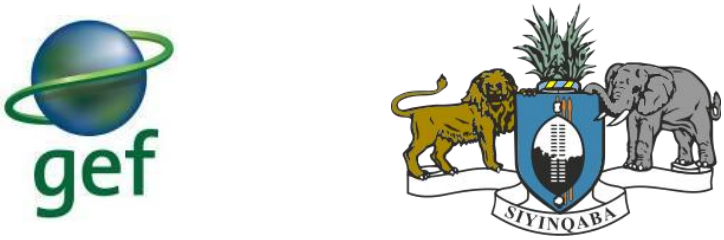


PROJECT DOCUMENT

Kingdom of Swaziland

United Nations Development Programme

Global Environment Facility

Strengthening the National Protected Areas System of Swaziland

GEFSEC PROJECT ID: 5065; GEF AGENCY ID: PIMS 4932; AWARD ID: 00081957

Brief Description:

Swaziland lies between latitudes 25° and 28° south and 31° and 32° east in the south eastern part of Africa. The country is a landlocked country covering an area of 17,364 km^2, with South Africa in the north, west and south, and Mozambique in the east. Although Swaziland is small in size, it has great variation in landscape, geology, climate, ecosystems and species that make up the four physiographic regions.

Despite the global significance of its biodiversity, Swaziland's formal Protected Area (PA) estate is comprised of relatively small and vulnerable PAs, covering only 3.9% of the country and inadequately representing the countries varied ecosystems. There is therefore a need to expand the PA estate, while strengthening PA management competencies. This will in turn require the participation of a broad range of stakeholders, including private landholders, local communities and the tourism industry, to establish 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 the PA sites.

The long term solution is that Swaziland adopts a landscape conservation paradigm that allows a broader range of stakeholders to work together to manage biodiversity more effectively. Under this approach, PAs will be established and managed in critical biodiversity areas as clusters—different sites managed by the State, private landowners and communities in proximity to one another. These PAs will need to be managed as part of a matrix of land uses across landscapes that allow biodiversity management objectives to be integrated in the strategies, production practices and decisions of a range of land and resource users occupying land immediately adjacent to PAs (and between them—so as to maintain functional corridors).

The project's goal is to strengthen the management effectiveness of the PA system of Swaziland to ensure a viable set of representative samples of the country's full range of natural ecosystems are conserved, through a network of PAs. The project objective is to effectively expand, manage and develop Swaziland's protected area network in order to adequately protect the biodiversity and landscapes of the country. This will involve devising a system of integrating land and natural resource management that transforms the current PA patchwork into a protected areas network, while creating incentives for all Swazis (land management agencies, conservancies, private landowners and tourism operators) to work together toward conservation and sustainable economic development. In order to achieve the project goal and objective , the project's interventions have been organised in three components:

- **Component 1: Knowledge based platform operationalised at the National and regional level to address current and emerging threats to PAs and biodiversity conservation.**
- **Component 2: Landscape approach operationalised and leads to expansion of PA network.**

- **Component 3: Strengthening PA functioning through improved Conservation management and Operational support for existing and new PAs, including both formal and informal PAs.**

SIGNATURE PAGE

Country: Swaziland

UNDAF Outcome (s)/Indicator (s): Outcome 2: *Increased and more equitable access of the poor to assets and other resources for sustainable livelihoods*.
Relevant CPAP 2011-2015 Outcome(s): Outcome 3: National institutions have the capacity and providing guidance on the utilisation of natural resources in a sustainable and equitable manner. Indicator: *Enhanced national ability to put in place environmentally friendly and sustainable development*.

Project Title: Strengthening the National Protected Areas System of Swaziland.
Objective: To effectively expand, manage and develop Swaziland's protected area network in order to adequately protect the biodiversity and landscapes of the country.
Expected Components: (i) Knowledge based management platform operationalised at the National and regional level to address current and emerging threats to PAs and biodiversity conservation; (ii) Landscape approach operationalised and leads to expansion of PA network; and (iii) Strengthening PA functioning through improved Conservation management and Operational support for existing and new PAs including both formal and informal PAs.
Implementing Partner: Swaziland National Trust Commission (SNTC) a parastatal organisation, in close cooperation with the Ministry of Tourism and Environmental Affairs (MTEA),

Programme Period:	**2014 - 2020**	**Total Budget**	**USD 28,990,000**
Project ID:	**00091061**	GEF	5,390,000

Award ID	**00081957**		
		Swaziland Environment Authority	2,200,000
PIMS #:	**4932**	Swaziland National Trust Commission	11,400,000
Project Duration	**6 Years**	UNDP Swaziland	200,000
Management Arrangement:		Big Game Parks	9,800,000
	NIM	Total Co-finance	**23, 600,000**

Agreed by (Ministry of Tourism and Environmental Affairs)

NAME SIGNATURE
Date/Month/Year

Agreed by (Ministry of Economic Planning and Development)

NAME SIGNATURE
Date/Month/Year

Agreed by (UNDP):

NAME SIGNATURE
Date/Month/Year

Table of Contents

List of Tables

List of Figures

List of Boxes

Acronyms

APR	Annual Project Report
AWP	Annual Work Plan
BGP	Big Game Parks
CBD	Convention on Biological Diversity
CBNRM	Community Based Natural Resource Management
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CO	Country Office
GDP	Gross Domestic Product
GEF	Global Environment Facility
GNI	Gross National Income
HDI	Human Development Index
IA	Implementing Agency
IPCC	Intergovernmental Panel on Climate Change
IS	Inception Sessions
IUCN	World Conservation Union/International Union for Conservation of Nature
IW	Inception Workshop
M&E	Monitoring & Evaluation
MAB	Man and Biodiversity
MDG	Millennium Development Goal
MEA	Millennium Ecosystem Assessment
MTEA	Ministry of Tourism and Environmental Affairs
NBSAP	National Biodiversity Strategy and Action Plan
NDP	National Development Plan
NGO	Non-Governmental Organisation
NIM	National Implementation Modalities
NP	National Park
NPM	National Project Manager
NRM	Natural Resource Management
OFP	Operational Focal Point
PA	Protected Area
PAS	Protected Area System
PIF	Project Identification Form
PIR	Project Inception Report
PMU	Project Management Unit
PPG	Project Preparation Grant
PSC	Project Steering Committee
PSCM	Project Steering Committee Meetings
RCU	Regional Coordinating Unit
TPR	Tripartite Report
SADC	Southern Africa Development Community
SGP	Small Grants Programme
SNTC	Swaziland National Trust Commission
UNCCD	United Nations Convention to Combat Desertification

UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNFCCC	United Nations Framework Convention on Climate Change
UN-REDD	United Nations Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries
WHC	World Heritage Convention
WWF	World Wide Fund for Nature

Glossary

Community	Where reference is made in this document to community with regards to local or rural community, CBNRM or CCAs, community means the people resident on Swazi Nation Land under the jurisdiction of a chief unless otherwise specified.
Conservancy	Conservancy refers to an association or other legal entity representing a number of distinct land units under conservation management with differing ownership that have agreed to co-operate.

SECTION I: Elaboration of the Narrative

PART IA: Situational Analysis

INTRODUCTION

1. Swaziland lies between latitudes 25° and 28° south and 31° and 32° east in the south eastern part of Africa. The country is a landlocked country covering an area of 17,364 km^2, with South Africa in the north, west and south, and Mozambique in the east. Although Swaziland is small in size, it has great variation in landscape, geology, climate, ecosystems and species that make up the four physiographic regions. The western part of the country includes the mountains of the Drakensberg plateau (reaching over 1800 metres above sea level), and the eastern part adjoins the coastal plains of Mozambique (down to 20 metres above sea level). Forming the eastern border of Swaziland is the Lubombo range of hills. Swaziland's mean annual rainfall ranges from as low as 200mm per year in the south east to as much as 1500mm per year in the Northwest.

