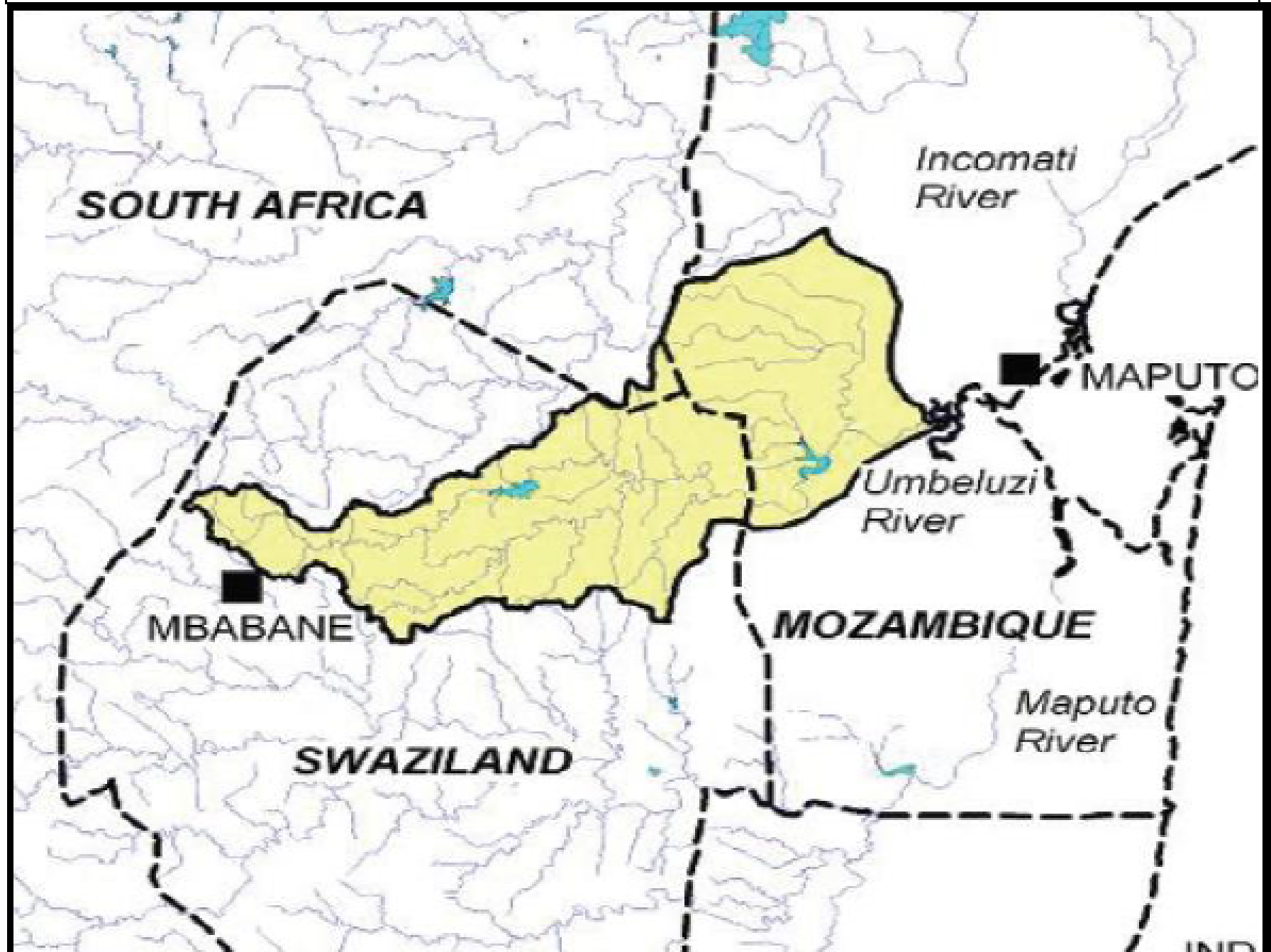
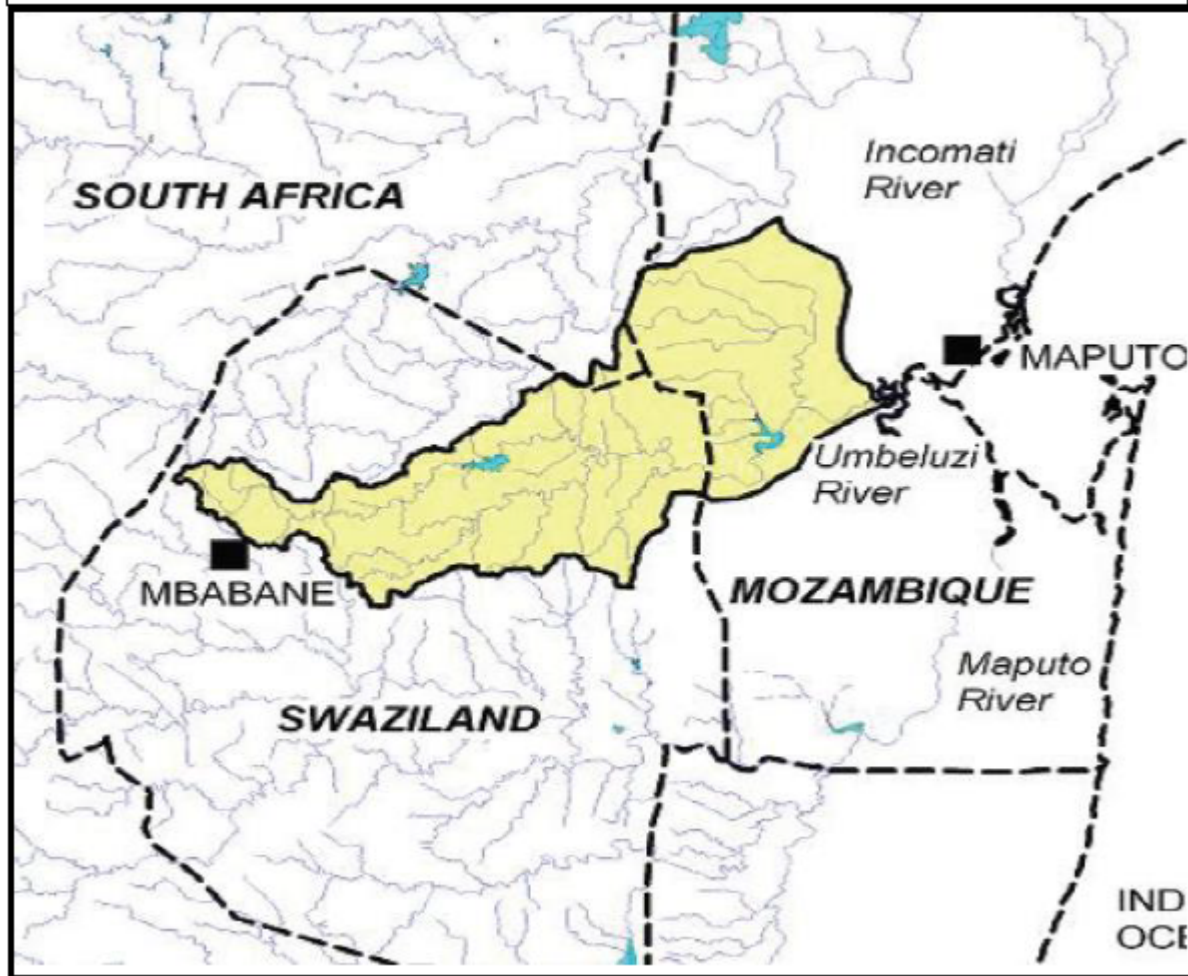




Figure 2: Mbuluzi River Basin



Causes of Biodiversity Loss and Land Degradation in the Mbuluzi River Basin:

The Mbuluzi catchment is characterized by severe deforestation, overgrazing and severe exploitation of vegetation for domestic use. The area is also facing improper soil management. Poverty around the area pushes community members towards unsustainable harvesting of natural resources for resale locally and internationally as a source of livelihood. The wood from forests is used for craftwork which is exported to other countries including South Africa.



Overstocking is a common problem in the Mbuluzi catchment area. This is mainly due to the country's traditional norm which values livestock as a measure of wealth. This then leads to high numbers of livestock per homestead which exceeds the carrying capacity of grazing lands. Furthermore, the country's rangelands have witnessed bush encroachment which has made the conditions conducive for shrubs therefore reducing the country's grazing capacity.

The source of the Mbuluzi river is characterized with the existence of special grasses that are used for handicrafts and other domestic uses including making mats, house thatching but these grasses are over harvested annually.

Soil erosion is widespread in Eswatini and is very severe on small holder farms and communal grazing areas. The Middle veld of Eswatini is the most affected. Results indicate that soil erosion is widespread in the basin. Over 55% of the basin is affected by moderate erosion where estate farming and controlled grazing are the main land uses. Very severe erosion takes place over almost 12% of the area where communal grazing and small holder farms are predominant. The erosion upstream of drainage basins affects economic activities downstream especially irrigated agriculture because it contributes sediment yield hence reducing the lifespan of dams and reservoirs. In situ damage caused by soil erosion includes the loss of crop production media, reduction of soil productivity as a result of lowered soil fertility, which may indirectly be perceived through decreased harvests. On the other hand, the products of soil erosion, viz. sediments, have a bearing on water quality in a river network.

The importance of Trans-Frontier Conservation Areas (TFCAs) for collaboration is increasingly recognized and supported. This is an international agreement signed by (Eswatini, South Africa & Mozambique) the respective countries to facilitate co-operation for conservation and tourism development within these areas. There are four core TFCAs involving Eswatini namely, Malolotja-Songimvelo; Lubombo Conservancy-Goba; Ndumu-Tembe-Futhi-Mambane; Jozini-Pongola. It should be noted that Malolotja-Songimvelo TFCA is located within Mbuluzi river basin. The project will work in 3 protected areas in these (Malolotja Nature Reserve, Mlawula nature reserve and Hawane reserve all within the Malolotja-Songimvelo TFCA. The biodiversity survey conducted during the SNPAS (2016/17) base line highlights an increase in threatened species in this TFCA. Under this project, a protected Area network (PAN) Conservation Strategy for the Mbuluzi landscape developed and implemented and this will contribute to the efforts of the TFCA.

#### Policy and institutional set-up for management of land and water resources in the Mbuluzi River Basin:

The land use tenure system of the Kingdom of Eswatini is divided into three categories namely Swazi Nation Land (SNL), Tittle Deed and Crown land. SNL is land held by the chiefs in trust for the King and Tittle Deed Land is privately owned land and Crown Land is held by the King in trust for the Swazi Nation. In most cases the SNL is where communities undertake their activities communally while Title Deed Land is mostly owned by the private sector and private owner for specific purposes. The country's land use is mainly small-scale subsistence crop agriculture, large scale commercial agriculture, extensive communal grazing, ranching, plantation forestry, parks: wildlife management, residential, industry, recreation and water reservoirs. Land management planning begins at community-level through the Chiefdom Development Planning process. This process is led by community leaders (Chiefs) which work closely with the Ministry of Tinkhundla Administration and Development.

The Ministry of Tinkhundla Administration and Development assists communities in the development of Chiefdom Development Plans. The Chiefdom Development Plan is a local planning tool for communities that highlights their medium to long-term developmental priorities, document and undertake mapping of boundaries, infrastructure, and land resources for their developmental priorities to promote sustainable development in rural communities. This is a nationally adopted approach through the National Decentralization Policy and Strategy of 2002. Within the Chiefdom Plans, the environment sector is customized to include Community-Based Natural Resource Management (CBNRM) hence calling it the Chiefdom Sustainable Development Plans.

The Ministry of Tourism and Environmental Affairs (MTEA) promotes and supports the tourism industry and wildlife conservation within an environmental framework that enhances amenities, conserves culture, sustains forest management, embraces meteorology and addresses climate change challenges to contribute towards sustainable socio-economic development. Under MTEA, there is a Forestry Department which provide an oversight role, direction and guidance to forest development and management sector.

The Eswatini National Trust Commission (ENTC) is the parastatal organization responsible for the conservation of the country's cultural and natural heritage. The Ministry of Natural Resources and Energy's mission is to ensure sustainable development, use and management of natural resources (land, minerals, water and energy) and provides surveying, mapping, land and real rights registration and valuation services to the public and private sector in a transparent manner. The obligation of the Ministry of Agriculture (MoA) is to ensure household food security and increased sustainable agricultural productivity through diversification and enhancement of commercial agricultural activities. The Land Use and Development Department of the MoA is responsible for promoting rational land use and the development of agricultural land and water resources, particularly on SNL.

Big Game Parks (BGP) is a private non-profit Trust which manages three protected areas in Swaziland. BGP answers to the Head of State and performs its mandate through the King's Office.

#### Long-term Solution and Barriers:

The long-term solution is to facilitate a transformative shift from unsustainable to integrated sustainable land and forest management in the Mbuluzi River Basin in order to secure habitat for biodiversity conservation, to maintain a flow of multiple ecosystem services and to support rural development of livelihoods opportunities.

Barrier 1: Inadequate legal, regulatory and institutional framework for Integrated Natural Resource Management: The overall legal and policy framework for the management of natural resources in Eswatini suffers from insufficiently clear and consistent policies and regulations that are a barrier to the sustainable use of these resources. The financial and human resources earmarked for baseline programmes related to agriculture and forestry in the Mbuluzi River Basin are deployed and managed by sectoral departments/institutions in silos. There is a need to harmonise and coordinate efforts across sectors, and spearhead innovative ways and means of enhancing ecosystem functioning and resilience in an integrated and coordinated way that balances socio-economic and environmental objectives. Also, mandates for regulation of land and resource use are scattered among different authorities. Coordination among these regulatory authorities is weak. Decision-makers lack solid information on which to base decisions regarding land use allocation and management. Without a proper assessment, monitoring and planning regime for the maintenance of ecosystem services, managers and users have a difficult time effectively evaluating and integrating land degradation risks and threats to biodiversity with decision-making. The local authorities lack the capacity to generate, implement and enforce integrated land management plans. Thus in practice, land use allocation and use typically does not take into account the conservation values of forests and woodlands when assigning them to production purposes, nor does it incorporate the value of ecosystem goods and services that are delivered by intact natural areas. Land use planning also suffers from unclear divisions of responsibilities between relevant departments and poorly defined implementation and monitoring procedures and mechanisms at national, region, tinkundla and Chieftdom levels. The technical capacities and orientation of land use planning staff also needs to be improved; many government officers responsible working with communities on land use planning need training in order to replace a culture of top-down planning with more participatory approaches.

Barrier 2: Inadequate demonstrated experiences in SLM approaches due to lack of capacity: Eswatini does not have operational examples of integrated sustainable land management at a landscape scale. Without access to know-how, proven through demonstration, government decision-makers and resource users do not have the tools and knowledge necessary to decrease land degradation and safeguard biodiversity. There is a critical need to showcase innovative management practices and scale up approaches for the livelihood benefits that it will realize.

Forest/Woodland Conservation and Restoration: In order to maximize on the services provided by properly functioning ecosystems, these need to be identified and conserved. Areas where important services can be provided to the benefit of local communities and where these services have been compromised need to be identified and restoration processes started.

Rangeland management: There is a need to reduce carrying capacity of cattle in ecologically sensitive areas and promote new husbandry measures such as rotational grazing.

Arable land: Overproduction of land and continually reducing the nutrient content in the soil will lead to reduced productivity of land in the long-term resulting in financial and economic losses. Sustainable land management practices increase yield and are in most cases water efficient compared to other practices. Technologies are also available that can ensure similar or higher yields on the same land than conventional agriculture methods, with the use of less water and with no negative effects e.g. erosion. Such practices need to be demonstrated to farmers in order to ensure uptake.

eed to be demonstrated to farmers in order to ensure uptake.

### Barrier 3: Ineffective wildlife protection and management of protected areas on the ground:

Protected area management: Management of protected areas is focused mainly on tourism regulation and anti-poaching activities. The maintenance of intact ecosystems and restoration of degraded ecosystems are seen as secondary activities and only necessary if funds are available. There is a strong need to maintain and restore the integrity of ecosystems in the protected areas and maximize the land use it was allocated.

A critical constraint to effective wildlife protection in Eswatini is the very limited information that exists on biodiversity and the threats to biodiversity in the country.

This information gap is compounded by and contributes to the absence of a landscape-level approach to protected areas including nature reserves and community conservancies and the lack of multi-sectoral land and resource use planning, which together greatly reduces the effectiveness of existing efforts to manage wildlife and preserve ecosystem services including critical habitat areas and the corridors between them. Most of the protected areas in the Mbuluzi ecosystem need to have a Protected areas Network strategy and action plan. Management of protected areas, and of the wildlife that resides within them, is further constrained by the lack of management plans and the insufficient technical capacities and resources of wildlife protection and PA staff. Most of the staff are essentially untrained in PA management, wildlife conservation, community engagement and collaboration and development of sustainable resource use / livelihoods programs, and in many cases, they are physically unable to execute their duties.

At the management level, on the other hand, many posts remain unfilled and key capacities, for example in ecological monitoring, are very weak. The PA units and wildlife conservation staff targeted under this project also suffer from inadequate equipment and infrastructure: in general access to many areas of critical habitat is extremely difficult as there are few functioning vehicles; guard outposts are very poorly constructed; and field work and communications are greatly limited by a lack of radios, telephones, GPS units, binoculars, cameras, compasses, etc. Funding for wildlife protection and PA management is extremely limited and mostly allocated to salaries for rangers. Most of the biodiversity conservation funding in Eswatini over the past decade has come from the international donor community, but even the amount of these funds has been very limited. Finally, cooperation with the tourism sector on PA management and wildlife protection, as well as the generation of revenues / jobs for local communities, has been limited.

### Barrier 4: Insufficient Knowledge and Lessons Learned on INRM and Mainstreaming of Youth and Gender

in ILM relevant activities in Eswatini: According to the Eswatini 6<sup>th</sup> National report to the CBD, the general level of understanding on sustainable utilization of ecosystems, biodiversity and resources is thought to be insufficient, even though environmental issues receive some coverage in the media and forms part of the agenda in certain fora. In order to ensure that the ILM practices that are tested and showcased in Eswatini is broadly taken up by the population of the country and all benefit equally from the provision of ecosystem services, it is necessary to mainstream youth and gender issues throughout the application and communication of results. This also applies to sensitize the population in general of the successes and value of ecosystems and practices applied to restore such services. There is also a need to learn from other countries in the region on how they apply the practices and share Eswatini's experiences in regional fora. Eswatini should also apply new monitoring tools to track progress on its application of ILM. The 6th National report to the CBD recommends that there is a need to monitor the current level of awareness on biodiversity in the country and work towards increasing it to the desired level. It further recommends that, to raise awareness, initiatives and institutions that deal with public awareness on environmental issues need to be empowered and capacitated. The curricula of schools and tertiary institutions must be revised to include environmental issues. In addition, there should be clear unified messages at the highest governance level to instill behavioral change on issues of biodiversity and ecosystem services.

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[1] Mushala, H.M. 2000. An investigation of the Spatial Distribution of Soil Erosion in the Mbuluzi River Basin of Swaziland. UNISWA Research Journal of Agriculture Science and Technology.

## 1.2) THE BASELINE SCENARIO AND ANY ASSOCIATED BASELINE PROJECTS,

Eswatini recognizes the challenges and costs of land degradation and biodiversity loss and is working towards improvement of environmental management, ecosystems restoration, water use efficiency, agricultural production enhancement across the country through various initiatives as described below:

The Eswatini national annual vulnerability assessment and analysis report assesses rangelands conditions (species, erosion, visible features, browsing potential). The project Lower Usuthu Smallholder Irrigation (LUSIP-GEF) Sustainable Land Management Project provides resources for the rangeland and livestock baseline data collection to assist in rehabilitation of rangelands.

The Department of Land Use Planning and Development under the Ministry of Agriculture (MoA) develops land use plans and maps for government farms where it carries out (a) Soil surveys: to generate soil maps and accompanying reports that characterize the various soil types occurring in the survey area. (b) Generate land capability maps: to show different categories of land capability classes from prime arable land through marginal to non-arable land and (c) Develop land use plans: to cover resettlement plans, crops and forestry land suitability plans. Under this proposed project, this department will provide land use plans and maps for communal lands that the project will use to develop and implement chiefdom's development plans. Without GEF intervention, the Department of Land Use Planning will continue producing land use plans for government farms only and yet the highest levels of land degradation exist in communal lands.

Conservation Agriculture (CA) was introduced into Eswatini by the Ministry of Agriculture (MOA) with support from FAO and the Cooperation of the Development of Emerging Countries (COSPE) in 2002. It was piloted in two sites i.e. Shewula community in the north-east of the country and Kambhoke community in the south. Under this project, climate smart agriculture will be upscaled to all smallholder farms within Mbuluzi landscape. Without GEF intervention, this good technology for reducing land degradation will remain a preserve of the few areas.

The Ministry of Agriculture (MoA) is implementing a farm input subsidy programme. This is meant to stimulate sustainable food production. The input subsidy has a requirement that farmers must produce soil fertility test results for them to get inputs, this has seen the good practice of soil sampling for soil fertility testing increase from lows of 3758 in 2013/14 to 23,872 in 2017/18 but only in Government and large private farms. Also, the Government and private farms promote the natural development of *Panicum Maximum* (Guinea grass) in the lowveld and in some farms *Eragrostis curvula* (weeping love grass) planted for hay making. Under this GEF 7 proposed project, these initiatives will be scaled up to cover communal grazing lands and smallholder poor farmers.

The forestry department under the Ministry is currently doing a nationwide tree planting initiative expected to plant a million trees every year. The initiative is estimated at US\$500,000 over 3 years for the whole country. The Department is also formulating an Alien Invasive Species Management Strategy which is mainly focusing in the Mbuluzi river basin since recently concluded mapping exercise highlighted the basin as a hotspot for *Chromolaena odorata* as one of the leading causes of land degradation in this areas. The forestry department co-financing will directly contribute to component 2 of the project.

The Department of Forestry annual budget allocation for year 2016-17 stood at US\$ 500,000. Only 23% of the costs are allocated to professional services such as forest protection and management, removal of alien plant species across the country. It is estimated that 10% (US\$ 50,000) is invested in the Mbuluzi River Basin on an annual basis. Afforestation activities for soil conservation are carried out and the department of forestry provides subtropical and tropical trees grown from their nurseries. Co-financing from the Department of Forestry will contribute to both components 1 and 2 with a stronger attention on outputs 2.1.5 on Tree planting in degraded communal lands and along riverine and 2.1.6 on Capacity building of Community Forest Associations (CFAs). The GEF financing will support the forestry department in expanding and establishing community nurseries to all chiefdoms and lower levels in the basin and identify and train community members in nursery bed management. Without GEF intervention, tree nursery bed establishments will remain at the national and Tinkhundla levels only.

Peak Timbers is a state-owned company situated around the basin where it has commercial forest plantations. As part of its environmental requirements it has a number of areas dedicated to conservation. The company carries out sustainable land management practices within the basin estimated at US\$ 412,000 annually. They also have an incentive scheme for local communities that provides them with livelihood opportunities like piggery, poultry and ranching to reduce pressure on natural resources estimated at US\$ 450,000 annually. Peak timbers will contribute to the project by providing technical support to communities under output 2.1.5 on Tree planting in degraded communal lands and along riverine

The Ministry of Tinkhundla Administration and Development is Responsible for planning, implementing inclusive development; and mobilizing resources for effective service delivery at provincial and community level. Currently helping communities undertake their chiefdom development planning process within and outside the Mbuluzi catchment. The Ministry also has community development officers (5 within the catchment area) that assist with community initiatives. It invests an average of \$330,000 per year. The Ministry of Tinkhundla Administration and Development co-financing will contribute to output 1.1.4 on development and implementation of Chiefdom Sustainable Development Plans but will also contribute to component 4 because it is this same ministry that houses the gender and labor and social development affairs department of the kingdom. Under the GEF project, chiefdom development planning process will be technically supported to include land degradation interventions and technologies for all the chiefdoms in the Mbuluzi basin.

World Vision (WV) is an international NGO working in Eswatini whose objective is to promote community livelihood programmes to relieve pressure from reliance on natural resources. Projects and activities include land rehabilitation, donga reclamation, tree planting, community gardens, portable water supply and sanitation. A total of US\$20.793 million in annual operating budget was received from donors and a fifth of this goes to Mbuluzi river basin. World Vision co-financing will contribute to component 2 on supporting farmers on-farm training activities and food security and component 4 on youth and gender programmes and monitoring and documentation of best practices and lessons learnt. The current coverage of WV is in a few Tinkhundla and chiefdoms. With GEF intervention, WV will be able to cover all the farmers in the basin and provide them with technical knowledge. They will assist in formation and training of farmer field schools and demonstration sites.

The communities around the Mbuluzi basin are undertaking environmental initiatives under the food for work programme. Their activities include donga rehabilitation, tree planting and grazeland management which has environmental benefits. Of note is the Majotini community, the Dvokolwako communities and the Sihhoye community who have the food for work programme. They have invested about US\$200,000 in 2019 and would continue to do so during the lifetime of this 8-year programme which ends in 2026 making a total of about USD 1.6 million. Their co-financing and participation will contribute to component 2 and 4.

The Food and Agricultural Organization's Eswatini Programme supports the Eswatini government to achieve household food security, increased sustainable agricultural productivity through diversification and enhancement of commercial agricultural activities. Sustainable land Management is promoted in all the FAO projects, which offers leveraging opportunities for LDN. The total national investment is US\$ 2 Million and about 30% (US\$600,000) is invested in the upper Mbuluzi Basin in form of land management e.g conservation agriculture, soil erosion control and farm inputs

NEPAD-CAADP Project "Promotion of Sustainable Feed and Fodder Production and Utilization" worth USD 1.7 million is being implemented in Mbuluzi river basin by the Eswatini Meat Industries Limited, state owned company.

Eswatini Meat Industries Limited will work with the project to train livestock farmers on Sustainable Feed and Fodder Production and Utilization. Currently, this support is being given to large scale farmers but under the project, it will be extended to small scale livestock farmers including those in communal grazing lands.

Eswatini National Trust Commission (ENTC) is a public enterprise responsible for conservation of Eswatini's Natural and Cultural heritage. Its responsible for management of state protected areas and for oversight, supervision and regulation of privately owned protected areas. It has three conservation areas within Mbuluzi river basin namely, Malolotja Nature Reserve, Mlawula nature reserve and Hawane (Ramsar site). The commission invests an average of \$322,000 annually for staff salaries and maintenance work on park boundaries, routine patrols for these 3 PAs. The staff force comprises of 45 rangers, 1 law enforcement officer and 1 Park Warden. With the GEF funding, the staff will be trained and equipped with skills in effective management and monitoring of the protected areas. They will also be trained in effective fire management. Eswatini National Trust Commission (ENTC) co-financing will contribute to output 1.1.1 of component 1 and all outputs of component 3 on the protected areas.

The Ministry of Tourism and Environmental Affairs is responsible for Promotion of environmental sustainability and climate change resilience, while conserving biodiversity to support livelihoods and economic beneficiation through tourism. The Ministry invests approximately US\$ 230,000 annually on tourism promotion. Has staff members dedicated for the Hhohho region which houses the basin drawing approximately US\$ 265,000 annually. The Ministry of Tourism and Environmental Affairs co-financing will contribute to components 1 and 3 outcomes.

Mbuluzi Game Reserve is a privately owned reserve in Eswatini, within the Lubombo Conservancy, with an annual budget of about US\$ 500,000, that supports community development and sustainable livelihood programmes in a few selected communities; which include promotion of conservation agriculture, supply of portable water, land rehabilitation, tree planting and encouraging sustainable use of natural resources to curb the challenge of poaching, unsustainable harvesting of natural resources. With GEF funding, this programme will be extended to all communities living around the 3 protected areas. Mbuluzi Game Reserve and the Lubombo Conservancy co-financing will contribute to components 3 on PA management and also will support communities living around these PAs.

Work is in progress on the project Strengthening the National Protected Areas System (SNPAS) of Eswatini which aims to strengthen the management effectiveness of existing PAs in addressing threats, while expanding the Protected Area (PA) estate to incorporate protection worthy areas that would have progressively been degraded as the pressures mount.

Veld and forest fires monitoring is done using MODIS data in GIS which is housed at the Eswatini National Trust Commission (ENTC). The MODIS data using a geographic information system (GIS) is used to monitor incidences of veld and forest fires in the country and is useful for planning purposes. The implementation of the fire management strategy has been effective in minimizing occurrences of fire incidences in the country. Among the good initiatives done are trainings of community fire-brigades where the trainees were given firefighting gears. Also, fire belts are built in boundaries and borderlines of forest plantation companies and some rangeland farms also do them. In the country's regional fire hot spots, Fire Prevention Association were established to work in collaboration with fire protection service providers. Forest plantations have adopted cold burning for their terraces and fire belt when the Fire Danger Index (FDI) is below danger zone in the morning hours or cool evening hours. Mbuluzi landscape is among the fire hotspots in the country. The Ministry of Agriculture is continuing with maintaining and rehabilitating fire breaks in government farms and annually covering and maintains about 90 km (minimum) to 304 km (maximum) depending on machinery availability. Private ranches and forest plantations do maintain fire breaks which are also grass land biodiversity areas. Currently there is limited capacity in national wildlife protected areas to manage fires. Therefore, under this GEF project, this level of fire management by forest plantations will be extrapolated to national protected areas. The ministry of agriculture and the department of forestry will provide training to the staff of protected areas in fire management.

Eswatini contains one of the largest remaining intact altitudinal gradients of natural ecosystems in Southern Africa and is the only place where this continuum is concentrated in relatively short distance (of about 200 km). Such an intact gradient holds great significance for biodiversity conservation because it allows ecological processes such as migration and gene flow and provides the opportunity for population shift as an adaptation to climate change. This considerable biodiversity is contained in four distinct ecosystems: namely montane grassland, savannah-woodland mosaic, forests and aquatic systems. Despite the global significance of its biodiversity, Eswatini's Protected Area (PA) estate is comprised of very small and vulnerable PAs poorly distributed across ecosystems and formal PAs cover only 4.26% of the country. There is, therefore, a need to expand the PA estate, while strengthening PA management competencies. This in turn will require the participation of a broad range of stakeholders, including private landholders, local communities and the tourism industry to establish a new State PA, private and community managed reserves. A landscape approach is needed to strategically place these different PAs in proximity to one another and manage land in immediately adjacent areas to reduce threats to biodiversity and improve connectivity between PA sites. The GEF5-funded project on Strengthening the National Protected Areas System of Swaziland (SNPAS) was a step in achieving this target. This project sought to strengthen the existing protected area network and improve the level of protection for biodiversity in reserves. It should be noted though that efforts are underway under the Lubombo Conservancy to establish an additional community conservation area in Mhlumeni. This GEF7 probed project will add to these efforts by improving management effectiveness of three protected areas within the Mbuluzi river basin through landscape approach and by developing a protected area network strategy for the landscape. This landscape approach will bring together a broad range of stakeholders, including private landholders, local communities and the tourism industry to develop a protected area network strategy and implement it in a participatory manner private and community managed reserves. Without this approach, the current little conservation efforts will remain fragmented with no greater impact.