2. Swaziland contains four separate geographical regions that run from North to South and are determined by altitude. Along the eastern border with Mozambique is the Lubombo, a mountain ridge, at an altitude of around 600 meters. The mountains are broken by the canyons of three rivers, the Ngwavuma, the Usutu and the Mbuluzi River. This is cattle ranching country. The western border of the country, with an average altitude of 1200 meters, lies on the edge of an escarpment. Between the mountains rivers rush through deep gorges making this a most scenic region. Mbabane, the capital, is located on the Highveld. The Middleveld, lying at an average 700 meters above sea level is the most densely populated region of Swaziland with a lower rainfall than the mountains. Manzini, the principal commercial and industrial city, is situated in the Middleveld. The Lowveld of Swaziland, at around 250 meters, is less populated than other

areas and presents a typical African bush country of thorn trees and grasslands.

Figure 1: Map of Swaziland

3. Despite the global significance of its biodiversity, Swaziland's Protected Area (PA) estate is comprised of very small and vulnerable PAs, poorly distributed across ecosystems and formal PAs cover only 3.9% of the country. There is therefore a need to expand the PA estate, while strengthening PA management competencies. This will in turn require the participation of a broad range of stakeholders, including private landholders, local communities and the tourism industry, to establish 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 the PA sites.

Context and Global Significance

BIOPHYSICAL CONTEXT

National Context

4. Swaziland has four broad biophysical regions (Highveld, Middleveld, Lowveld, and Lubombo), based on topography, climate and vegetation. Swaziland, despite its small size, supports a diverse assemblage of ecosystems and habitats which are home to a wide range of organisms. It has four major biomes: grassland, savannah, forest and aquatic. Each of the terrestrial biomes can be further divided into various vegetation types. Four forest types can be distinguished: Northern Mistbelt, Scarp, Lowveld Riverine and Ironwood Dry. Three grassland types can be distinguished: Barberton Montane, Ithala Quartzite, KaNgwane Montane. The savannah vegetation can be divided into three broad types (Lowveld, Sourveld and Bushveld) and nine fine types: Tshokwane-Hlane Basalt Lowveld, Zululand Lowveld, Delagoa Lowveld, Granite Lowveld, Lebombo Summit Sourveld, Northern Zululand Sourveld, Kaalrug Mountain Bushveld, Southern Lebombo Bushveld, and Swaziland Sour Bushveld. The aquatic biome can be broadly divided into rivers, streams and marshes. In addition to the above natural ecosystems there are a number of man-made ecosystems and habitats including various dams, canals, forests, grasslands and savannahs.

5. Swaziland has a dual system of land tenure comprising Swazi Nation Land (SNL), which is communal land held in trust by the King, and Title Deed Land (TDL). Overall, SNL covers approximately 70%, while the TDL makes up approximately 30% of the country. In terms of land use, extensive communal grazing occupies 50% of the available land, ranching 19% and small-scale subsistence agriculture 12% of the country. Commercial forest is the fourth most common land use in Swaziland (8%) and is predominantly based on large plantations operated by the private sector under the TDL. The remaining 10% of the country consists of large-scale crop agriculture, nature reserves, water reservoirs and their catchments, and areas used for settlements, industry and recreation[1]. The distribution of land use practices and the exploitation of natural resources in the country vary according to the land tenure system in each area. In general, small-scale agriculture, extensive communal grazing and some extraction and collection occur on SNL, whereas land uses such as large-scale agriculture, ranching, plantation forestry, parks and reserves are associated with TDL. Although water reservoirs mostly serve TDL, they are also found on SNL.

Climate and Water

6. Swaziland has a subtropical climate, with warm wet summers and cool dry winters. Climatic conditions vary from region to region. Mean annual rainfall ranges from 1500 mm in the highveld to 500mm in the lowveld. In the highveld temperatures vary between a maximum of 33°C in mid-summer and 0°C at night in mid-winter. In the lowveld, diurnal temperature may exceed 40° C.

7. Swaziland lies in three international river basins, namely, the Inkomati, Umbuluzi and Maputo river basins. All three of these basins are shared with South Africa and/or Mozambique. Rivers

[1] Swaziland's First National Communication to the United Nations Framework Convention on Climate Change, 2002.

rise in the Eastern Highlands of South Africa, flow through Swaziland and then discharge into the Indian Ocean along the Mozambique coastline. There are two relatively large river catchments lying within Swaziland, namely: the Ngwavuma River catchment in the south and the Umbuluzi River catchment in the north.

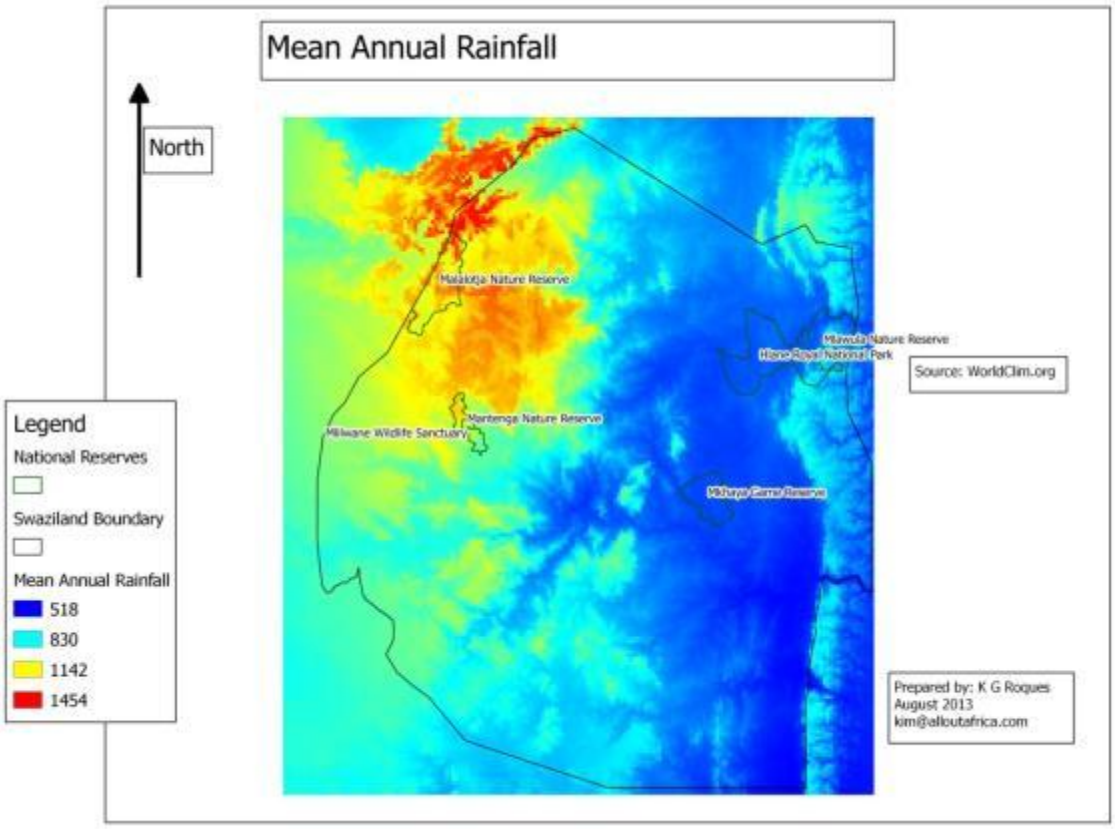


Figure 2: Mean Annual Rainfall in Swaziland

8. Swaziland's surface water resources are estimated at 4.45Billion m^3/year with 42% of the water originating from neighbouring countries and 58% originating within the country[2]. The average annual runoff for all rivers in Swaziland is estimated to be 2.6 billion m3/year17 representing 18% of total annual rainfall.