The country is a net sink of GHG emissions. This means that while Eswatini emitted 4,861 Gg CO<sub>2</sub>e, the country's natural flora and farmed areas in the land use, land use change and forestry sectors sequestered emissions by 5,863 Gg CO<sub>2</sub>e, resulting in a net sink status of -1,002 Gg CO<sub>2</sub>e.

The Mbuluzi catchment is expected to be highly impacted by climate change. According to the Climate Change Vulnerability Assessment of the Water Sector and Infrastructure in Eswatini study commissioned under the Adapting National and Transboundary Water Resources project funded by the GEF under the SCCF; the future annual runoff is going to be less than the observed by 3.3% (2.11 Mm<sup>3</sup>) and 2.9% (11.07 Mm<sup>3</sup>) for the dry and wet year scenario respectively. This means that there will be less runoff in the Mbuluzi River basin in both dry and wet year scenarios given A2 climate change scenario. The magnitude of the annual runoff

decrease is similar in terms of percentage, but the magnitude of the change is high in the wet year scenario compared to the dry year scenario. The implication here is that there will be less water to store in the catchment given climate change and this will have a negative impact on irrigated agriculture in the country. The table below highlights the projected runoff under the two scenarios for the Mbuluzi catchment.

Month	Dry year scenario			Wet year scenario		
	Observed runoff (Mm <sup>3</sup> )	Future runoff (Mm <sup>3</sup> )	Percentage change	Observed runoff (Mm <sup>3</sup> )	Future runoff (Mm <sup>3</sup> )	Percentage change
Oct	5.40	3.74	-30.74	11.26	14.51	+28.86
Nov	5.81	5.48	-5.68	19.74	18.02	-8.71
Dec	10.04	9.77	-2.69	53.76	22.45	-58.24
Jan	10.52	10.95	+4.09	33.67	53.48	+58.84
Feb	7.81	7.65	-2.05	132.23	116.80	-11.67
Mar	4.41	5.83	+32.20	50.90	64.15	+26.03
Apr	5.15	4.06	-21.17	22.10	25.75	+16.52
May	5.02	3.21	-36.06	14.86	14.45	-2.76
Jun	2.59	2.56	-1.16	12.16	10.83	-10.94
Jul	2.50	2.59	+3.60	11.53	10.66	-7.55
Aug	2.48	2.65	+6.85	9.34	10.29	+10.17
Sep	1.53	2.65	+73.20	12.76	11.81	-7.45
Total	63.25	61.14	-3.34	384.28	373.21	-2.88

Month	Dry year scenario			Wet year scenario		
	Observed runoff (Mm <sup>3</sup> )	Future runoff (Mm <sup>3</sup> )	Percentage change	Observed runoff (Mm <sup>3</sup> )	Future runoff (Mm <sup>3</sup> )	Percentage change
Oct	5.40	3.74	-30.74	11.26	14.51	+28.86
Nov	5.81	5.48	-5.68	19.74	18.02	-8.71
Dec	10.04	9.77	-2.69	53.76	22.45	-58.24
Jan	10.52	10.95	+4.09	33.67	53.48	+58.84
Feb	7.81	7.65	-2.05	132.23	116.80	-11.67
Mar	4.41	5.83	+32.20	50.90	64.15	+26.03
Apr	5.15	4.06	-21.17	22.10	25.75	+16.52
May	5.02	3.21	-36.06	14.86	14.45	-2.76
Jun	2.59	2.56	-1.16	12.16	10.83	-10.94
Jul	2.50	2.59	+3.60	11.53	10.66	-7.55
Aug	2.48	2.65	+6.85	9.34	10.29	+10.17
Sep	1.53	2.65	+73.20	12.76	11.81	-7.45
Total	63.25	61.14	-3.34	384.28	373.21	-2.88



Jul	2.50	2.59	+3.60	11.55	10.66	-7.55
Aug	2.48	2.65	+6.85	9.34	10.29	+10.17
Sep	1.53	2.65	+73.20	12.76	11.81	-7.45
Total	63.25	61.14	-3.34	384.28	373.21	-2.88

The Eswatini Government through the Komati Downstream Development Project (KDDP) and the Eswatini Water Development enterprise, is investing on projects to enhance run-off in the Mbuluzi basin, however, there is need for a holistic approach that introduces interventions in the entire catchment to address critical drivers of change in runoff including addressing land degradation, grass/plant cover and alien invasive plant species. The project will utilize the outcomes of the Adapting National and Transboundary water Resources Project to inform any interventions. This will ensure that interventions are resilience to climate change. Lessons learnt on the Lower Usuthu Sustainable Land Management Project under GEF 4, especially with regard to stakeholder engagement, women and youth engagement will be considered in the implementation of activities.

### ***1.3) Proposed alternative scenario with a brief description of expected outcomes and components of the project***

The proposed project will promote the adoption and application of integrated sustainable land management and ecosystem restoration technologies to safeguard the integrity of key ecosystems in the Mbuluzi Catchment in Eswatini. It will focus on the interface between people and the ecosystems on which they depend for livelihoods. It will bring together all the people using land resources within the Mbuluzi River Basin to harness and manage their natural resources more sustainably for optimum benefits. The project will ensure that the sustainable management of ecosystem goods and services is fully integrated into national and local level development planning. It is expected to yield multi-developmental benefits to Eswatini's Vision 2022 6<sup>th</sup> pillar: Agriculture and Environmental Sustainability. It will also build upon the strong commitment by the Government of Eswatini to promote productivity through improved biomes and productive ecosystems in the Mbuluzi catchment. The project is fully aligned with Eswatini's National Voluntary Targets on Land Degradation Neutrality. The Targets were defined during a LDN Target Setting Process, and seek to avoid, minimize and reverse land degradation; reduce current annual loss of forest to cropland; increase forest cover through afforestation and agroforestry programmes; increase land productivity in all the country's four regions through SLM practices; increase the amount of land set aside for nature and wildlife conservation; rehabilitate degraded and abandoned land for crop production. The project will be implemented through the following Components:

#### **Component 1: Strengthening Policy, Legislative and Institutional Frameworks for integrated natural resources management in the Mbuluzi river catchment area.**

Output 1.1.1 Institutional and legislative framework for SLM and ecosystem restoration in the Mbuluzi landscape revised and implemented; under this output, the National Policy and Legislative Framework Strengthened to Enable Effective Land-use planning and Management in the Mbuluzi basin, the national environment policy and legislative framework will be strengthened to enable effective land use planning and management, aligned with existing LDN Targets. Particular focus will be placed on the formulation of the comprehensive national environment policy, updating the Flora Protection Act of 2000, formulation of Integrated Natural Resources Strategy and Action Plan and the national forest regulations aimed at reducing continued loss of environmental resources. The project will support the development of Forest Management Regulations in support of the Forest Bill, which was developed in 2016 alongside a legal framework for the management and control of alien invasive species. Eswatini National Trust Commission (ENTC) co-financing will contribute to output 1.1.1 of component 1 and all outputs of component 3 on the protected areas.

Under Output 1.1.2; Landscape-scale ecosystems and Land-use assessment conducted for Mbuluzi basin, the state of the environment ecosystems, ecological values, forests, and productive areas that merit rehabilitation and restoration through SLM and ecosystem restoration will be identified. The mapping will focus on the development of forest maps and wildlife maps etc. for the Mbuluzi basin which will be critical in informing future investments on these ecosystems. In addition, a landscape-scale ecosystem and land use assessment will be conducted specifically for the Mbuluzi Basin, identifying the state of the environment, and ecosystems, ecological values, forests, and productive areas that merit rehabilitation and restoration.

Under Output 1.1.3, Development of an Integrated Land Management Strategy and Action Plan for the Mbuluzi river Basin as a framework for effective management of the basin; a National Sustainable Land Management Strategy and Action Plan for the Mbuluzi Basin will be developed.

Under Output 1.1.4 Mbuluzi Basin Chiefdom Sustainable Development Plans Developed and Strengthened to scale up the adoption of SLM and ecosystem restoration using a participatory approach, the Mbuluzi Basin Chiefdom Sustainable Development Plans will be strengthened and implemented to scale up adoption of SLM and ecosystem restoration using participatory approaches. Tinkhundla Administration and Development Bill of 2015 acknowledges the need for Chiefdom Development Planning (CDP) framework. The CDP is a participatory land-use planning process involving the participation of households in a chiefdom and led by a multi-disciplinary team comprising a team of Land Use Planner, Irrigation Engineer, Soil Specialist and Social Geographer and Gender specialists. The team compiles an inventory of existing land use, land holdings and related issues; and identification of irrigation schemes, rainfed farming and livestock grazing areas, human settlements, rehabilitation sites and conservation areas. The CDP uses traditional and modern development approaches to equip rural households with the capacity to plan for community development. However, there is a limitation on financial and staff capacity of the EEA to carryout timely inspections. There are currently budgetary constraints to mainstream CDPs escalation countrywide in the Ministry of Tinkhundla, Development and Administration. Under this project, all the chiefdoms will be supported to develop CDPs with SLM and ecosystem restoration approaches and will be implemented.

## **Component 2: Ecosystem restoration through capacity strengthening for Promotion of sustainable land management (SLM) practices**

The outcome of this component is Reduced Land degradation through capacity strengthening for innovative SLM technologies in productive landscapes across 60,700 ha of the Mbuluzi River Basin.

Under output 2.1.1 Capacity of agriculture extension workers in relevant ministries and departments will be strengthened with SLM technologies to be able to deliver them to sub-national level institutions including local communities at farm level, while under output 2.1.2. Training of trainers at local community levels including chiefdoms will be conducted by the extension workers in output 2.1.1. Under output 2.1.3, Farmer Field Schools (FFS) and SLM demonstration sites will be established for farmer groups and farmer open field-days will be organized with technical backstopping by the capacity built in output 2.1.1.

Eventually with the knowledge acquired and capacity built from the above outputs, then under output 2.1.4 SLM practices will be implemented in communities to improve soil fertility and reduce land degradation, increase farm yield and productivity for improved food security and livelihoods targeting maize and legumes for crops and livestock at least 15,000 households from 60,000 ha of maize fields and pasture lands.

In addition, Under outputs 2.1.5 Tree planting in degraded communal lands and along riverine areas will be promoted to reduce land degradation and under output 2.1.6 Capacity building of Community Forest Associations (CFAs) for community biodiversity conservation will be enhanced for them to continue with the forestry related activities at community level and consequently, indigenous forest/woodland restoration covering 700 ha in Mbuluzi catchment with livelihood benefits will be undertaken. The Department of Forestry and forest companies like Peak Timbers will also be engaged to work with Chiefdoms in the basin to re-establish the 700 hectares of indigenous forests and woodlands that had social and cultural significance. This proposed initiative lends itself to the introduction of farmer-managed regeneration of natural forests. Through this initiative, traditional forestry conservation and management strategies will be mobilized to promote ecosystems restoration and partnerships and collaborative initiatives will be established between forest companies and communities to enhance joint efforts in ecosystem restoration. Co-financing from the Department of Forestry will contribute to components 1 and 2 with a stronger attention on outputs 2.1.5 on Tree planting in degraded communal lands and along riverine and 2.1.6 on Capacity building of Community Forest Associations (CFAs). Peak timbers will contribute to the project by providing technical support to communities under output 2.1.5 on Tree planting in degraded communal lands and along riverine

## **Component 3. Effective management of 3 protected areas within the basin**

Under this component, a landscape protected Area network (PAN) Conservation Strategy for the Mbuluzi landscape will be developed and implemented. Therefore, Management frameworks and governance models for PAs including Management plans will be revised and aligned with the PAN developed and these revised Management frameworks and governance models will be implemented. The Capacity of PA Management staff will be supported and strengthened to implement actions of the PAN and also to implement and enforce provisions and obligations of Management frameworks and governance models that will have been developed/revised and aligned to the PAN. The PA staff will also be trained PA Management Effectiveness monitoring and they will be equipped with monitoring and tracking tools. In order to enhance maintenance of the ecological integrity of the targeted PAs, Protected Area Integrated fire management systems, that include participation of local communities, will be developed and implemented. Mbuluzi landscape is among the fire hotspots in

the country and fires are a big threat to the wildlife protected areas therein. The current national efforts on fire management have been concentrated on forests. Therefore, this project will be a game changer in operations of the government by supporting it to expand its fire efforts from the forest estate to PAs. The fire target areas will also include communal lands around protected areas and hence reduce the land degradation therein. This means that efforts to reduce land degradation will be employed in PAs, communal lands and forestry and hence the government target of reducing land degradation in Mbuluzi landscape will be attained. Finally, the PA Management Effectiveness of the Mbuluzi landscape will be monitored and tracked and analyzed. Lesson learnt from this monitoring system will be upscaled to other PAs nationally and regionally. Eswatini National Trust Commission (ENTC) co-financing will contribute to all outputs of component 3 on the protected areas because it is responsible for management of the 3 protected areas that the project will work in.

#### **Component 4: Knowledge Management, Gender and Youth mainstreaming and M&E**

The 6th National report to the CBD recommends that there is a need to monitor the current level of awareness on biodiversity in the country and work towards increasing it to the desired level. It further recommends that, to raise awareness, initiatives and institutions that deal with public awareness on environmental issues need to be empowered and capacitated. This component will ensure that implementation of Components 1, 2 and 3 is tracked using gender and youth disaggregated statistics (*inter alia* the numbers of participants on training courses, numbers of beneficiaries etc.) with a particular focus on ensuring that women can participate at least on an equal basis to men (e.g. by ensuring training activities are held at times and in venues accessible to women and the disabled, using training materials which are tailored to their needs and interests). During PPG, a full gender assessment will be undertaken, and a gender mainstreaming plan will be developed. However, working on gender and with youth will be integrated in all components, activities and results. World Vision co-financing will contribute to component 2 on supporting farmers on-farm training activities and food security and component 4 on youth and gender programmes and monitoring and documentation of best practices and lessons learnt.

*Output 4.1.1* Appropriate systems will be adopted and implemented to monitor the progress and outcomes of the project also ensuring that lessons learnt are properly documented. This output will focus on developing an interactive monitoring and evaluation system to track implementation of Biodiversity strategy and SLM in the country for purpose of upscaling. It will focus on identifying measures for success and to monitor the necessary governance frameworks for effective implementation of integrated land management practices.