Biodiversity

9. There are 19 vertebrate species on the IUCN (2013) Globally Threatened Species list which are native to Swaziland. The current distribution of these species was considered based on up to date records in relation to the PA network. Of the 19 globally threatened vertebrate species, 6 are locally extinct in Swaziland and 11 are found within Gazetted PAs. Of the 40 species of threatened plants recorded for Swaziland 29 occur within National PAs, a further 3 occur in Informal PAs and the balance except for one species (*Ficus sansibarica Warb. ssp. Sansibarica*) are found in potential new PAs.

[2] Mwendera, E.J., Manyatsi, A.M., Magwenzi, O. and Dhlamini, S.M., 2002. Water demand management programme for Southern Africa, country report for Swaziland. IUCN (The World Conservation Union) Southern Africa Country Office, Praetoria.

Table 1: Globally Threatened Vertebrate Species native to Swaziland[3]

Species Name	English name	Status
Acinonyx jubatus	Cheetah	Vulnerable (1)
Balearica regulorum	Grey Crowned Crane	Endangered (1)
Bucorvus leadbeateri	Ground Hornbill	Vulnerable (1)
Bugeranus carunculatus	Wattled Crane	Vulnerable (1)
Chetia brevis	Orange-fringed River Bream	Endangered
Chiloglanis bifurcus	Incomati Suckermouth	Endangered
Diceros bicornis	Black Rhinoceros	Critically Endangered
Geronticus calvus	Southern Bald Ibis	Vulnerable
Gyps africanus	African White-backed Vulture	Endangered
Gys coprotheres	Cape Vulture	Vulnerable
Hippopotamus amphibius	Hippopotamus	Vulnerable
Hirundo atrocaerulea	Blue Swallow	Vulnerable
Loxodonta africana	African Elephant	Vulnerable
Lycaon pictus	African Wild Dog	Endangered (1)
Necrosyrtes monachus	Hooded Vulture	Endangered (1)
Panthera leo	Lion	Vulnerable (2)
Sagittarius serpentarius	Secretary Bird	Vulnerable
Torgos tracheliotos	Lappet-faced Vulture	Vulnerable (3)
Trigonoceps occipitalis	White-headed Vulture	Vulnerable (3)

(1) Species is extinct in Swaziland as a breeding species and hence not recorded from any locality in the country

(2) Species only exists in Swaziland in a semi-captive situation

(3) Species was breeding in gazetted area(s) up until mid-2000s. Its current status is not certain and they may be extinct as a breeding species in Swaziland

10. Of the 40 species of threatened plants recorded for Swaziland 29 occur within National PAs, a further 3 occur in Informal PAs and the balance except for one species (*Ficus sansibarica Warb. ssp. Sansibarica*) are found in potential new PAs.

Table 2: Globally Threatened Plant Species native to Swaziland

Species Name	Status
Adenium swazicum Stapf	Endangered
Aloe albida (Stapf) Reynolds	Endangered
Aloe chortolirioides A.Berger var. chortolirioides	Endangered
Aloe ecklonis Salm-Dyck	Vulnerable
Aloe kniphofioides Baker	Vulnerable
Aloe minima Baker	Vulnerable
Brachystelma coddii R.A.Dyer	Endangered
Cheirostylis gymnochiloides (Ridl.) Rchb.f.	Critically Endangered
Cyrtanthus nutans R.A.Dyer	Endangered
Dianthus mooiensis F.N.Williams ssp. kirkii (Burtt Davy) S.S.Hooper	Vulnerable

[3] Based on the IUCN 2013 Listings

Species Name	Status
Disa intermedia H.P.Linder	Endangered
Encephalartos lebomboensis I.Verd.	Endangered
Erica swaziensis E.G.H.Oliv.	Endangered
Ficus polita Vahl ssp. Polita	Vulnerable
Gladiolus brachyphyllus F.Bolus	Vulnerable
Kniphofia umbrina Codd	Critically Endangered
Lannea antiscorbutica (Hiern) Engl.	Endangered
Melanospermum italae Hilliard	Endangered
Protea parvula Beard	Vulnerable
Prunus africana (Hook.f.) Kalkman	Endangered
Streptocarpus wilmsii Engl.	Vulnerable
Syncolostemon comptonii Codd	Critically Endangered
Syncolostemon stalmansii (A.J.Paton & K.Balkwill) D.F.Otieno	Vulnerable
Asclepias eminens (Harv.) Schltr.	Vulnerable
Aster pseudobakeranus W.Lippert	Vulnerable
Crassula vaginata Eckl. & Zeyh. ssp. minuta Toelken	Critically Endangered
Eulophia chlorantha Schltr.	Endangered
Melanospermum swazicum Hilliard	Endangered
Streptocarpus davyi S.Moore	Vulnerable
Adenium multiflorum Klotzsch	Endangered
Ceropegia cimiciodora Oberm.	Endangered
Duvernoia aconitiflora A.Meeuse	Endangered
Aloe dewetii Reynolds	Endangered
Celtis mildbraedii Engl.	Critically Endangered
Dierama elatum N.E.Br.	Extinct
Gardenia thunbergia L.f.	Critically Endangered
Heywoodia lucens Sim	Endangered
Oxyanthus pyriformis (Hochst.) Skeels ssp. pyriformis	Endangered
Siphonochilus aethiopicus (Schweinf.) B.L.Burtt	Endangered
Ficus sansibarica Warb. ssp. sansibarica	Critically Endangered

Only Vulnerable or higher categories are listed i.e. not Near Threatened or Data deficient species.

11. Covering an area of 17,364 km^2, Swaziland has 2,600 species of flowering plants, approximately 121 species of mammals, 153 amphibians and reptiles, and 350 species of birds; making it unique in floral and faunal species richness. The country also 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 a 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 shifts as an adaptation to climate change. Swaziland's forests contain 22 million metric tons of carbon in living forest biomass. This considerable biodiversity richness is contained in four distinct ecosystems: namely montane grassland, savannah-woodland mosaic,

forests, and aquatic systems.

Swaziland's Protected Area Estate

12. The IUCN defines a Protected Area as "A clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values" (Dudley 2008).

13. Swaziland's existing National PA estate is comprised of relatively small areas covering only 3.9% of the country. Swaziland's first existing National PA, Mlilwane Wildlife Sanctuary, was proclaimed under the Game Act of 1953 followed by Hlane Game Reserve in 1967. In 1972, the Swaziland National Trust Commission (SNTC) was formed specifically to conserve areas and features representative of Swaziland's natural and cultural heritage. In addition, custodianship of wildlife falls under the King's Office which placed the management of the Game Act and CITES under the responsibility of the Big Game Parks. This provides the major responsible parties for the management of PAs in Swaziland as BGP and SNTC.

14. The six National PAs include Malolotja, Mlawula and Mantenga managed by the Swaziland National Trust Commission (SNTC) and Mlilwane, Hlane and Mkhaya managed by Big Game Parks (BGP). Mlilwane and Mantenga adjoin each other as do Hlane and Mlawula. By far the largest of these areas is the Hlane-Mlawula complex comprising 37,888 ha followed by Malolotja (16,292 ha) and Mkhaya (10,050 ha) and lastly the Mlilwane-Mantenga complex (5,300 ha). Together these areas comprise 69,530 ha i.e. 3.9% of the country, however, only 50,118 ha of these national PAs have been gazetted.

15. There are a number of Informal PAs in Swaziland which qualify as PAs in that they are conserved through "other effective means" but which are not gazetted under the SNTC, Game or Flora Protection acts. The largest of these Informal PAs is IYSIS at just over 20,000 ha, with the Big Bend Conservancy, Jozini Big 6, Mhlosinga and Mbuluzi ranging from just over 13,000 ha to just over 2,300 ha respectively. Most of the other Informal PAs are under 1,500 ha in size, but together these areas comprise at least 46,977 ha i.e. 2.7% of the country.

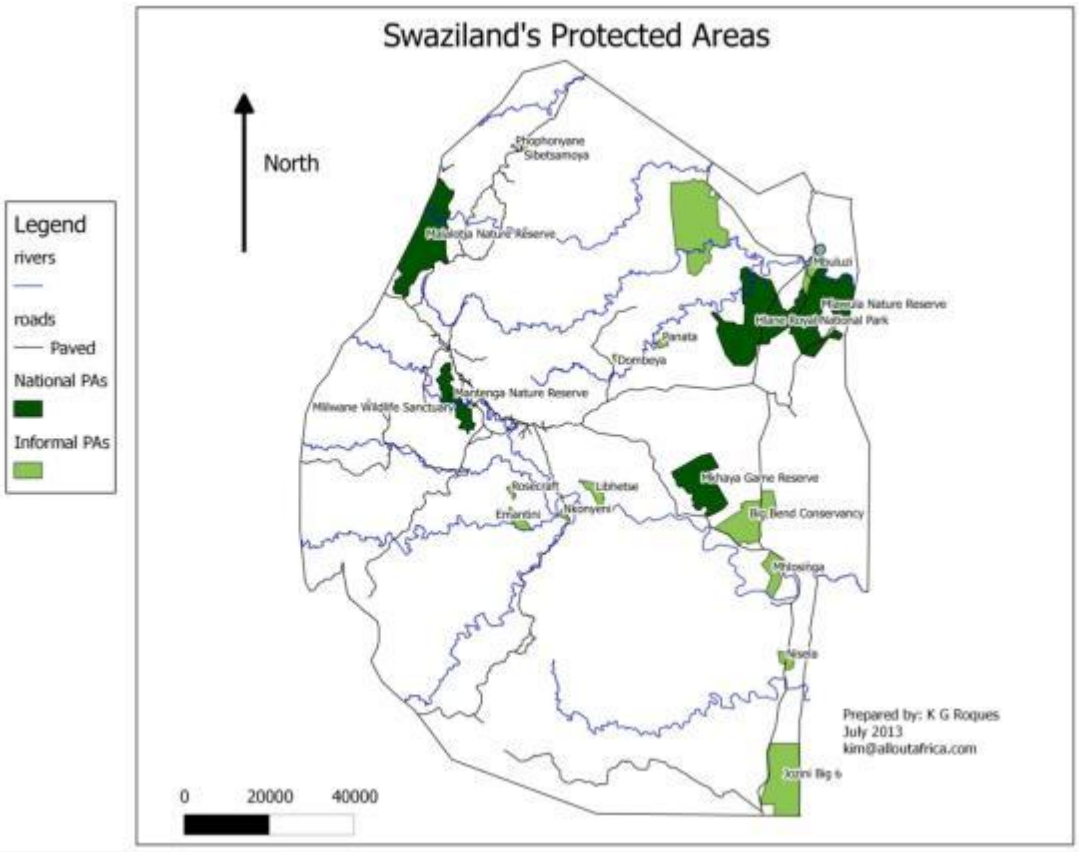


Figure 3: Swaziland's PAs including National and informal PAs

16. Although the existing PAs are relatively well positioned to cover the variation in biodiversity, many are not gazetted and there are a number of growing threats to these reserves and the remaining natural areas within the landscapes of the country. There is therefore a need to expand the PA estate, both by establishing new PAs and gazetting some of the existing informal PAs while strengthening the management of existing PAs. This will in turn require the participation of a broad range of stakeholders, including government departments, private companies and landholders, rural communities on SNL and the tourism industry, to establish new PAs on the appropriate lands. A landscape approach is needed, to strategically manage and conserve the biodiversity of these PAs within the context of the broader environment to reduce threats to biodiversity loss, maintain ecosystem services and improve connectivity as is for example operationalised by the Lubombo Conservancy.

Proposed New PAs

Table 3: Proposed New Protected Areas, Land Use and Proposed Size

Proposed Protected Areas	PA Size (ha)	Land Use
Ngwempisi (Ntungulu)	11,487	Private farms, Cattle grazing, Resource harvesting, Ecotourism Human settlements
Manzimnyame	17,886	Cattle Ranching and Resource harvesting
Mahhuku	9,039	Cattle ranching
Shewula	3,215	Communal Cattle grazing, Resource harvesting, Ecotourism
Mdzimba	8,315	Communal Cattle grazing, Resource harvesting
Makhonjwa	8,159	Communal Cattle grazing, Resource harvesting

Proposed Protected Areas	PA Size (ha)	Land Use
Nyonyane	19,295	Cattle and Sugar Ranching and Resource harvesting
Sibebe	2,856	Communal Cattle grazing, Resource harvesting, Ecotourism
Motjane vlei	397	Cattle ranching, Small-scale dryland cropping
Jilobi Forest	1,763	Communal resource harvesting
Mahamba	2,104	Private farms, Cattle grazing, Resource harvesting, Ecotourism Human settlements
Bulembu Mountain	552	Private farms, Cattle grazing, Resource harvesting
Ndlotane	7,781	Private farms, Cattle grazing, Resource harvesting
Nsongweni	4,714	Private farms, Cattle grazing, Resource harvesting
Mambane	9,290	Private farms, Cattle grazing, Resource harvesting
Nkhalashane	4,343	Cattle Ranching, Resource harvesting
Mkhaya West	85	Communal Cattle grazing, Resource harvesting
Mhlumeni	2,319	Communal Cattle grazing, Resource harvesting

17. The PPG resulted in the prioritisation of Shewula, Nkalashane, Makhonjwa, Sibebe, Motjane vlei, Manzimnyame, Muti-muti, Mahhuku, Ngwempisi, Mambane, Mkhaya west, Jilobi and Bulembu as the proposed new PAs to be established during the project implementation. However there were gaps in the available information, so surveys of all the areas in the above table are proposed under component I of the project with the potential for information derived from these surveys to adjust the prioritisation of proposed new PAs. The other areas in the above table not prioritised during the PPG including Mdzimba, Nyonyane, Mahamba, Ndlotane, Nsongweni and Mhlumeni will therefore also be considered for investment during the project implementation. It is proposed that Mdzimba, Nyonyane and Mhlumeni be facilitated by the SNTC should they be prioritised. It is proposed that BGP facilitate Nsongweni, Mahamba and Ndlotane, should they be prioritised.

Existing Informal PAs Proposed for Gazettement

Table 4: Existing Informal Protected Areas Proposed for Gazettement, Land Use and Size

Existing PAs proposed for Gazettement	PA Size (ha)	Land Use
Phophonyane Conservancy	504	Informal PA, Ecotourism, Private farms
Mbuluzi	2,357	Informal PA, Ecotourism,
IYSIS	20,016	Informal PA, Ecotourism, Game and Cattle Ranching
Muti-muti Conservancy	2,079	Informal PA, Ecotourism,
Royal Jozini Big 6	12,662	Informal PA, Ecotourism
Libhetse	1,576	Informal PA, Tourism

SOCIO-ECONOMIC CONTEXT

National Context

18. Swaziland's population is estimated at 1,093,158[4] with an annual growth rate of 2.7%. The population of Swaziland may be divided into 76% rural and 24% urban. Some 75% of the population practice subsistence farming and 63% of the population live on less than the equivalent of US$1.25 per day[5]. Economically, Swaziland depends heavily on South Africa from which it receives more than 90% of its imports and to which it sends 60% of its exports. Swaziland's currency is pegged to the South African rand, effectively subsuming Swaziland's monetary policy to South Africa. The government is heavily dependent on customs duties from the Southern African Customs Union (SACU), and worker remittances from South Africa supplement domestically earned income.