*Output 4.1.2 Documentation, publication and dissemination of best practices and lessons learnt:* Sufficient information for adaptive management and learning collated and disseminated with active participation of key stakeholders and project partners: this output will focus on development of the project's youth and gender strategy which will identify youth and gender sensitive initiatives for the project and recommends effective measures to ensure that the youth and women effectively contribute to decision-making in the project at all levels. Lessons learned from the project are shared at national and international levels including exchange visits hosted through south-south triangular cooperation: *This output* will ensure that best practices and lessons learned are collated, documented and disseminated at chiefdom, landscape and national levels to inform uptake of ILM practices in Eswatini and also to shares the project's results to enable others to benefit (scaling-up achievements post-project).

*Output 4.1.3:* will establish National multi-stakeholder platforms (AFR 100) to champion ILM practices in the country and to ensure that lessons learned from the project are shared at national and international levels. The momentum for large-scale restoration has never been stronger, as restoration is increasingly recognized as a key strategy to meet climate change and sustainable development goals. Eswatini can benefit from linking with and sharing global and continental initiatives, such as the African Forest Landscape Restoration initiative (AFR100), which was launched at COP21, the Bonn Challenge  and the *Land Degradation Neutrality* target working to accelerate sustainable landscape management. These highlight "No One Can Go It Alone on Restoration", reinforcing the links across these initiatives is essential to derive maximum value from the considerable technical, human and financial resources associated with each, while effectively supporting countries in meeting their environment and development objectives.

Under Output 4.1.4: A women and youth engagement protocol will be adopted for the project. Project gender and youth strategy implemented, monitored and reported.

#### **Theory of change**

The above alternative scenario can be summarized into a Theory of Change (described and graphically presented below):

The intervention logic for the project is premised on the understanding that resources will be deployed to implement the interventions (activities) to deliver outputs which in turn will lead to certain institutional and behavioral changes (outcomes) at the intermediate level provided that the assumptions and certain pre-conditions governing project implementation hold true. At the lowest level of the theory of change, necessary and sufficient interventions will be deployed to deliver outputs. The key assumptions underpinning this level of the theory of change is that there is political will for integrated landscape management, interest and commitment from the local communities. The next level of the theory of change, shows that outputs will lead directly to the delivery of the project

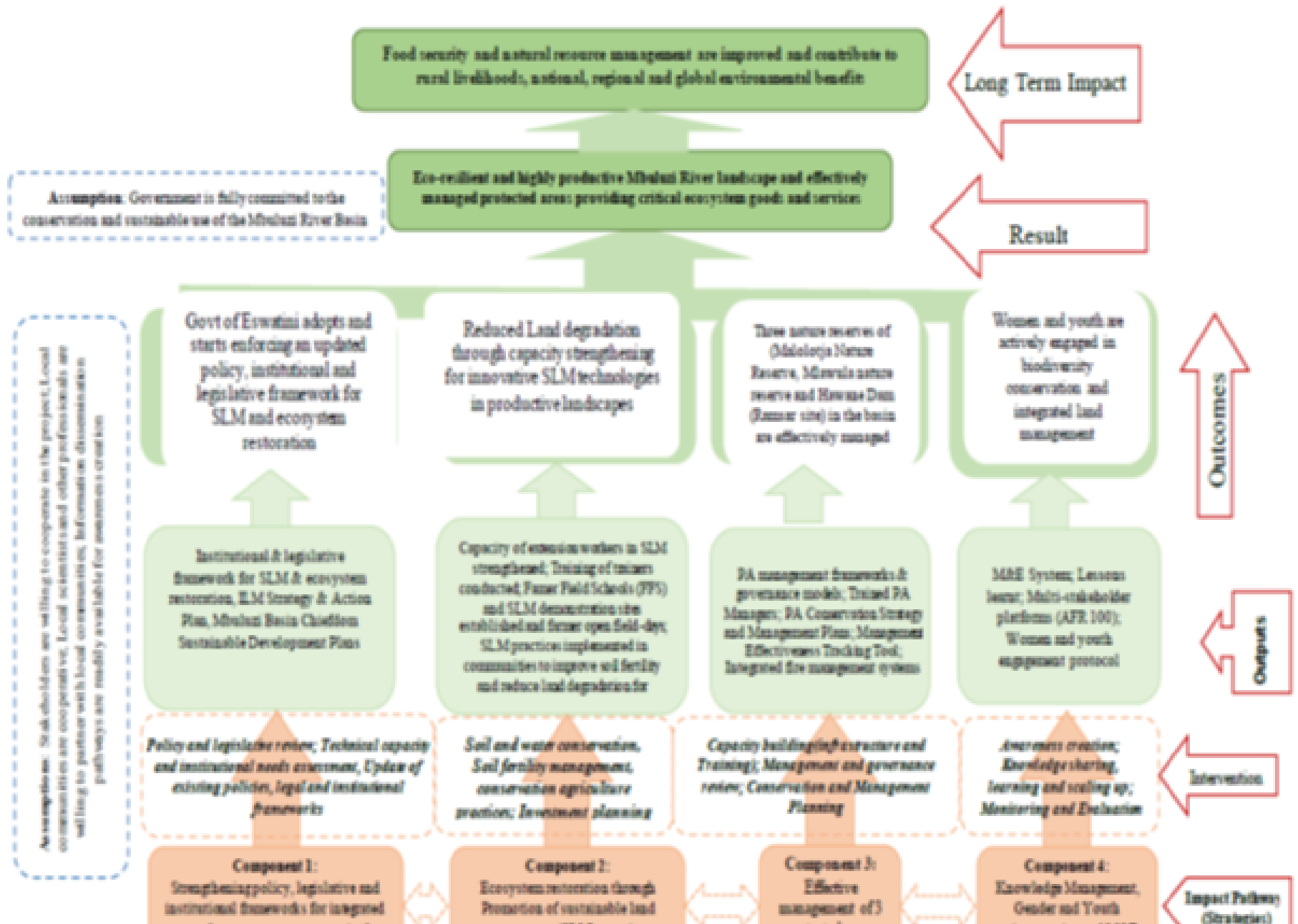
outcomes, namely: (a) the Government of Eswatini adopts and starts enforcing an updated policy, institutional and legislative framework for SLM and ecosystem restoration (b) Reduced Land degradation through capacity strengthening for innovative SLM technologies in productive landscapes across 60,700 ha of the Mbuluzi River Basin (c) Capacity strengthening for Effective management of the three nature reserves of (Malolotja Nature Reserve, Mlawula nature reserve and Hawane Dam (Ramsar site) in the basin is undertaken d) Active participation of women and youth in biodiversity conservation and integrated land management will directly lead to an eco-resilient and highly productive Mbuluzi River landscape and effectively managed protected areas providing critical ecosystem goods and services (Project Objective). The underpinning assumption here is that government is fully committed to the conservation and sustainable use of the Mbuluzi river basin. The outputs are deemed as sufficient and adequate to deliver the stated outcomes if the following assumptions are true: (i) Stakeholders are willing to cooperate in the project; (ii) Local communities are cooperative; (iii) Local scientists and other professionals are willing to partner with local communities; (iv) Information dissemination pathways are readily available for awareness creation. It is anticipated that delivery of the project objective will lead to the delivery of the anticipated project impact which is "Food security and natural resource management are improved and contribute to rural livelihoods, national, regional and global environmental benefits". In order to achieve the stated impact, factors/conditions (impact drivers) are necessary for the project to move from outcomes to delivery of impact: (i) target stakeholders exhibiting continuous commitment to integrated landscape management approaches; (ii) continuous engagement and ultimate ownership/buy-in of project activities by stakeholders; and (iii) project partnerships and personnel with key institutions/policy champions to drive political will necessary for policy change are stable.

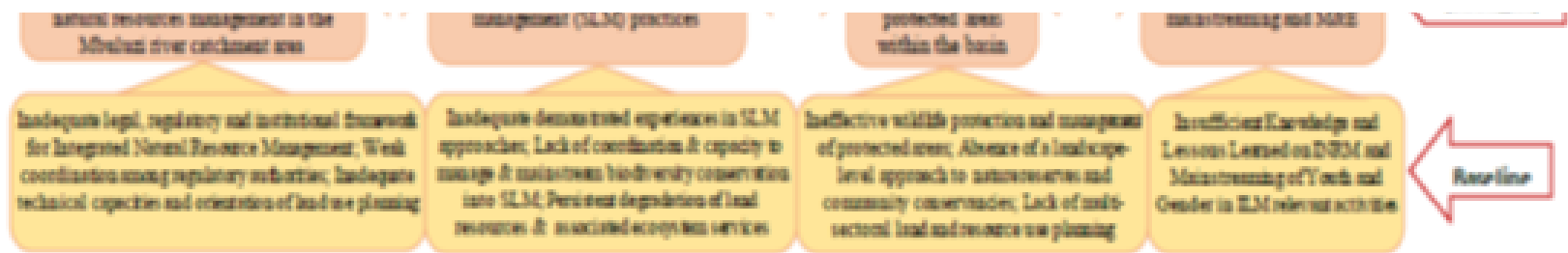
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[1] The Bonn Challenge is a global effort to restore 150 million hectares of the world's deforested and degraded land by 2020 and 350 million hectares by 2030. It is an implementation vehicle for national priorities such as water and food security and rural development while contributing to the achievement of international CC, BD and LD commitments. Underlying the Bonn Challenge is the forest landscape restoration approach, which aims to restore ecological integrity at the same time as improving human well-being through multifunctional landscapes.

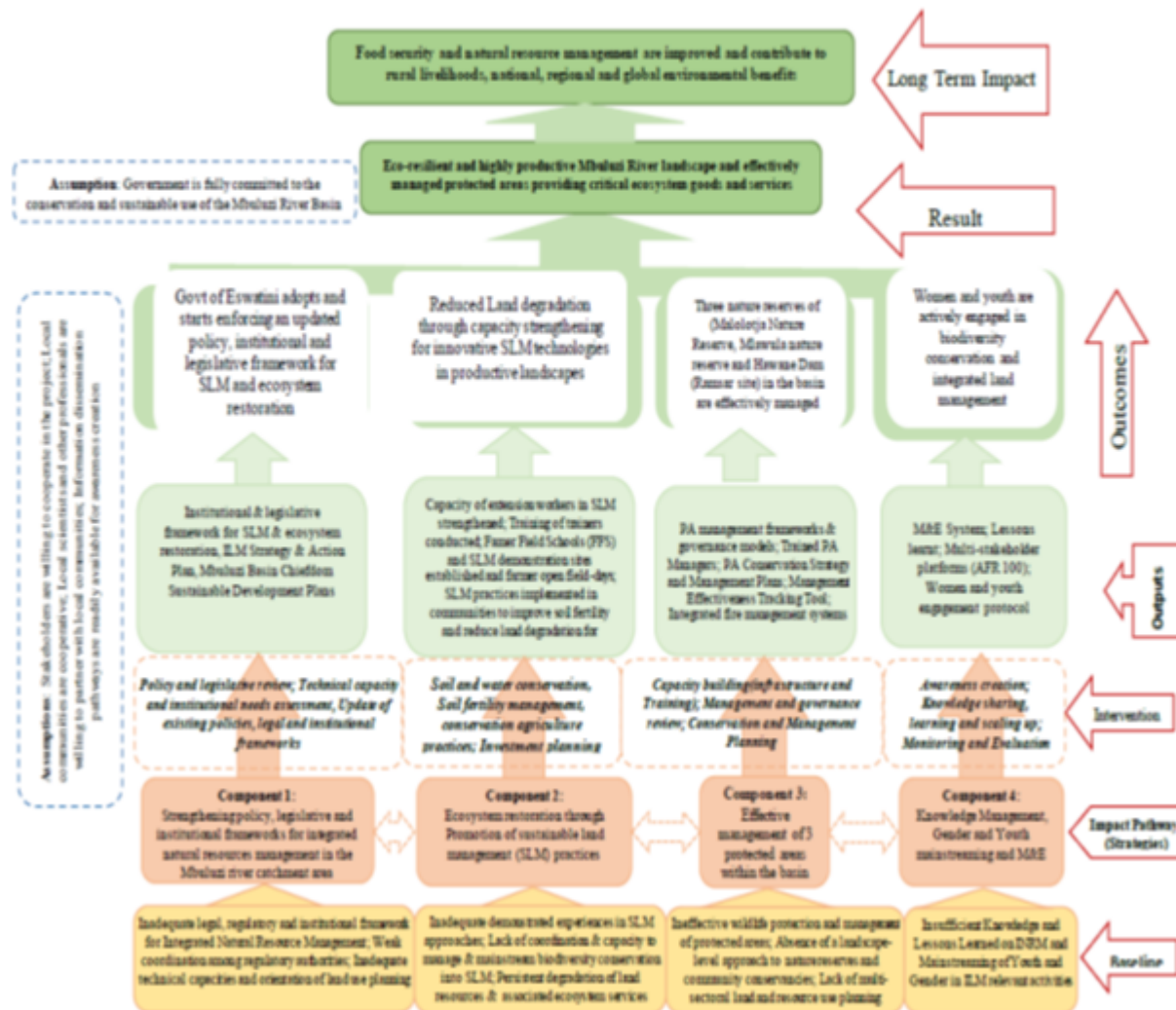


# Theory of change





## Theory of change



#### **1.4) alignment with GEF focal area;**

The proposed project is designed to contribute to the GEF goals of land degradation and biodiversity focal areas.

The project will aim at improving agro-ecosystem services and sustaining rural livelihoods through sustainable land management (LD 1-1), by bringing together local, sub-national and national stakeholders to jointly plan for and implement SLM measures, and in reducing competing land uses and increasing the resilience in landscapes and their users (LD 1-4) by pooling resources for SLM and thus establishing a coordinated scheme for programming to attain integrated sustainable land management in Mbuluzi River basin landscape.

The project intervention strategy contributes to achieving the LDN targets set by the government of Eswatini for 2030, particularly target 2, rehabilitate 600,000 hectares of degraded land to functionality by 2030. It is equally well-aligned to the LDN intervention strategies to achieve SDG 15.3 set by the parties to the UNCCD, such as a) rationalizing engagement with partners, overcoming fragmentation and systematically tapping into increasing finance opportunities; b) designing and implementing bold LDN transformative projects that deliver multiple benefits; and c) tracking progress towards achieving the LDN targets. The project will be doing so by facilitating participatory land use planning and by contributing to resolve issues relating to competing land uses, while supporting smallholders' livelihoods; and by developing and strengthening capacities to sustainably continue these approaches to maintain functional landscapes providing ecosystem services for all its users.

Beyond the targeted focal areas under land degradation, the project will have important additional environmental co-benefits. In applying sustainable land management approaches, the proposed project will contribute to the GEF biodiversity focal area strategy and the synergetic implementation of multiple objectives and in particular SDG 15.3.

Under component 3, the project will deliver global environmental benefits through improved management of 3 protected areas (Malolotja Nature Reserve, Mlawula nature reserve and Hawane Dam (Ramsar site) leading to species conservation in the basin. Hence making the project aligned with BD2.7. In addition, global environmental benefits will extend beyond these 3 Protected Areas, as efforts to scale up biodiversity conservation in Mbuluzi river landscape will be attained through component 2; outputs 2.1.5 in which tree planting in degraded communal lands and along riverine areas will be promoted to reduce land degradation and also under output 2.1.6 in which Capacity building of Community Forest Associations (CFAs) for community biodiversity conservation will be enhanced for them to continue with the forestry related activities at community level and consequently, indigenous forest/woodland restoration covering 700 ha in Mbuluzi catchment with livelihood benefits will be undertaken. Reforestation of degraded communal lands and along riverine areas will cause biodiversity enrichment and the return of species in these areas.