19. Swaziland's economy is diversified, with agriculture, forestry and mining accounting for about 13% of GDP, manufacturing (textiles and sugar-related processing) representing 37% of GDP and services – with government services in the lead – constituting 50% of GDP. Title Deed Lands (TDLs), where the bulk of high value crops are grown (sugar, forestry, and citrus) are characterised by high levels of investment and irrigation, and high productivity. Nevertheless, the majority of the population – about 75%is employed in subsistence agriculture on Swazi Nation Land (SNL), which, in contrast, suffers from low productivity and investment. This dual nature of the Swazi economy, with high productivity in textile manufacturing and in the industrialised agricultural TDLs on the one hand, and declining productivity subsistence agriculture (on SNL) on the other, may well explain the country's overall low growth, high inequality and unemployment with unemployment estimated at 40%.

20. Swaziland's economic growth and societal integrity is highly endangered by its HIV epidemic. Swaziland has the highest national HIV prevalence in the world at 26.1% of adults between the ages of 15 and 49, peaking at 54% among pregnant women aged 30–34. Swaziland is ranked 191st out of 198 countries in life expectancy, with an average life expectancy of only 47.36 years[6]. Swaziland is also one of the most unequal countries in the world, with a GINI coefficient of 51.5[7].

CBNRM and Rural Income Generation

21. The CBNRM concept has its origin in Southern Africa, especially Namibia and Zimbabwe and South Africa before independence, where legislation (e.g. 1975 Parks and Wildlife Act in Zimbabwe) was amended to establish the principle that the landowner or appropriate authority of the land where wildlife was found had the legal right to utilise that wildlife. The outcome was very positive as this land use option turned out to be suitable for agricultural regions IV and V that are characterised by low rainfall. The benefits included higher financial returns as compared to cattle ranching, increased employment, economic multiplier effect and most environmental degradation was reversed.

[4] Central Statistical Office, 2007 – 2030 Swaziland Population Projections for 2013
[5] United Nations Development Programme (2008). "Human development indices – Table 3: Human and income poverty (Population living below national poverty line (2000–2007))".UNDP. 28 November 2008. Retrieved 29 December 2009.
[6] CIA World Factbook.
[7] United Nations Development Programme (2012). International Human Development Indicators-UNDP. http://hdrstats.undp.org/en/indicators/67106.html.

22. While CBNRM activities are taking place in Swaziland very little has been written about this development. Examples such as the Shewula Community Trust which established the Shewula Mountain Camp and Nature Reserve are CBNRM initiatives which need to be strengthened and repeated elsewhere in Swaziland to ensure the growth of this movement which is a vehicle for transforming rural economies. This project will provide capacity building support and training to Shewula and other communities and opportunities for funding PA projects. To enhance CBNRM in Swaziland, it is critical for Swaziland through the Ministry of Tourism and Environmental Affairs to develop comprehensive regulations on Community Based Natural Resource Management. The regulations should contain clear aims, objectives, principles and strategies taking into account experiences learnt from other SADC countries as discussed above but also putting into consideration Swaziland's unique characteristics.

23. One of the biggest weaknesses of CBNRM programs is the poor distribution of CBNRM financial and employment benefits. In many locations, rural communities derive little or no financial, employment and food benefits from CBNRM programs at a household level. When CBNRM programs are primarily designed to achieve conservation, without equal focus on issues relating to social empowerment or economic development, this has also resulted in community funds being kept in the bank without re-investment or in misuse and misappropriation.

24. With increasing population and falling productivity of farmlands, generating alternative sources of income is essential. It is important to promote activities that balance the need for conserving biodiversity and meet the requirements of rural communities on SNL, on the one hand, and promote technologies and skills that can provide additional income on the other. Uneven development and inadequate service provision are a significant cause of poverty in Swaziland's rural areas.

Alternative Livelihoods

Introduction and Promotion of Game Ranching

25. Wildlife Ranching is a viable livelihood option in place of, or in combination with, cattle ranching. It results in improved use of available forage in savannah habitats and therefore maximises productivity as well as improving biodiversity conservation. Wildlife ranches generally employ three times more staff than livestock farms due to the nature of the operation. Game is better adapted than livestock to marginal conditions in Swaziland (which becomes increasingly relevant with global warming). Free-ranging game is not dependant on other crops' success, as is the case with the beef industry. Wildlife ranches can have both consumptive and non-consumptive revenue (e.g. game meat and tourism), which are not mutually exclusive. As a result, promoting game farming will help meet many of the conservation, income generation and livelihood goals of this project and should be a key activity that is targeted.

26. Currently in Swaziland, there are numerous options for game ranching that are not being pursued as a result of a few barriers to entry including: insufficient knowledge of the industry among traditional cattle farmers, limited availability of game stock, high costs of game fencing and anti-poaching and a limited market for game meat. Investments in improving the sharing of game farming knowledge and training, improving the availability of game (through facilitating game capture and transport), subsidising game fencing and targeted marketing of game meat as a premium product would likely result in significant returns for biodiversity conservation, income generation and rural livelihoods.

Improving Productivity of Farming Practices

27. The most efficient way to increase production of the staple food crops is adoption of improved cultivation methods. Any increase in productivity results in an improved return on their labour inputs, which is the main criterion that villagers use when deciding whether to adopt new systems. Among the possibilities are agro-forestry, improvements to soil fertility, and the introduction of other off-season cash crops

28. **Agro-forestry**, an integrated approach of using the interactive benefits from combining trees and shrubs with crops and/or livestock, is a relatively low-cost solution that can raise productivity of smallholdings by up to 60%. This would not only increase a households' food availability, it can potentially free some food supplies for sale outside the household. It has the additional benefit of providing corridors for the movement of animals.

29. **Improving soil fertility:** Among the easiest to implement are utilisation of soil-restoring **green manure.** For example, research from India shows that areas previously covered with Siam weed (*Chromoleana odorata*) and lantana (*Lantana camera*) are 10% more fertile than adjacent areas. Siam weed has also been used successfully an enricher for organic and farm based manure.

Promotion of Appropriate Alternative Technologies

30. **Beekeeping, indigenous poultry farming and edible oil programs:** are relatively easy to expand and improve (from current program levels) and most rural communities on SNL would strongly support these activities. In addition, the poultry can provide an additional source of meat and eggs for the family. Consideration should also be given to the expansion of edible oil programs beyond the current reliance on sunflower oil. Simultaneously with the expansion of these programs, development of a more systemic collection process—one that relies on the **development of a cadre of local collectors**—should be considered for development of an additional income option, and for removal of a key barrier to more widespread adoption. The collection network should be based, for example, on local collectors using cargo bicycles (with or without flatbed or closed cart trailers), allowing them to collect from multiple locations that then bring the products to a central collection point for motorised distribution.

31. **Commercial worm farming:** is one of the rural enterprises that can be developed at both a smallholder scale and a larger commercial enterprise. The use of earthworms in waste management by utilising and breaking down organic wastes has received increasing attention over the last 20 years, where research programs and commercial projects have been developed in many countries on all continents, led by the growing realisation that organic matter in the waste stream can be used as a resource rather than going to landfills; that diversion, remediation and recycling of organic matter from the waste stream can create a marketable product for sale; and by the increasing recognition of vermiculture as a viable alternative to composting[8].