Embedding activities of this proposed GEF project into the government frameworks and planning process including the Chiefdom Sustainable Development Plans, will strengthen its impact on fostering the resilience of smallholders, livelihoods, and against the adverse effects of climate change. The combined landscape and livelihoods approach including tree planting of degraded lands, through the local processes, will be used to promote alternative and sustainable energy sources and will also advance local level knowledge that will broaden the beneficiaries' adaptive capacities.

#### **1.5) incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and co-financing;**

Eswatini has completed the process of setting LDN Targets, through a participatory process that involved multiple stakeholders. In full alignment with the National Targets, the project seeks to halt and reverse land degradation and promote the adoption of SLM in the Mbuluzi River Basin.

Investing in restoration of ecosystems and the establishment of sustainable agricultural production systems are all cost effective measures as they contribute to the reduction in costs of reversing the impacts of land degradation and biodiversity loss. Land degradation and habitat loss all result in extensive degradation of productive lands which could generate "environmental refugees" as communities move to find better lands. Such movements usually result in conflict which can be costly in terms of losses of human lives and productive resources and assets.



#### Scenario without GEF:

Without GEF-support, emphasis would be on supporting agricultural development and smallholders' livelihoods, without an integrated landscape management approach, targeting improved ecosystem services as the underlying foundation for resource users' livelihoods. Beneficiaries would mainly derive local environmental benefits from local planning and co-management of natural resources, without realizing global environmental benefits through integrated planning, policy and legal reforms and incorporation of community-led, district and national level natural resource management approaches. However, the GEF project will not have a strong focus on governance reform, but the focus will be on bottom-up work and coalition building and bringing about solutions and improvements at the local level, empowering communities and chiefdoms to address these issues. Where necessary, national level regulations and their changes will become part of the small sub-component on institutional work under component 1. Without GEF support, a global connection to best practices would be missing: globally used knowledge management on how to achieve the LDN targets and M&E tools for the land degradation would not be integrated into the national strategies and local stakeholders would not be knowledgeable about the underlying concepts and how to meaningfully contribute their own expertise in providing data to these tools.

#### Scenario with GEF:

The GEF financing will facilitate the integration of initiatives on combating land degradation - extending integrated planning/management of natural resources to the landscape level - focusing on strategies and activities that generate benefits for the global environment contributing to the productive landscape and ensuring food security for the targeted beneficiaries and achievement of LDN. GEF resources will be used for connecting critical pieces of knowledge and innovation globally to local application through SLM coalitions including Multi-stakeholder platforms (AFR 100) to champion INRM practices in the country, while influencing the enabling policy, legal and institutional framework to integrate lessons learned around local engagement in landscape management approaches. Proposed investment will be designed to strongly contribute to the national LDN goals, target the ecosystem restoration of the basin and ensuring effective management of the 3 protected areas within the basin, while contributing to local resilience opportunities through improved food security and livelihoods diversification. The proposed alternative is based on a holistic and integrated landscapes and livelihoods approach with specific interventions. The high-level decision to adopt landscape management therefore presents tangible opportunities for the solutions to the landscape degradation problem to be devised at the most appropriate level and for the specific environmental degradation problems to be well-understood before solutions are crafted.

#### **1.6) global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF); and**

The project is designed to support the country's transformational agenda to achieve greater environmental and economic security. It will primarily support both government, NGOs and community-led efforts in sustainable land and biodiversity conservation and catalyze associated behavioural change within the Mbuluzi River basin landscape, while raising capacities to promote long-term climate resilient development and to achieve biodiversity co-benefits through applied and integrated SLM approaches. It will take a landscape management approach, informed by lessons learned on the interlinked challenges of poverty, ecosystem services, climate change, biodiversity, institutional performance, governance, and community-based engagement and management. GEF support will be fully blended with government and NGO resources to fund locally driven planning and replicable, innovative actions, that will lead to the attainment of the following global environmental benefits:

(a) the project will have impact over 95,700 hectares including:

- 700 ha of forest restoration.
- 60,000 ha of restored agricultural land through SLM practices,
- 35,000 ha of terrestrial protected areas under improved management for conservation and sustainable use

(b) 100,000 beneficiaries (50% ♂ and 50% ♀) are expected to benefit from project activities

The results of the proposed project will pave the way for similar improvements nation-wide leading to the achievement of LDN voluntary targets and improved flow of ecosystems goods and services. The project will contribute to the following National Voluntary LDN Targets: (i) Reduce current annual loss of forest to cropland of 9.1 km<sup>2</sup> to 4 km<sup>2</sup> by 2022 and achieve 0 km<sup>2</sup> forest loss by 2030; (ii) Increase forest cover through Afforestation/Agroforestry in existing forest; areas of shrubs/grassland; croplands by 465,290 ha; (iii) Improve by 50% productivity and SOC stocks in cropland and grasslands by 2030 as compared to 2015; and (iv) Rehabilitate 115,000 ha of degraded and abandoned land for crop production by 2030.

More specifically, the project will lead to the development of chiefdom land use plans covering the basin. It will also lead to improved land management introducing and promoting the use of SLM and SFM practices. At least 100,000 people will benefit directly from the project. Among the beneficiaries, at least half will be women. The project will also assist the country in combating land degradation and moving towards LDN. A knowledge management system to widely disseminate the lessons arising from the pilot tests will be carried out. The project will also bring about the protection of valuable ecological resources such as arable land through the enforcement of land use plans, buffer zones, and riparian strips. This, in turn, will lead to the restoration and renewal of the natural habitats of a number of plant and animal species and valuable ecosystem services. In addition, land productivity, in various forms, will be enhanced. As a result, globally significant biodiversity will be conserved, valuable ecosystem services will be safeguarded and land under sustainable agricultural production will be increased.

The project will put in place measures to strengthen the enforcement of wildlife protection laws, with the main priority being the protection of globally significant and threatened species against poaching and illegal harvesting. This outcome of the project is expected to produce tangible conservation benefits for endemic plant and animal species which are critically endangered such as *Warburgia salutaris*, *Encephalartos striatus*, *Aloe albida*, *Protea comptonii* and *Gardenia thunbergia* that are under threat from poaching and overexploitation. The project will support Local communities to benefit from enhanced services provided by maintaining and enhancing the integrity of ecosystems. In addition, the project will support activities that will lead to improved management of a total of 34,500 ha of protected areas. Improved management of these protected areas will help to maintain globally significant biodiversity and ecosystem goods and services.

The project also will contribute to Eswatini's achievement of the CBD 2020 Aichi Targets mainly through Target 12, as the project contributes to reducing the loss of known threatened species, and possibly preventing their extinction across the landscapes; and will also contribute to other Aichi targets as follows: Target 4, to the extent that the project will engage governments, business and various other stakeholders to manage biodiversity within safe ecological limits (e.g. through site management activities); Target 11, as the project will contribute to improving the management effectiveness of the PA system; and Targets 14 and 15, as the project support the enhancement of ecosystems' functions, structure and resilience, including in the face of climate change.

The Global Environmental Benefits that will be generated from project implementation include the sustainable management of natural resources and critical habitats in an integrated manner providing development and environmental benefits. The implementation of the proposed project will have an immediate global environmental benefit through the rehabilitation and restoration of degraded lands in the basin.

### **1.7) innovation, sustainability and potential for scaling up.**

The multisectoral approach used in designing this project will facilitate the collation and use of the outcomes and recommendations from a plethora of GEF funded projects that have been implemented in Eswatini over the years to develop activities that enhance integrated management of common resources such as land and forests for purposes of advancing local development. The project is therefore innovative in that it breaks out of the "silo mode" that most development projects have been developed and implemented in over the years. This project will learn from the experiences of others who are already implementing the approach, mainstreaming the landscape approach into locally used systems of land use planning. It will also serve to build national capacity to implement Eswatini's commitment to the Land Degradation Neutrality target of the UNCCD.

The proposed project is intended to build upon prior investments through the GEF. Community members in the Mbuluzi have been sensitized to the need and value of local action through initiatives such as the construction of sand and earth dams to improve availability of water, and these techniques will now be demonstrated through experiential hands-on learning. The project also includes training and capacity building of individual farmers and representatives of institutions charged with planning and implementation of water and biodiversity management at the Basin level. This approach will ensure that actions taken under this project will be developed with the full participation of beneficiary communities sustained beyond its lifespan. The proposed documentation and dissemination of the results from project implementation is expected to facilitate scaling up of the project to other larger River Basins in Eswatini. It will also inform activities in neighbouring Mozambique, which forms part of the Mbuluzi river system.

The project will provide a platform for strengthening coordination towards LDN and biodiversity conservation. In the face of growing challenges, there will be a growing need for awareness on the importance and value of biodiversity conservation and environmental protection, particularly among local communities who are the custodians as well as consumers of wildlife products. Increasing greater participation of local communities in conservation purposes will be useful to maintain the integrity of land, conserving biodiversity and achieving LDN in the future. Innovation through use of audio-visual, social media and interactive materials on conservation issues for education, awareness and advocacy will be developed, involving community-based organizations and building their capacities to reach out to the communities.

### Sustainability

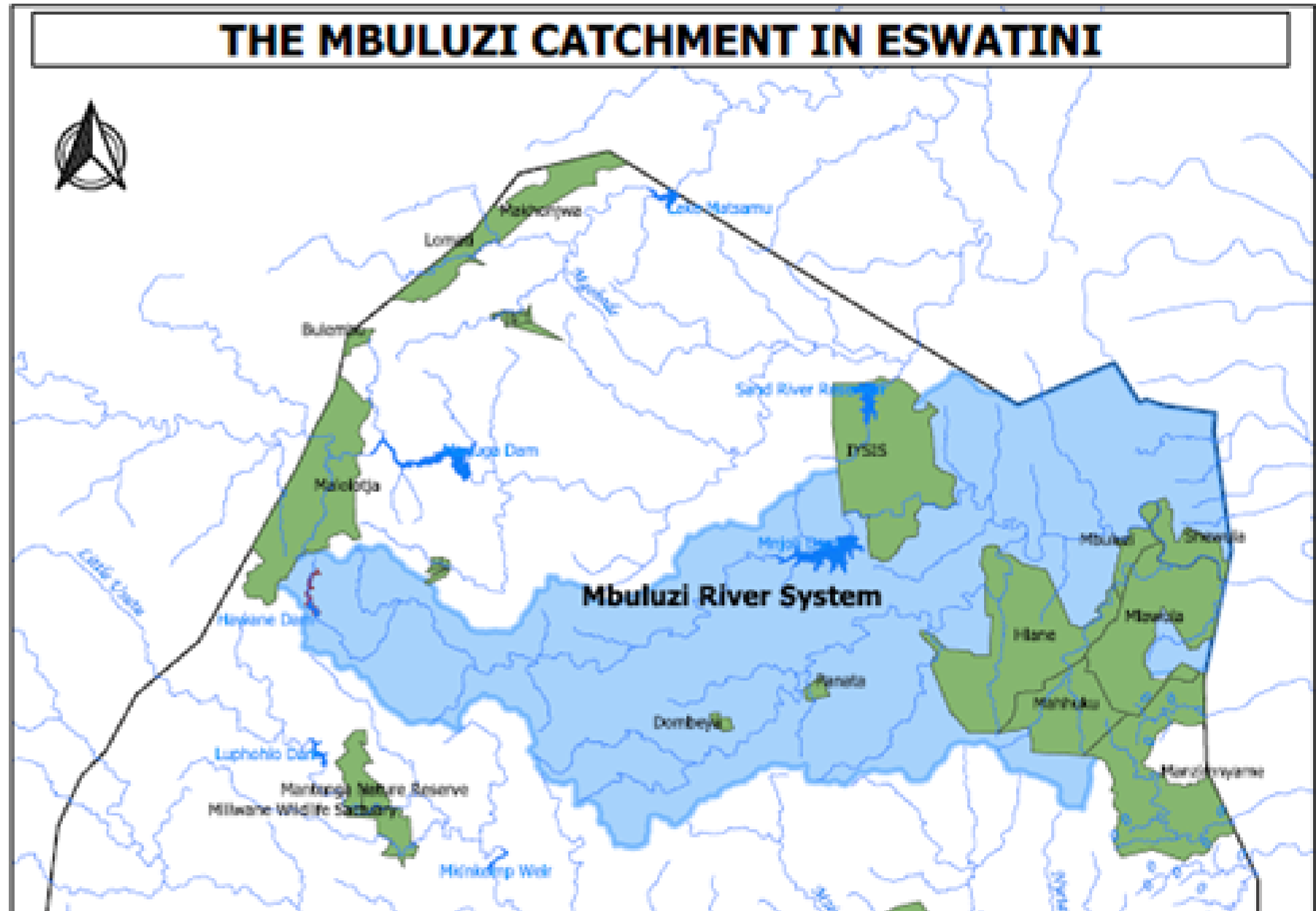
As the project builds a strong enabling environment taking into account the needs of the government sector and focusing on building their capacities for long term effective management, the actions proposed are expected to be sustainable. The project will work closely and in full partnership with central and local governments and local communities and the parastatals, which will be reinforced and strengthened engagement with local farmers cooperatives in terms of training for new approaches and managing competing land uses. This will create a better climate for sustainability.