32. **Farm gate markets:** The development of competitive farm gate markets is an important step in promoting increased production. Fresh food and firewood are significant sources of cash income for many rural villagers. It is suggested that farmers themselves should be taught to market their own produce. In doing so, farmers could get competitive farm gate prices for their produce.

[8] Vermicompost is seven times richer than compost and requires a seventh of the quantity (Munroe, Manual of On-Farm Vermicomposting and Vermiculture).

33. **Non-Timber Forest Products:** NTFPs are another option for improving livelihoods and enhancing conservation. Certain species, such as jacaranda provide scope for local-level processing and value addition for **handicrafts and furniture production**. The use of a well-promoted and supported **fair trade type certification standard** that would support and encourage use of IAS, such as jacaranda for the handicraft market and local furniture would reflect in sellers' ability to gain higher prices for their products.

34. Consideration should be given to the development of **Payment for Ecosystem Services (PES) programs**. There are several options for developing PES, including both carbon and REDD projects, with the income providing for conservation management, infrastructure, utilities, and other needs. These programs have both an upfront cost and are time consuming to set up, however they can provide much needed income. For example, in the Sofala community in Mozambique, each household is guaranteed an income of 40 USD per annum for 7 years for based on household performance (payments to farmers are front-end loaded each year by 30%). As part of this carbon & REDD project the farmers can choose agro-forestry (for soil improvement, fuel wood and fodder for livestock) or indigenous fruit trees with the purpose of improving yields and reducing forest clearing pressure. The project also has riparian stabilisation planting and habitat restoration components.

35. **Alternative Energy Resources:** Introduction of other household fuel solutions such as fuel-efficient stoves and improved charcoal processing should be encouraged. Such technologies could assist households by reducing their need to collect firewood and free the household's time and allow them the opportunity to develop alternative incomes. Among the technologies to be considered are **fuel-efficient stoves, solar water filters** for households who do not have access to potable water, **solar charged lanterns** and **solar water heaters**. The production and sale of **briquettes**, made by compacting biomass waste that can serve as both a household and institutional fuel. Briquettes are a better fuel than firewood. Lastly, consideration should be given to the systemic distribution of **solar-based electricity**, so that remote communities on SNL can acquire access to technology. This would allow households to develop the skills to create non-farm small enterprises, such as data entry, that could provide additional sources of income.

Commercial Use of Invasive Alien Species

36. Promoting the utilisation of any IAS remains a controversial approach due to the potential to contributing to their spread, especially when effective integrated management strategies are not implemented. For utilisation to work it must be integrated with a coherent and comprehensive PA management strategy. Various invasive species can be utilised for different purposes:

37. **Siam weed (***Chromolaena odorata***):** biogas production; improving soil fertility and reducing the fallow period of farm lands; mulch for increased maize yield; livestock feed; leaf meal for poultry; insect and rodent repellent for temporal storage of maize; plant fertiliser, compost and mulch; remediation of heavy metals in soils; treatment for oily wastewater; charcoal and briquettes;

38. **Lantana (***Lantana camara***):** fuel wood and biogas (when dry); charcoal and briquettes; construction material for bee hives; as vermicomposting can increase field yield; botanical insecticide to protect crops; improve soil productivity; source of low cost enzyme for detergents alkaline protease; flower can be used a natural silk dye; biofuel and bioethanol; paper pulp (high

fibre values)

39. **Black wattle (***Acacia mearnsii***):** furniture and handicraft products (specialty timber); fuel wood and biogas (when dry); charcoal and briquettes; construction material; paper pulp (high fibre values); biomass; commercial tannins and wattle extract; tannin-based wood adhesives; useful for cooper work; axe- and pick-handles; useful for agro-forestry; posts for fencing; can be used as livestock fodder in certain conditions; edible gum and seed; and bark tea.

Tourism Related Enterprises

40. Currently, there is limited ecotourism in Swaziland. What does exist is mostly focused on big game viewing, cultural performances, and on single aspect adventure tourism products (although there are some experiential and niche enterprises). It is, however, clear that nature and culture are the main assets that Swaziland has to offer and the principal reasons that the general leisure visitor, the adventure tourist, as well as, the special interest enthusiast come. Therefore, there is a need to develop, diversify and adapt products based on Swaziland's exceptional nature and culture that do not damage the environment and that provide rural communities on SNL with opportunities to generate income from different market segments

FINANCIAL SUSTAINABILITY OF SWAZILAND'S PAS

41. Swaziland's protected areas (PAs) cover 4.45% of the country and form the core strategy in ensuring a sound natural resource base, as well as, meeting the country's conservation obligations under the Convention of Biological Diversity (CBD). In addition, the protected area system (PAS) contributes significant value to the national economy, primarily in that it underpins a large portion of the national tourism industry, the fastest growing economic sector. However, despite the substantial economic potential, the PAs in Swaziland are severely underfunded. Moreover, the PA system is considered inadequate to meet national conservation goals, and further investment is required to expand and improve it.

42. Currently in Swaziland, there is no long-term PA system development plan in place, nor are there management plans for many individual PAs. Conservation activities need strengthening in the majority of the PAs and there is a shortage of a historic financial data series to understand current trends and sources of funding. Furthermore, the multiplicity of management approaches and managing entities complicates a systemic understanding of the PAS financial situation. These challenges highlight the need for a comprehensive methodological approach to facilitate the development of a robust financial process that reflects a link between PA management tools, implementing partners and institutional strengthening for PA management.

Current Funding for PAs

43. There are two major sources of funding for the management of PAs: governmental budgets and self-generated funds. Among the variety of mechanisms in place it is worth mentioning the entrance fees, different user fees and use charges as limited sources of financing. Swaziland's SNTC PAS have traditionally been funded from the government treasury and given low priority, as it was seen to have little to contribute to the national development process. Recurrent budgets are commonly just enough to keep only basic management structures in place, and capital budgets were insufficient to prevent depreciation and decay of PA infrastructure. However, valuation studies in other African countries have shown that the PAS underpin a large part of the national tourism industry and, as such, generates significant economic value in terms of income

and employment.[9] These studies have also shown that enhanced investment in the PAS will be economically efficient, resulting in positive economic returns in terms of income.

44. **Government Sources:** The vast majority of funding to manage the SNTC PAs (and in future the Forestry PAs) is from governmental sources, assigned through specific budgets for each of the agencies in charge of PA management. As a result of the minimal financial resources allocated by the government, the budget barely allows for the maintenance of immediate management functions and key staff, though both agencies are looking at ways in which to increase self-generated revenues.

45. **Self-generated Funds:** The second source of resources with important potential for growth, are self-generated revenues although the current amount generated for SNTC PAs is still very low. The funding source for most private PAs is self-generated funds.

46. It is clear that the current composition of mechanisms and sources is insufficient and inadequate, since it is not, as far as can be determined, meeting the financial needs of the system, nor is it taking full advantage of available funding and market-based opportunities.

Alternative Funding Sources for PAs

47. Sustainable financing or long-term financial sustainability refers to securing adequate financing to cover the true costs of managing an economically and ecologically viable landscape with respect to agreed objectives regarding biodiversity and habitat conservation, as well as, sustainable use of natural resources. It requires a combination of national and sub-national public investments, payment mechanisms for goods and services, and the coordination of donor grants and cooperation, as well as, the enabling conditions that allow the financing to be effectively and efficiently delivered. There are three primary source categories: Government, Market, and Donor. Each source of financing (i.e., the origin of the financial resources used to underwrite the investment and pay those who carry out landscape management) has a range of possible sub-sources to generate actual financing.

Government Sources

48. Government (domestic) budgets can be made to represent a significant amount of financial support for all aspects of landscape management, including direct budget allocations for conservation forests and PAs, tax earmarks and fee revenues to manage production forests and other industries. Specifically, government administered fiscal instruments include taxes and subsidies on natural resource extraction, removal of environmentally damaging product subsidies, introduction of new product taxes and user charges, and modifications of other taxes and charges. Properly designed, these create economic incentives for more efficient resource use and pollution abatement, by driving up the cost of environmentally harmful activities or increasing the returns to sustainable approaches (e.g., environmental taxes and charges); mobilise funds for environmental protection and natural resource management (e.g., via environmental charges and fiscal transfers); and ensure a more equitable distribution of benefits and costs from the management of environmental resources (e.g. improved access to

[9] Turpie, J., Barnes J., Lange, G-M. & Martin, R. 2009. *The economic value of Namibia's protected area system and case for increased investment*. Ministry of Environment and Tourism: Windhoek, Namibia.

environmental public goods via public investments and pricing reforms)[10].

49. **Licensing & Royalty Fees and Concessions**: Licensing and royalty fees are typically classified as government non-tax revenue, either on a one-time or on an annual basis. The fee magnitude is dependent on government policy, but they are typically attached to a quantifiable number (e.g., amount of natural resources extracted). Concessions are contractual agreements, usually extended over long periods of time, between a government and a non-governmental party. The concession allows the non-governmental party to engage in an activity within the area of question, such as: logging, mining or hunting, and generates revenue to the government in the form of a concession payment(s). Licensing and royalty fees, on the other hand, reflect fees for non-extractive use for example, PA Image Copyrights often of pictures or footage taken in natural areas like PAs for commercial purposes like advertising.

50. **Taxes & Fees:** There is often a precedent and legal framework that makes tourism entrance fees a viable financing mechanism to establish and collect funds. The tourism industry, and associated revenues, is dependent upon a number of factors, primarily: the ease of accessing the destination in question and visitor willingness to pay. Among the fees in this category are Transportation and Hotel Taxes; Swaziland has an existing airport tax, and consideration should be given to using that tax in part, for conservation revenue.

51. **Fines:** Fines for resource related transgressions are in place in Swaziland. It appears, however, that there is a need to adjust the legally determined fine levels (currently perceived by the conservation community as too low) to increase their function as a deterrent, as well as work with the judicial system and various enforcement agencies to ensure that the fines are collected and applied. In addition, it would be beneficial for the country to develop a mechanism that ensures that the collected fines are directed back into conservation related activities.

52. **Subsidies & Tax Breaks for Private Conservation Investments:** The use of incentives or tax breaks to encourage private conservation investments within existing PAs or to establish new PAs is a well-known financial tool in many countries, though its formulation depends in the country's legal and tax collection structure (E.g. PAs don't have to pay PAYE tax). This would be an efficient & significant tax break. When using such a tool it is important to ensure that the funds are used not only for land set-asides, but also for management.

Market Sources

53. At the centre of all conservation activities lies the intrinsic value of the country's biodiversity as a valuable economic and ecological asset. The many goods and services produced across the landscape include raw materials, environmental services (e.g., watershed protection and carbon sequestration), tourism opportunities, traditional natural resource use, and extraction industries. Charging for these services allows for multiple benefits: it acknowledges the value that ecosystems provide and it raises new funds for the landscape.

54. **Tourism Payments, Fees & Taxes:** Among the fees in this category are: (i) Protected Area Entrance Fees. Most PAs in Swaziland already collect this fee, though a casual review indicates that in some cases the fees may be too low. (ii) Recreation License Fees and Special Access

[10] Emerton, L., Bishop, J. and Thomas, L. 2006. *Sustainable Financing of Protected Areas: A global review of challenges and options*. International Union for Conservation of Nature (IUCN): Gland, Switzerland and Cambridge, UK.

Payments. Many PAs charge additional fees for PA-related activities: daily use fees; vehicle, boat, and plane fees; camping fees; and special service fees, such as game drives. Incomes from these sources supplement the basic PA entry revenue and help cover the true costs of supporting PA visitors. This income capitalises on highly attractive features (e.g., scenery, charismatic species).

55. **Live Animal and Meat Sales from Excess Game:** Given that all PAs in Swaziland are too small to house viable populations of all native predators and restrict the migration of large mammals with fences, population management of game is necessary and off-take of excess game is commonplace. Sale of live animals and the processing and sale of meat from culled animals is an important source of revenue for PAs.

56. **Royalties from Private-Public Sector Partnerships and Service Concessions:** Many of the PAs have the capacity for increased numbers of accommodations, across a whole range from bottom to top-end establishments, including back-country and luxury bush-camps. When public-private partnerships are developed for accommodations, the private operators are responsible for the construction and maintenance of the facilities. A typical lease period for this type of arrangement is 15 to 45 years, with assets being handed back to the PA at the end of the period and in top condition. The expected royalty amounts to about 5-15% of annual turnover. Often a guaranteed minimum payment to the PA is included in the contract. Moreover, in order to cover the additional cost of the service concession management and to ensure the high level of visitor experience in PAs, it is strongly recommended that the tourism concession fees be reinvested in PA management, operations and training.

57. **Payments for Ecosystem Services (PES):** One such example is the REDD financing mechanism that directly links financial incentives for conservation with carbon stored in forests and natural woodlands. Generally speaking, both production forests and PAs are viable sites for REDD projects. The actual amounts paid are extremely variable and project dependant. The Makira project in Madagascar, for example, generates 27 metric ton of carbon for each forested hectare. Based on this, a 1,000 hectare forested area may generate 81,000 USD annually (at 3 USD/carbon credit[11]). A different approach is the Sofala community in Mozambique, where each household in the community is guaranteed an income of 40 USD per annum for 7 years for based on household performance (payments to farmers are front-end loaded each year by 30%). As part of this carbon & REDD project the farmers can choose agro-forestry (for soil improvement, fuel wood and fodder for livestock) or indigenous fruit trees in order to improve yields and reduce forest clearing pressure.

58. A sub-segment of PES is **revenue generation from invasive alien species (IAS)**. Tessema (2012) coined the phrase "eradication by utilisation" to describe the economic use of IAS as a means of harnessing their economic potentials for meeting basic human needs, and at the same time control their spread and possibly eradicate them. In the context of PAs, this can be a viable means for increasing the relatively short-term financial opportunities available to PA managers, while at the same time addressing a key natural resource management objective: the removal of IAS. Promoting the utilisation of any IAS remains a controversial approach due to the potential to contributing to their spread, especially when effective integrated management strategies are not implemented. For utilisation to work it must be integrated with management strategy. In

[11] A carbon credit represents one tonne of carbon dioxide equivalent removed, avoided or sequestered. The current market price for a carbon credit is around 3 USD per credit.

addition to the urgent natural resource management aspects of an IAS utilisation program, other key elements of any such program include education and training, development of secondary industries, especially in the communities on SNL surrounding PAs, and community and enterprise development training.

59. **Tradable Development Rights (Biodiversity Offsets & Mitigation Banking):** Many consider this option a sub-segment of PES. In environmental contexts, mitigation generally refers to efforts to reduce or offset the negative environmental consequences of activities that are permitted despite their negative impact. Biodiversity offsets are measurable conservation outcomes resulting from actions designed to compensate for significant residual adverse biodiversity impacts arising from project development and persisting after appropriate prevention and mitigation measures have been implemented. The goal of biodiversity offsets is to achieve "no net loss" or preferably a net gain, of on-the-ground biodiversity with respect to species composition, habitat structure and ecosystem services, including livelihood aspects. The compensation payments on biodiversity offsets vary widely in amount, and may be voluntary or required by law. There is a need to strengthen both existing technical and regulatory capacity, as well as, ensuring that the legal and policy framework is in place prior to using this revenue option.