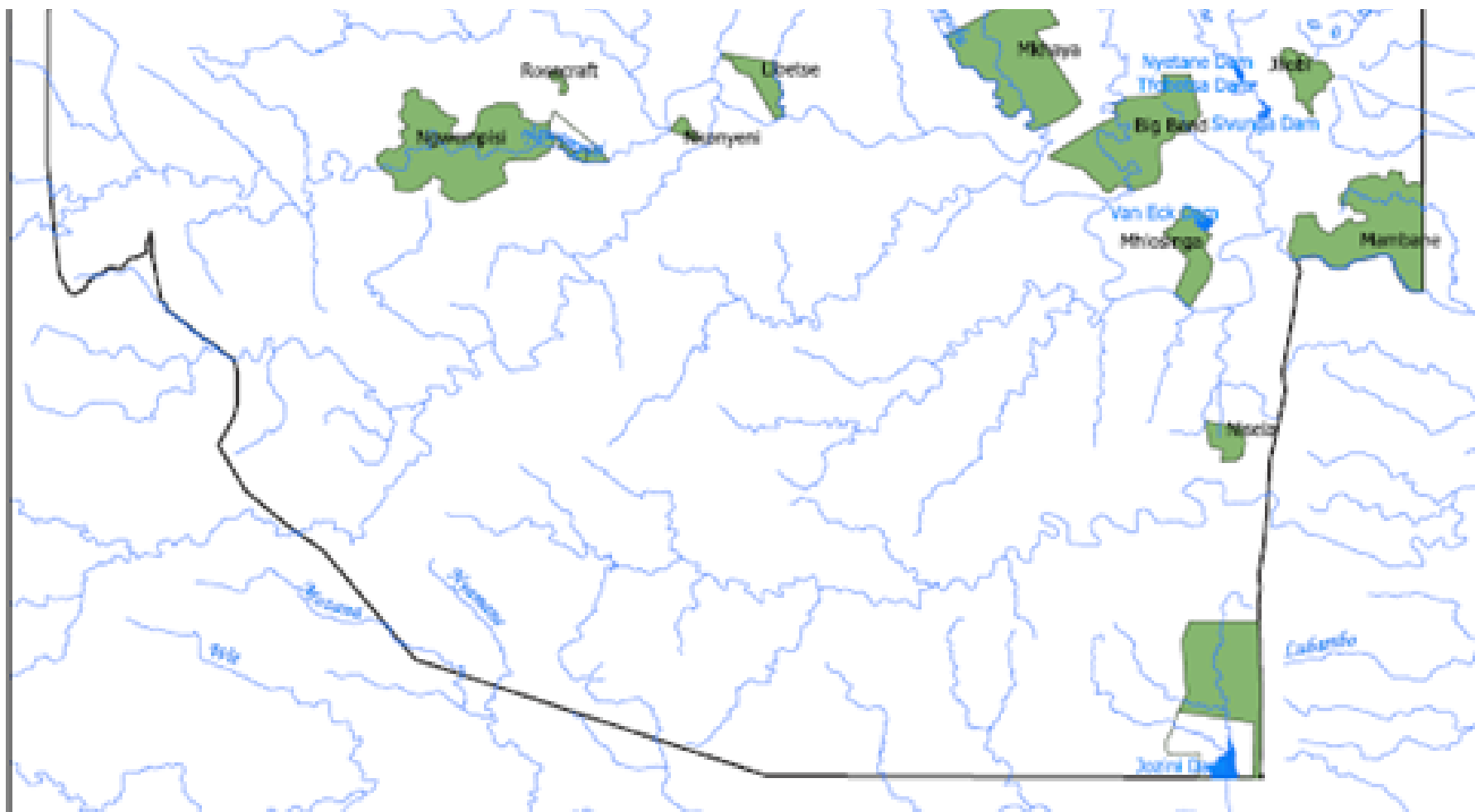
### Scaling up

The project approach is to develop the enabling environment and then test/demonstrate the resulting elements in pilot project situations. The SLM Pilot project sites will be selected based on numerous factors including significant tree cover loss, socio-economic, bio-physical and major agro-ecological zones. The pilot sites will be tried in various centers to understand the successes and challenges in implementing SLM measures. In order to be impactful, LDN will be mainstreamed in development sectors resulting in investments in SLM/SFM by private sector developers like Teak Timbers, to prevent further land degradation. Lessons learnt and experiences will be shared in order to reduce the cycle from innovation to replication. In order to do so, component 3, will ensure the dissemination for replication and scaling up of results, innovative approaches and achievements. These mechanisms will provide the means for scaling-up and replicating best practices for rehabilitation of degraded land, the prevention of further degradation and achievement of land degradation neutrality.

## 1b. Project Map and Coordinates

Please provide geo-referenced information and map where the project interventions will take place.





10 0 10 20 30 40 km

### Legend

— River

■ Dam

■ Ramsar Site

■ Protected Area

■ Mbuluzi Catchment

## 2. Stakeholders

Select the stakeholders that have participated in consultations during the project identification phase:

Indigenous Peoples and Local Communities Yes

Civil Society Organizations Yes

Private Sector Entities Yes

If none of the above, please explain why:

This project concept has been developed by the Eswatini National Trust Commission in close and direct consultation with Ministry of Tourism and Environmental Affairs and the Ministry of Agriculture with technical assistance from UNEP.

In September 2019, the UNEP Task manager travelled to ESwatini and held consultation meetings with Eswatini National Trust Commission, the Ministry of Tourism and Environmental Affairs and the Ministry of Agriculture. Thereafter, UNEP continued holding virtual meetings with the partners. However, these were more of informal meetings and minutes were not made.

During the project identification phase, other government departments have been closely engaged to establish the most effective coordination arrangement. CSOs and private sector have been consulted, in particular those working in the relevant key sectors. It is worthwhile noting that stakeholder consultation is a continuous process. The list of consulted stakeholders is as detailed below.

Table 2.1: List of Stakeholders consulted, their contacts and the dates of meeting.

	CONSULTATIONS WITH THE DEPARTMENT OF FORESTRY 6 <sup>TH</sup> NOVEMBER 2019, MINISTRY OF TOURISM AND ENVIRONMENTAL AFFAIRS BOARD ROAAM		
1.	Hlobsile Sikhosana	Ministry of Tourism and Environmental Affairs	<a href="mailto:hlobskhos@yahoo.com">hlobskhos@yahoo.com</a>
2.	Nkosinathi Jele	Department of Forestry	<a href="mailto:jelebritewell22@gmail.com">jelebritewell22@gmail.com</a>
3.	Mbhekeni Nxumalo	Department of Forestry	<a href="mailto:sanelisiwemamba@gmail.com">sanelisiwemamba@gmail.com</a>
4.	Ncamiso Ngcamphalala	Ministry of Tourism and Environmental Affairs	<a href="mailto:bandzie@gmail.com">bandzie@gmail.com</a>
	CONSULTATIONS WITH DEPARTMENT OF WATER AFFAIRS 14 <sup>TH</sup> NOVEMBER 2019, MINISTRY OF NATURAL RESOURCES		
1.	Spencer Green-Thompson	Department of Water Affairs	<a href="mailto:greenthompsons@gmail.com">greenthompsons@gmail.com</a>
2.	Limbo Dlamini	Department of Water Affairs	<a href="mailto:limbohlubi@gmail.com">limbohlubi@gmail.com</a>
3.	Mangaliso Dlamini	Department of Water Affairs	<a href="mailto:d.mangaliso@ymail.com">d.mangaliso@ymail.com</a>
4.	Hlobsile Sikhosana	MTEA	<a href="mailto:hlobskhos@yahoo.com">hlobskhos@yahoo.com</a>
5.	Thulani Methula	ENTC	<a href="mailto:methulani@gmail.com">methulani@gmail.com</a>
	CONSULTATIONS WITH MINISTRY OF AGRICULTURE 13 <sup>TH</sup> NOVEMBER 2019		
1.	Hlobsile Sikhosana	Ministry of Tourism and Environmental Affairs	<a href="mailto:hlobskhos@yahoo.com">hlobskhos@yahoo.com</a>
2.	Howard Mbuyisa	Ministry of Agriculture	<a href="mailto:howardveli@yahoo.com">howardveli@yahoo.com</a>
3.	Daniel Dhladhla	Ministry of Agriculture	<a href="mailto:luthini2@gmail.com">luthini2@gmail.com</a>
4.	Sipho Shiba	Ministry of Agriculture	<a href="mailto:sthokozane@yahoo.co.uk">sthokozane@yahoo.co.uk</a>
5.	Bongani Magongo	Ministry of Agriculture	<a href="mailto:bhmagongo@yahoo.com">bhmagongo@yahoo.com</a>
6.	Thulani Methula	SNTC	<a href="mailto:thulani.methula@sntc.org">thulani.methula@sntc.org</a>
7.	Seth Maphalala	SNTC	<a href="mailto:tfca@sntc.org.sz">tfca@sntc.org.sz</a>

8.	Gcina Dlamini	SNTC – SNPAS	<a href="mailto:gcina.dlamini@undp.org">gcina.dlamini@undp.org</a>
CONSULTATIONS WITH CIVIL SOCIETY, 11 FEBRUARY 2020, HAPPY VALLEY HOTEL			
1.	Bhekisisa	COSPE	<a href="mailto:bmb.lpc.cospe@gmail.com">bmb.lpc.cospe@gmail.com</a>
2.	Zama Maziya	COSPE	<a href="mailto:zjozane@gmail.com">zjozane@gmail.com</a>
3.	Sibhamu Tsabedze	RMI Swaziland	<a href="mailto:sibhamu@rmiservices.net">sibhamu@rmiservices.net</a>
4.	Jerry Nxumalo	RMI Swaziland	<a href="mailto:jerrynxumalodm@gmail.com">jerrynxumalodm@gmail.com</a>
5.	Notsikelelo Malindzisa	SWADE	<a href="mailto:notsikelelo@swade.co.sz">notsikelelo@swade.co.sz</a>
6.	Lynn Kota	SWADE	<a href="mailto:lynnkota@gmail.com">lynnkota@gmail.com</a>
7.	Norman Mavuso	SWADE	<a href="mailto:norman@swade.co.sz">norman@swade.co.sz</a>
8.	Enock Dlamini	ACAT	<a href="mailto:emdlamini@acat.org.sz">emdlamini@acat.org.sz</a>
9.	Tsakasile Dlamini	PERLUM Swaziland	<a href="mailto:tsakasiledlamini@gmail.com">tsakasiledlamini@gmail.com</a>
10.	Gugu Mthimkhulu	Irrigation Africa	<a href="mailto:gugu.mthi@gmail.com">gugu.mthi@gmail.com</a>
11.	Titus Dlamini	ECOTONE	<a href="mailto:titus.dlamini0727@gmail.com">titus.dlamini0727@gmail.com</a>
CONSULTATIONS WITH ICRAF, world vision and evergreening global alliance in Oct, Nov and Dec 2020 and Jan 2021			
1	Chomba, Susan	ICRAF	<a href="mailto:S.Chomba@cgiar.org">S.Chomba@cgiar.org</a>
2	Winowiecki, Leigh Ann	ICRAF	<a href="mailto:L.A.WINOWIECKI@CGIAR.ORG">L.A.WINOWIECKI@CGIAR.ORG</a>
3	Sinclair, Fergus	ICRAF	<a href="mailto:F.Sinclair@cgiar.org">F.Sinclair@cgiar.org</a>
4	Vagen, Tor-Gunnar	ICRAF	<a href="mailto:T.VAGEN@CGIAR.ORG">T.VAGEN@CGIAR.ORG</a>
5	Janice Lucas	Evergreening Global Alliance	<a href="mailto:janice.lucas@evergreening.org">janice.lucas@evergreening.org</a>
6	Upenyu Mawande	Evergreening Global Alliance	<a href="mailto:upenyu.mawande@evergreening.org">upenyu.mawande@evergreening.org</a>

In addition, provide indicative information on how stakeholders, including civil society and indigenous peoples, will be engaged in the project preparation, and their respective roles and means of engagement

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The civil society will facilitate for the strengthening of relationships between the various stakeholders and the local communities, especially those that depended on the area for sustenance. Community development projects; establishing alternative livelihood projects in the key buffer communities; conducting regular assessments of the economic benefits that can be provided to communities; supporting the provision of access to training opportunities in agriculture and business in collaboration with key development stakeholders; creating linkages to marketing opportunities; and developing entrepreneurship through partnership. The civil society will also assist in the development of benefit sharing mechanism for the local communities which will ensure access to the natural resources in a sustainable manner

**Table 2.2 List of Stakeholders and their roles and responsibilities in project implementation**

<b>Stakeholder Name</b>	<b>Proposed/Expected Role(s)</b>
Ministry of Tourism and Environmental Affairs	The Ministry of Tourism and Environmental Affairs will serve as the Project Executing Agency. The Ministry will chair the Project National Steering Committee and be responsible for accounting for project activities and resources to UNEP-GEF. It also houses the Forestry department which will be responsible for implementing reforestation, afforestation and activities to eradicate alien invasive species.
Ministry of Agriculture	The Land Use Planning section of the Ministry will be responsible for monitoring land degradation and catchment rehabilitation
Ministry of Natural Resources and Energy	The Ministry of Natural Resources and Energy (MNRE) will provide technical advice on integration of renewable and alternative energy systems into the production cycle. Through the Surveyor General's department, the Ministry will be responsible for activities to apply GIS and other technologies for the production of maps for natural resources.
Ministry of Tinkhundla Administration and Development	The Ministry will be responsible for coordinating Chiefdom Sustainable Development Plans and the mobilization of communities and traditional leaders.
Eswatini National Trust Commission	The Eswatini National Trust Commission (SNTC) is responsible for managing protected areas and wetlands that are located in the upper catchment of the Mbuluzi River. It also houses the Parks Service.
Private Sector companies	Private sector companies involved in the forest and sugar industry will provide technical advisory services for catchment management through their corporate social responsibility programmes.
Peak Timbers	Through its sustainable land management programme, Peak timbers will contribute to the project by providing technical support to communities under output 2.1.5 on Tree planting in degraded communal lands and along riverine
National Maize Corporation	National Maize Corporation is involved in purchase, storage and marketing of maize from local farmers. It does this through local farmers associations and groups. It will participate in the project by assisting information of farmer groups and platforms and providing technical support in training and functionality and operationalization of these farmer groups. It will also provide technical training in post-harvest handling.
ICRAF	International center for Research in Agro-Forestry (ICRAF) will provide advisory services to the government on tree planting, land degradation and soil surveys as to which tree species to plant where, when and why.
Eswatini Meat Industries Limited	Eswatini Meat Industries Limited will work with the project to train livestock farmers on Sustainable Feed and Fodder Production and Utilization to small scale livestock farmers including those in communal grazing lands.
World Vision	Will participate in the project by promoting community livelihood programmes to relieve pressure from reliance on natural resources. Projects and activities include land rehabilitation, donga reclamation, tree planting, community gardens, portable water supply and sanitation.
Academic and Res	The project will engage academic and research institutions such as the University of Eswatini (UN



Research Institutions	ESWA) to provide advisory and research services to address the impacts of phenomena such as climate change on the integrity of ecosystems in the basin.
UNEP	Project Quality Assurance and co-financing. Will also provide technical advice.
Traditional leaders	Traditional Leaders (Thinkundla) are responsible for developing Chiefdom Development Plans which have direct implications for land management. These institutions will be enlisted to participate in activities to promote sustainable land management in the Mbuluzi catchment.
Farming Associations	The project will facilitate the grouping and formulation of Farmers Associations in the Mbuluzi Basin. Small-scale farmers making use of water in the Mbuluzi Basin without water permits will be registered and supported to secure formal water use rights through the Department of Water Affairs. These Associations will be responsible for ensuring environmental integrity of the basin by contributing to the management and implementation of planned community-based environment management activities.
Community Groups	Existing community-based organizations/groups will be strengthened to implement environmental management projects at chiefdom level. They will support activities such as removal of alien invasive plants and reforestation and will be beneficiaries of livelihoods initiatives piloted in the Mbuluzi catchment.
Farmers	Farmers will be beneficiaries of livelihoods initiatives piloted in the Mbuluzi catchment. They will be assisted to form Farmers Associations and or groups and their capacities will be strengthened through training in SLM and INRM practices. They will provide their farms to act as demonstration sites. Farmer field schools will be established with the support of farmers.

### 3. Gender Equality and Women's Empowerment

Briefly include below any gender dimensions relevant to the project, and any plans to address gender in project design (e.g. gender analysis).

Much has been publicized about the effects of land degradation. Focus has been placed on the impacts of land degradation and climate change on food production and on hydrology and water resources. The impact that does not receive the attention it deserves is the amplification of inequalities, particularly for women.

A large body of literature points to the fact that natural disasters are not gender neutral; that extents of vulnerability to environmental challenges differ among men and women. According to Tanele Dlamini (2017), women pay a higher cost of environmental degradation in Eswatini. First, women make up 53% of the population in a country with 63% of the population living in poverty, therefore solving their problems is solving the problems of the majority. Second, statistics support that women are amongst the most vulnerable in the country and it is the vulnerable groups which experience an intensification of challenges under additional vulnerability to the environment. The Eswatini Household Income and Expenditure Survey 2009/10 reported female-headed households as having higher poverty incidence at 67% when compared to their male counterparts at 59%. Furthermore, the Labour Force Survey provides that between 2001 and 2010, unemployment for women rose from 29.7% to 31.3% while for men there was a decrease from 29.7% to 25.7%. Suffice to say, women need distinctive consideration.

Noting that 70% of the population reside in rural areas and that 89% of the poor live in rural areas in an economy which is predominantly depend on agriculture; land degradation and pro-longed drought result in disturbing levels of food insecurity. Drought truncates rainfall and limits arable land. Drought adds strain to already fragile rural households predominately deriving their livelihoods from subsistence agriculture. Moreover, drought further limits access and control over resources. Women's increased vulnerability to climate change is connected to the fact that women have fewer resources and therefore low adaptive capacities. In Swaziland, women generally have lower economic status than men as the 2013-2014 Draft Labor Force Survey indicates that male earnings are 67% higher than those of women. Additionally, the survey indicates female labour participation rate at only 45% and women participation in the labour force as lower in all the regions as well as across rural and urban dimensions.

Tichagwa (1994) advances reasons why droughts are more harmful to women than men. Tichagwa advocates that drought can have economic, social, health, and environmental effects on women. His argument centers around the notion that women's workload increases in times of drought. Women are primarily responsible for meeting the food needs of the family. In times of drought, rural women have to walk longer distances to fetch water and firewood (often on foot) and this poses health risks. To evidence this, the Swaziland Multiple Indicator Cluster Survey (MICS) 2010 confirms that for households without drinking water on premises, those typically responsible for collecting drinking water was 69% women. Women have unique expertise and experience as they also pass on their skills to their children on how to manage water collection and how to collect firewood, skills are a vital household asset – especially during drought.

Promoting gender equality and empowering women is a stand-alone goal in the Sustainable Development Goals (SDGs). This shows commitment to gender-focused approaches to tackling world challenges including climate change. SDG Goal 5 is dedicated to achieving gender equality and empowering all women and girls. Goal 5 links with several goals such as Goals 1 (no poverty); Goal 2 (zero hunger); Goal 3 (good health and well-being); Goal 4 (quality education); Goal 6 (clean water and sanitation); Goal 8 (good jobs and economic growth); Goal 10 (reduced inequalities); Goal 13 (climate action) and Goal 17 (partnerships for the goals). This relationship with numerous others goals gives the indication that a gendered perspective is a critical lens necessary to solve developmental problems to accelerate the Kingdoms efforts to become a developed country.

Locally, so much more work needs to be done for gender-specific strategies to be identified, and effectively implemented. Linkages between gender, environmental conservation, agriculture and land degradation and ecosystem restoration remain in need of greater recognition. Adaptive interventions need to bear in mind the cultural norms; unequal distribution of roles, resources and power. This builds the case for strategies which need to mark the appropriate target. The same economic and societal roles that make women more vulnerable to the effects of land degradation and biodiversity loss are also the same key challenges which mark women as key actors for driving sustainable development.

To-date, the Eswatini National Development Strategy (NDS) pronounces that the country mainstreams biodiversity conservation, and SLM into national development and sectoral planning and budgeting. In executing its role of developing and strengthening legal and institutional framework for biodiversity conservation and SLM, the national trust commission and the ministry of agriculture need to pay particular attention to women, their needs and their unique experience.

There is need to reduce gender disparities in natural resource management, the socio-economic differences between men and women need more vigorous interrogation so as to ease gender roles which increase vulnerability to environmental shocks. At the first instance, there is need to assess the socio-economic differences which need to be understood for natural resource management. Secondly, women need appropriate representation at all levels of natural resource

management agreements in order to contribute their distinctive experience. Environmental conservation Projects and programme interventions must not exclude women as they are powerful change agents. Through a gendered review of strategies, Swaziland can address a range of environmental issues. Sustainability and effectiveness of natural resource management projects and policies can be strengthened through women's greater participation. As Carvajal-Escobar, Quintero-Angel & M. Garcia-Vargas (2008) put it, women tend to be very effective at mobilizing communities and have a clear understanding of what strategies are needed at the local level. This defines the next move that is necessary, it is to craft out women's role in enhancing ecosystem restoration of Mbuluzi River landscape through promotion of SLM and effective management of protected areas within it.

The population of Eswatini is predominantly rural (77%) with the majority being women. Women are therefore affected by the impacts of the weak national economy and high unemployment levels in a disproportionate manner. Productive resources like land are also unevenly distributed in favor of men thereby condemning women to the impacts of poverty and food insecurity. Recent trends increasingly recognize the role that women play in national development planning. The proposed project recognizes the focus of His Majesty King Mswati III's Vision 2022 and the National Development Strategy both of which seek to promote gender equality and social integration in line with the provisions of the following SDG's: poverty (1), gender equality (5), and inclusive and sustainable growth (8). To support this vision, during the PPG phase, a gender assessment will be undertaken and a project specific gender mainstreaming plan will be developed in close collaboration with women's groups and associations in the country. A detailed analysis gender issues in the basin will be conducted during the PPG stage and a gender action plan for the project will be developed.

The project recognizes the importance of both men and women's active participation in adapting to the future changes the kingdom faces from environmental degradation and other external threats, and in addressing the ongoing challenge of securing rights to land and resources to provide sustainable livelihoods for their families and improving their ability to make strategic life choices. The project, also, recognizes the role of women, as primary users and stewards of many natural resources, in environmental protection, as well as in productive systems in sustainable agriculture and forestry. It supports actions to increase women's voice in the dialogue and decision-making over natural resources. It will ensure that women are equally represented in governance bodies of the 3 targeted protected areas. Additionally, while working to empower indigenous people and local communities living in and around protected areas, the project will give specific attention to include women as well as men. The project will seek to (a) analyze and identify any project-relevant gender differences as well as opportunities to empower women relevant to the project outcomes.

There is inadequate knowledge from Eswatini on: (a) integration of indigenous women's perceptions into policy; (b) resource data on access and ownership, especially within communal lands and impacts; and (c) forest conflicts and their impacts. The Project will participate in furthering the knowledge and finding innovative ways of dealing with gender issues in the kingdom. The project will also develop gender sensitive strategies during project preparation. More particularly, within each component, gender issues will be considered. For example, in Component 3, to strengthen protected area management and increase participatory governance and planning, the program will use appropriate mechanisms to enroll women in protected area governance, as men are often seen as the family representative, leaving no room for women's participation in public spheres. Relative to Component 2, gaps will be identified to ensure that technical support for SLM is provided to both men and women alike and that women can participate, as women often have an important role traditionally in agroforestry, farming and land management. For Component 1, analysis of gaps in policies and legal frameworks will also identify gender gaps so that improvements include specific measures where needed for women and vulnerable groups, for example considering the issue that women are less likely to have official documents, which may impede their ownership of land. Component 4 and the coordination project will develop specific strategies and guidelines for ensuring projects develop gender sensitive activities. Specific gender related studies will be considered as deemed appropriate during the project's implementation and advised by the program steering committee. Program monitoring will measure number of female beneficiaries and will aggregate other gender related indicators as specified by each outcome.

During the project preparation, these aspects will be further detailed.

The project will help smallholder farmers produce more, higher-quality food and connect with new markets. The vast majority of Eswatini's 1.2 million people depends on subsistence farming and the years of economic slowdown, a devastating AIDS pandemic and recent droughts linked to climate change have made it increasingly hard for the rural population to live off the land. According to FAO's most recent hunger figures, one in three people in Swaziland is undernourished. Improving the food security and nutrition of vulnerable communities and helping small holder farmers move away from subsistence farming are key objectives of the Eswatini Agricultural Development Project (SADP), which is focused on creating a vibrant commercial agricultural sector and the project will strive to contribute to this. The project will focus on the most vulnerable, particularly the elderly, women and the youth. Household gardens allow vulnerable families to grow vegetables for their own consumption, or to sell within the community. Women and Youth groups will get technical assistance to set up small agribusinesses, including poultry farming, pig raising, or vegetable and crop production. Generally, the project will be disseminating good

agricultural practices among Swazi smallholders, helping them to grow more, better-quality produce while preserving the environment and reducing pressure on limited natural resources. Farmers will be trained in such good practices as conservation agriculture, agro-forestry and seed multiplication. In addition, construction and rehabilitation works in the livestock sector, water infrastructure and technical services will support farmers in increasing their output.

Due to the division of labour between men and women, women are more likely to be in the household and charged with provision of food, water and management of family health. This may increase their vulnerability to domestic violence as tensions mount up especially during the quarantine periods where meeting the daily requirements of the household becomes increasingly daunting. The collection and analysis of sex disaggregated data will be emphasized during project implementation. This will provide insight on how the impacts of COVID-19 have reshaped power relations between men and women as well as how they use and manage the environment. This will particularly assist in identifying targeted actions to enable men and women to become key actors in helping reduce the negative impact of COVID-19 on the environment both in the current and post COVID-19 era.

**Does the project expect to include any gender-responsive measures to address gender gaps or promote gender equality and women empowerment?** Yes

**closing gender gaps in access to and control over natural resources;** Yes

**improving women's participation and decision-making; and/or** Yes

**generating socio-economic benefits or services for women.** Yes

**Will the project's results framework or logical framework include gender-sensitive indicators?**

Yes

#### 4. Private sector engagement

Will there be private sector engagement in the project?

Yes

Please briefly explain the rationale behind your answer.

##### Private Sector Involvement

Collectively, the private sector has continuously invested in the natural resources management and promoted ecosystem services. This has been done primarily through development and maintenance of tourism facilities, protected areas planning, law enforcement and biodiversity monitoring and staff development. Involvement of the private sector in conservation has increased over the past decade and is set to increase further through initiatives such as the landscape management structures, the OECMs and Biosphere Reserve initiatives. With financial and technical support from previous project/programme initiatives, this has seen an increase in the viability of ecotourism, increased financial returns to the investments in biodiversity conservation. The project will cultivate sustainable relationships with stakeholders, policymakers and community leaders in an effort to ensure that policies are in place and applied for the effective management of the protection of the ecosystems. The private sector is expected to contribute towards the protection of the ecosystems as they benefit immensely from the ecosystem services.

During the project identification stage, a brief consultation was undertaken with private sector companies like Peak Timbers, Royal Eswatini Sugar Cooperation and the National Meat Industries and the bank. Further consultations will be undertaken during PPG stage.

Peak Timbers company Peak Timbers is a plantation forest and sawmilling company with commercial forest plantations within the basin. It will provide technical support to local communities in forestry and ecosystem restoration activities especially re-forestation. The company has an incentive scheme for local communities that provides them with livelihood opportunities like piggery, poultry and ranching to reduce pressure on natural resources.

Although Royal Eswatini Sugar Cooperation has its own sugar plantations, it also has a lot of smallholder farmers under its out-grower scheme within the basin. The company will assist in mobilizing these farmers and will contribute to their training so that these smallholder famers can learn SLM/INRM practices and adopt them either in their sugar plantations or in subsistence gardens of maize, sorghum and vegetables.

Swaziland Meat Industries Limited already has a network of pastoralist and livestock farmers it is working with that have been formed into groups. Partnership with this company will make it easy to organize livestock farmers and the company will provide technical support and training. This is the company that buys meat from farmers in an organized way.

Eswatini Bank is financing smallholder agricultural farms around the basin and the project will identify environmental activities that can be financed through this bank.

## 5. Risks to Achieving Project Objectives

Indicate risks, including climate change, potential social and environmental risks that might prevent the Project objectives from being achieved, and, if possible, propose measures that address these risks to be further developed during the Project design (table format acceptable)

<i>Risks</i>	<i>Rating</i>	<i>Mitigation measure</i>
Continued delays in approval of flagship policies and strategies such as National Environment Policy, National Water Policy.	M-H	Identify influential champions to lobby Government to have these policies adopted. Use of communication products that were produced under prior projects to lobby decision makers and get them to approve the policies. Commission studies to demonstrate value of these policy instruments and package findings appropriately.
Lack of political will at both upstream levels (e.g., parliamentarians and cabinet) and at local level (including traditional leaders).	M	The project will encourage engagement with stakeholders across all sectors of government including traditional leaders to mobilize their support. Details of how to engage with the traditional leadership structures will be discussed and fleshed out at the PPG stage.
Community conflicts over land boundaries preventing efficient delivery of project components on the ground.	M	Engage the Regional Administrator's Office and Tinkhudla centres in resolving potential conflicts that might arise due to unclear chiefdom boundaries.
Operational: Lack of coordination amongst stakeholders in project implementation	Low	Project Steering Committee to champion project through disseminating records of decisions taken at their meetings and linking these to national priorities and policy guidelines such as the National Vision.
Natural hazards, including landslides, drought, floods and fires at project sites and the worsening impacts of climate change during project implementation damage or destroy SLM measures implemented through the project.		Impact: The implementation of the project will be stopped or delayed as communities recover from the impacts of the extreme events and fires. The project is intended to manage this risk through promoting actions aimed at mitigating the impacts of climate change and drought. Specific action will include the promotion of afforestation programmes among rural communities and the institutionalisation of development planning systems that reduce land degradation. In addition, disaster risk and response plans may be put in place in collaboration with selected communities
An outbreak of diseases (Covid-19)		As of 30 October 2020, Eswatini has had 5,929 total cases of COVID-19 since the start of the epidemic, 117 COVID-19 related deaths and 5,657 recoveries. Although Eswatini has low cases of the virus as compared to other countries, the global economic slowdown will have an economic impact on it. Tourism contributes 5.9% to its GDP, and provides 4.6% of employment pre-COVID. This will have a major impact on the economy of the country. Under such conditions, the government is expected

		<p>of the country. Under such conditions, the government is expected to focus public resources on rebuilding the economy. This might affect the co-financing of the project and the ability of the project to deliver on the GEBs. The impact might also affect the food security situation in the country. During PPG and project implementation the importance of having a strong food security strategy will be communicated as part of the green recovery programme of country. Potential impacts on the commitment of co-financiers and partners will be assessed in detail during the PPG phase to develop adequate risk mitigation actions.</p> <p>The outbreak of Covid-19 has already affected work nationally and internationally. Travel restrictions have been in place. Should the situation continue, or should similar situations take place, the risk will be mitigated by trying to carry out relevant activities via alternative working methods (e.g. video-conferences, telecommuting, recourse to national human resources in the countries, etc.). Any mitigation measure will have to be discussed between the implementing and the executing partners/agencies.</p>
Risks that COVID-19 poses for all aspects of PIF concept and CEO endorsement packages	Low	The government will recruit enough and well knowledgeable consultant at national level to finalise the PPG on time. The gov't will also allow UNEP to recruit the international consultant with the right expertise to work on the PPG.
COVID 19 Restrictions of movement and holding meetings may make it difficult for the project development team to have adequate stakeholder engagement that will be fully inclusive.	High	<p>The govt of Eswatini has eased movement within the country and so stakeholder meetings will be conducted although in small groups of people</p> <p>On the 17th of March, the Eswatini Government declared a State of Emergency for 2 months with cautionary measures to curb infection rates being put in place. These include a cancellation of national events (e.g. Army day, King's Birthday celebration, Good Friday and Easter services); a cancellation of social events (e.g. MTN Bushfire Festival, Intervarsity Games etc.); the closure of schools and tertiary institutions, social gatherings to not exceed 50 people; a travel ban of travellers from high risk countries and a limitation of unnecessary travel within the country, educational program publications; the continued screening and contact tracing etc. This situation has since been eased and free travel within the country and holding of meetings of to 100 people are now allowed</p>
Limited capacity and experience for remote work and online interactions as well as limited remote data and information access and processing capacities to overcome COVID19 challenges	Low	The govt of Eswatini has procured and installed enough infrastructure in its offices for remote meetings. It also buys data for its staff for use even while working from home
Risk of ongoing or new human disease outbreaks such as the COVID-19 Pandemic affecting project implementation.	High	The project will comply with government directives in order to reduce health risks to project staff and stakeholders. Project start up could be delayed if necessary due to ongoing health risks and operational constraints caused by social distancing, self-isolation and other measures. Flexibility has been provided in the project budget through allowing a six month buffer at each end for project start-up and completion delays. Implementation may be paused if necessary i

		<p>completion delay or implementation may be paused if necessary in affected areas while government disease prevention or control measures are implemented, and resumed at a later time if feasible. The Project Steering Committee will guide project responses through email correspondence for ongoing situations, as required. Revision of the project workplan may be necessary, and an extension request may be required if implementation is substantially delayed. If possible, project support for PPE and IT communications to facilitate remote working will be sought.</p>
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## 6. Coordination

**Outline the institutional structure of the project including monitoring and evaluation coordination at the project level. Describe possible coordination with other relevant GEF-financed projects and other initiatives.**

There are a range of other relevant GEF-financed biodiversity and climate change initiatives, that are recently completed, ongoing and in the planning pipe-line, which will be fully appraised and involved in this project to maximize synergies and avoid risk of duplication, namely:

—The GEF- supported Lower Usuthu Smallholder Irrigation Project (LUSIP-GEF/LUSLM) (2009-2015) project supported the development of Chiefdom Development Plans as vehicles for promoting sustainable land and resources management in the Usuthu River Basin.

· The recently closed SCCF project 'Adapting National and Transboundary Water Resources Management to Manage the Expected Climate Change Project' (2012-2016) sought to ensure that the management of Eswatini's water resources was adapted to take into account the anticipated impacts of climate change. Using the principles of Integrated Water Resource Management (IWRM), climate change risks were incorporated into a management approach to facilitate this process through a national dialogue between a wide range of stakeholders from different sectors. Information generated and lessons learned from pilot-scale adaptation measures funded by the project, assisted policy implementation for effective adaptation planning and climate risk management in the water sector. The present project will pursue recommendations made by the Climate Change Vulnerability Assessment, and build on lessons learned including the implementation of national transboundary strategy, which was developed to promote the effective management of the Mbuluzi Basin in order to meet the transboundary agreement with Mozambique.

· The UNDP GEF Strengthening National Protected Areas Systems Project (SNPAS) (2014-2020), which is about to undergo Terminal Evaluation—sought to develop, expand and efficiency manage Eswatini's Protected Areas Network in order to protect globally significant biodiversity. The PA system was intended to increase from approximately 4% of the country's total land area to 6%. The project is being implemented using the landscape approach across different sectors, integrating land and natural resource management to transform the current PA patchwork into an integrated connected network that conserves biodiversity, maintains ecosystems services and enhances vulnerability of communities livelihoods especially those that are adjacent to the PAs, while taking climate change into consideration. The present project will build on the findings and recommendations of the Terminal Evaluation.

· The GEF-funded Smallholder Market-Led Project (SMLP) (2016-2022) targets reducing poverty and food insecurity of poor rural dwellers through investment supporting increased agricultural production and productivity and commercialization of smallholder agriculture. Production of commodities suitable both for household nutrition and market supply will be enhanced as will the linkages between markets and producers, resulting in improved food security and incomes. The project targets economically active poor households and food deficit households in 37 chiefdoms located in within 12 Tinkhundla in the southeast of Eswatini. Project investments in systems for market linkage, land and water conservation and engagement of extension services have significance for national service delivery.

## 7. Consistency with National Priorities

Is the Project consistent with the National Strategies and plans or reports and assessments under relevant conventions?

If yes, which ones and how: NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, INDCs, etc

The National Development Strategy (NDS) which is implemented through three year rolling National Development Plans provides the overarching national development framework for Eswatini. The NSD focuses on improving the standard of living of the people of Eswatini through poverty eradication, employment creation, gender equality and environmental protection. In the National Development Strategy (NDS) Vision 2022, Chapter 3.7 of the key Macro Strategic Areas, the Government of Eswatini recognizes environmental management as a necessary condition for sustainable development. This entails the maintenance of an ecological balance; accommodating environmental considerations in policies, strategies and programmes of both the public and private sectors; accommodate environmental compliance procedures; and ensuring that sector strategies for achieving the country's vision are environmentally friendly. The broad strategies of environmental objectives fulfilment are:

- *Integration:* Fully integrate environmental management and development planning in to ministries and initiate a collaborative coherent programme approach with all sectoral ministries and departments, each contributing in their area of expertise.
- *Monitoring:* Establish a national environmental mechanism for ensuring that the environmental priorities of national planning are observed and sought after. Coordinate monitor and control environmental protection measures.
- *Legislation:* Strengthen or develop a comprehensive system of environmental laws and regulations and reinforce the enforcement capability of the Eswatini Environment Authority.
- *Capacity Building:* Encourage popular participation and training, including embracing sectoral human resource development, education and training, public information and public involvement.
- *Gender:* Ensure a gender dimension in environmental management. Involve women actively in environmental decision-making at all levels.
- *Enforcement:* Enforce all environmental laws. Ensure that enacted environmental laws and regulations are implemented.
- *Conservation:* Curb and prevent the erosion of the soil, promote conservation and management of water and land resources, develop measures to conserve endangered animal and plant species, establish and promote the idea of botanic gardens.
- *Implementation:* Implement the country's Environment Action Plan, implement the national biodiversity strategy and action plan, initiate economic incentives to promote environmental management.
- *Finance:* Source financial resources needed for the introduction of the necessary institutional changes required for sustainable development, Establish an Environmental Fund.

The Strategy for Sustainable Development and Inclusive Growth (SSDIG), which is the review of the National Development Strategy (NDS) 1997 – 2022, was commissioned in 2013. The Government review took stock of the emerging challenges and opportunities that were not foreseen during NDS formulation in 1997. The revised strategy identified four thematic areas as critical for the attainment of the Vision namely: Good governance, Vibrant and diverse economy, Environmental sustainability and Highest human capital and social development.

The Government also developed and adopted the Poverty Reduction Strategy and Action Programme (PRSAP, 2006-2015) which serves as a critical means and guide to realizing the national vision and attain the Sustainable Development Goals. The Poverty Reduction Strategy and Action Plan (PRSAP) recognizes environmental management as pivotal to a sustainable increase in agricultural productivity. It recognizes that the underprivileged depend on the environment and

natural resources for their survival, therefore any meaningful poverty reduction strategy will have to address issues related to the environment. The strategy further acknowledges that the three critical environmental problems in country are soil erosion, deforestation and forest degradation (including both actual loss of trees and the changing composition and structure), and water and air pollution.

The project is aligned with the *National Biodiversity Strategy and Action Plan*, which details the national strategy for conservation and management of biodiversity. As most of the country's population depend upon subsistence agriculture, development planning in eswatini recognizes the need for sustainable land management as a vehicle for addressing poverty and managing biodiversity conservation at the community level. The propose project will contribute to target 9, 10, 11 and 12 of the National Biodiversity Strategy and Action Plan (NBSAP) targets: By controlling and management of invasive plant species, in the Mbuluzi catchment area, the project will contribute to target 9 of Eswatini's NBSAP which aims at ensuring that By 2020 invasive species that are alien to Eswatini and their pathways are identified and prioritized and eradicated and management plans established. The control of alien invasive plant species is particularly important in this catchment for downstream availability of water. The project will also contribute to target 10 of the country's NBSAP by controlling and eradicating pressures on Eswatinis's most vulnerable ecosystem (grassland ecosystem) which the last grassland wilderness in the country. By enhancing management effectiveness of nature reserves, the project will contribute to target 12 of the country's NBSAP which aims at ensuring that by 2022, the extinction of species known to be threatened in Eswatini has been prevented and their conservation status, particularly of those that are endemic and those most in decline, has been improved and sustained and target 11 of the NBSAP which aims at ensuring that By 2022, at least 20 per cent of Eswatini's land area is conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas

According to Eswatini's *LDN Target Setting Report*; between 2000 and 2010, a total of 465,290 Ha of land was degraded, which makes up 27% of the country. The report further highlights areas in the Mbuluzi catchment like Mhlangatane, Mnjoli, Madlangempisi, Lomahasha and Sitsatsaweni, as hotspots for land degradation which is directly driven by Deforestation, Improper soil management; Improper management of annual, perennial and scrub and tree crops; Disturbance of water cycle and Overgrazing. The project is expected to contribute to Eswatini's LDN specific targets of increasing by 10% net land productivity in all land cover categories through SLM practices. It will also contribute to the specific target of rehabilitating 115 000 ha of degraded and abandoned land by 2030.

Other policies and strategies which are relevant to this proposed project are the *Climate Change Policy and Strategy* and the *National Emergency Response Mitigation and Adaptation Plan* (2016-2022). These aim to provide the framework for addressing the impacts of climate change. Closely related to this is the country's participation in international initiatives to address climate change at the global level under the auspices of the United Nations Framework Convention on Climate Change (UNFCCC). As part of this engagement, the country produces National Communications and Nationally Determined Contributions to the Convention (NDC) which detail the strategies the country proposes to implement in order to meet its obligations under the Climate Change Convention. The last NDC was submitted in 2015. National Climate Change Strategy and Action Plan, 2016 aims at Promoting adoption of sustainable land management practices such as the soil management, seed management, and adaptive capacity of smallholder farmers.

The Natural Resources Management Act, 1951 prevents cultivation of crops within 33 meters of banks of public streams. It aims at Protecting the destruction of biodiversity rich ecosystems close to the riverbanks.

The Environment Management Act, 2002 aims to provide and promote enhancement, protection and conservation of the environment and the sustainable management of natural resources and to promote sustainable use of natural resources such as land considering the consequences for the present and future generations.

Several national policies are in the process of formulation to enable sustainable implementation of agricultural production and these are; (a) the National Agricultural Extension Policy Draft, (b) the Monitoring and Evaluation Policy, (c) the National Agricultural Research Policy, (d) the National Climate Change Policy, (e) the National Climate Change Strategy and Action Plan, (f) the National Wildlife Management Policy.

Completed policies are (a) the Disaster Risk Management Policy, which aims to prevent and minimize the impact of disasters and (b) the Eswatini Resilience Strategy and Action Plan.

Proposed legislation that is in the process of its enactment to enable sustainable agricultural production are (a) the Plant Health Protection Bill, 2015 which aims to prevent the introduction and spread of pests, facilitate trade in plants and plant products (b) the Eswatini National Research Authority Bill, 2015 (c) the

Dairy Act Amendment Bill, 2017 (d) the Seeds and Plant varieties (amendment) regulation 2017: amendment regulations of 2002 (e) the Livestock Identification and Traceability Regulations, 2015: to give effect to The Livestock Identification Act 2001

8. Knowledge Management

Outline the knowledge management approach for the Project, including, if any, plans for the Project to learn from other relevant Projects and initiatives, to assess and document in a user-friendly form, and share these experiences and expertise with relevant stakeholders.

This project aims to transform the situation from the baseline—in which there is inadequate awareness and management of protected areas and high infestation rate of invasive alien plant species in protected areas to a situation where protected areas along the basin are well managed, invasive plant species controlled and the Swazi population understands and accesses opportunities to use SLM technologies and biodiversity conservation in the River Basins. The knowledge shared via project activities will raise awareness of the importance of effective management of protected areas and will harmonize relationships between communities and protected areas. It will also raise awareness on sustainable landscape restoration and management, which contributes to adapting to and mitigating the impacts of climate change, thus increasing the resilience of landscapes and subsistence livelihoods. The knowledge sharing approaches catalyzed and supported by the project—including South-South cooperation—are designed to ensure that the project benefits from lessons of past projects, programmes and research to avoid reinventing the wheel, and it will share results (locally, nationally and internationally) to enable others to benefit by scaling-up achievements post-project. As this project will be utilizing outcomes of two main projects: firstly the Adapting National and Transboundary Resources to the Impacts of Climate change which highlighted the need to address biodiversity loss and land degradation including control of invasive plant species and secondly the Lower Usuthu Sustainable Land Management Project that introduce similar activities in the Usuthu Basin which highlighted the need to introduce the same intervention for the Mbuluzi Basin.. Innovative methodologies will be used to track the country’s progress the project’s contribution of the country’s national targets including targets under the NBSAP and the LDN.

9. Environmental and Social Safeguard (ESS) Risks

Provide information on the identified environmental and social risks and potential impacts associated with the project/program based on your organization's ESS systems and procedures

Overall Project/Program Risk Classification\*

PIF	CEO Endorsement/Approval	MTR	TE
Medium/Moderate			

Measures to address identified risks and impacts

Provide preliminary information on the types and levels of risk classifications/ratings of any identified environmental and social risks and potential impacts associated with the project (considering the GEF ESS Minimum Standards) and describe measures to address these risks during the project design.

The project is intended to manage this risk through promoting actions aimed at mitigating the impacts of climate change and drought. Specific action will include the promotion of use of renewable energy forms, removal of alien invasive species, promotion of afforestation programmes among rural communities and the institutionalization of development planning systems that reduce land degradation. Identify influential champions to lobby Government to have these policies adopted. Use of communication products that were produced under prior projects to lobby decision makers and get them to approve the policies. Commission studies to demonstrate value of these policy instruments and package findings appropriately. The project will encourage engagement with stakeholders across all sectors of government including traditional leaders to mobilize their support. Details of how to engage with the traditional leadership structures will be discussed and fleshed out at the PPG stage. Engage the Regional Administrator's Office and Tinkhudla centers in resolving potential conflicts that might arise due to unclear chieftdom boundaries. Project Steering Committee to champion project through disseminating records of decisions taken at their meetings and linking these to national priorities and policy guidelines such as the National Vision. The government will recruit enough and well knowledgeable consultant at national level to finalize the PPG on time. The gov't will also allow UNEP to recruit the international consultant with the right expertise to work on the PPG. The govt of Eswatini has eased movement within the country and so stakeholder meetings will be conducted although in small groups of people The govt of Eswatini has procured and installed enough infrastructure in its offices for remote meetings. It also buys data for its staff for use even while working from home The project will comply with government directives in order to reduce health risks to project staff and stakeholders. Project start up could be delayed if necessary due to ongoing health risks and operational constraints caused by social distancing, self-isolation and other measures. Flexibility has been provided in the project budget through allowing a six month buffer at each end for project start-up and completion delays. Implementation may be paused if necessary in affected areas while government disease prevention or control measures are implemented, and resumed at a later time if feasible. The Project Steering Committee will guide project responses through email correspondence for ongoing situations, as required. Revision of the project workplan may be necessary, and an extension request may be required if implementation is substantially delayed. If possible, project support for PPE and IT communications to facilitate remote working will be sought.

#### Supporting Documents

Upload available ESS supporting documents.

**Title**

**Submitted**

SRIF Eswatini Mbuluzi river basin - signed by Yunae

### Part III: Approval/Endorsement By GEF Operational Focal Point(S) And GEF Agency(ies)

A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S): (Please attach the Operational Focal Point endorsement letter with this template).

Name

Position

Ministry

Date

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Please provide geo-referenced information and map where the project intervention takes place