60. **Cause Related Marketing / Corporate Social Responsibility / Special Event Marketing:** In cause-related marketing a company links with, and donates to a non-profit organisation, as part of a program to promote the company's products or services by associating the company with the activities of the non-profit organisation. Cause Related marketing involves, for example, the sale of adoption rights for PA attributes. Numerous wildlife adoption schemes act as revenue generating mechanisms for conservation-oriented NGOs in this manner.

61. In recent years, as many public companies become more sensitive to their environmental footprint, they want to convey and promote a positive corporate image to the public and a link with conservation can help them do this. Other motivations for private sector involvement include access to capital, as more and more investors require sound environmental performance and pension funds favour leaders in this sector. Among the options for this type of collaboration are:

    (i) Providing funding to PAs, either as a donation to increase visibility in relation to conservation activities or means of mitigating the environmental impacts of activities;

    (ii) Providing professionally qualified experts in fields such as finance, infrastructure development and maintenance, tourism and concession management;

    (iii) Salary round-ups: In this mechanism, users allow utilities to round up (or in the case of salary payments to round down) the cents in their bills and donate the cents to a designated charity. Collection and transfer costs are low because the payment systems are both highly standardised and internet-based. Even if each donation is just cents, the totals can be great[12].

62. Special events and campaigns linked to activities that rely on natural resources, such as bike

[12] Koch-Weser, M. and Jacobs, W. 2007. *Financing the Future: Innovative Funding Mechanisms at Work*. Terra Media Verlag: Berlin.

rides, can also be leveraged to generate funds for PAs — either as part of a voluntary donation campaign or as part of the ticket price. Coordination with event organisers for such activities is required in advance, and it is useful when there is a central authority that is aware of all such activities well in advance to assist in generating funding as well as collaborating on potential marketing activities.

63. **Bioprospecting:** Bioprospecting is the systematic search for new sources of chemical compounds, genes, proteins, microorganisms, and other products with potential economic value. Pharmaceutical companies enter bio-prospecting agreements with countries in order to engage in these pursuits. In return, the companies get exclusive rights to screen the biodiversity for pharmaceutical compounds. In the event that the search leads to the development of a major drug, the agreements stipulates the benefit sharing (e.g., profits) to the host country. The host country, at its discretion, can utilise the money for biodiversity conservation or other activities. Concession fees and a share of expected royalties for any commercially valuable discoveries are often paid in advance, with a proportion of the payment typically allocated to in situ conservation efforts in PAs. The rules and procedures governing bioprospecting are, of necessity, quite complex and require a very clear legislative and regulatory environment, as well as, continuous enforcement, and as a result, this option is considered viable in the immediate future for Swaziland.

POLICY AND LEGISLATIVE CONTEXT

64. **The Private Forests Act No.3/1951:** This is an Act to provide for the better regulation and protection of private forests in Swaziland. It gives private forests owners' exclusive rights over their forests and their produce. It specifically excludes forests from Swazi Nation Land as it deals in particular with the rights of the owners of such forests.

65. **The Natural Resources Act No.71/1951:** This Act is to provide for the conservation and improvements of the natural resources and for other matters incidental thereto.

66. **The Wildlife and Flora Act No. 51/1953, short title: The Game Act:** This Act was amended in 1991 and 1993. The Act makes provision for control of abuse and trafficking in game and other wildlife and their products, according to the Schedules, and imposes stringent sentences on Royal and Specially Protected Species. The Game Act provides for the protection and sustainable legal use of game and other species of wildlife through a defined hunting season and permit system, and provides for the equitable sharing of benefits arising from the sustainable utilization. The Game Act provides for the proclamation of protected areas as sanctuaries and is administered through the King's Office.

67. **The Swaziland National Trust Commission Act No.9/1972:** The Swaziland National Trust Commission (SNTC) is a body corporate established by the SNTC Act of 1972. The SNTC's key objectives are both to preserve the cultural heritage and to conserve representative examples of the natural heritage of the Kingdom of Swaziland. It emphasises to the public the irreplaceable value of the national heritage. The Commission is charged with the general supervision and control of the Swaziland Centre and other declared institutions, national parks, nature reserves, monuments, relics and antiques. SNTC's responsibility for wildlife in Swaziland is restricted to parks and reserves gazetted under the SNTC Act. This Act has been amended K.O-I-C 22/1973.

68. **The Environment Audit, Assessment and Review Regulations 31/2000:** These regulations concern the systematic examination of the environmental impact of proposed projects to determine whether or not the activity will have any adverse impacts on the environment and

prepares for a mitigation plan to manage the resulting impacts.

69. **The Flora Protection Act No.10/2001:** This is an Act to protect indigenous flora and to provide for matters incidental thereto. It prohibits any person from plucking, gathering, cutting, uprooting, injuring, breaking or destroying a plant of any species that is listed in the Schedule to the Act. This Act repealed the Flora Protection Act of 1952.

70. **The Environment Management Act No.5/2002:** This Act is to provide and promote the enhancement, protection and conservation of the environment and the sustainable management of natural resources. It also turned the Swaziland Environment Authority (SEA) into a body corporate and established the National Environment Fund. In terms of this Act, the SEA has the power to halt any and all developments that have not been adequately scrutinised for their environmental impact. Any policy, bill, regulation, programme or plan requires a Strategic Environmental Assessment.

71. **The Kingdom Of Swaziland Constitution Act No.1/2005:** This Constitution Act is the supreme law in Swaziland. Section 210 (2) provides that the state shall protect and make rational use of its land, mineral, water resources as well as its fauna and flora, and shall take appropriate measure to conserve and improve the environment for the present and future generation.

72. **The Access and Benefit Sharing Bill of 2006:** This Bill deals with issues on the access and use of biological diversity. Although not made in terms of the Environment Management Act of 2002, it recognises its supremacy. It deals with such issues as community rights on SNL, including plant breeders' rights. It proposes institutional arrangements for the management of ABS issues. It recognises the Environment Management Board to be top of the hierarchy in its administration and implementation. It further protects the country's indigenous knowledge system and establishes a certification system.

INSTITUTIONAL AND GOVERNANCE CONTEXT

73. The country is divided into four administrative regions namely: Hhohho, Lubombo, Manzini and Shiselweni. Each administrative region has regional councils or local government administration centres called "Tinkhundla" (singular "Inkhundla"). Each Inkhundla is made up of about 10 chiefdoms (Umiphakatsi).

Ministry of Tourism and Environmental Affairs

74. The MTEA aims to promote and support the tourism industry, 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. The core objectives are: provide strategic leadership and strategic corporate services; develop and promote the tourism sector to contribute to the economic growth of the country; promote and conserve the natural and cultural heritage of the Kingdom; protect, conserve, restore and enhance the environment; safeguard and develop the forestry sector for the benefit of the Swazi nation; and observe weather and climate and monitor climate change in order to provide consistent and reliable data information.

75. The Forestry Department under the MTEA is mandated to: Take the overall lead in the maintenance of a coherent and contemporary forest policy and legal framework, with due consideration to the cross-sectoral nature of forestry; Maintain a comprehensive national forest

inventory, with an adequate planning capability and technical forest management capacity; and extend government forest policies and disseminate technical knowledge on forest management, markets and organisational aspects to SNL communities, individuals, companies and other institutions for the economic, social and environmental benefit of Swaziland.

76. The objectives of the Forestry Department are: To provide an oversight role, direction and guidance to the forest development and management sector; To provide extension services to farmers; To promote tree growing and sustainable use of forest and natural resources; To promote sustainable use, management and development of forest resources including the development of forest industry; To improve forest productivity and ensure sustainable supply of multiple forest products and services; To conserve bio-diversity of forest resources and encourage for its sustainable use including protection of plant genetic resources and environment; and To enhance national capacity to manage and develop the forest sector.

Swaziland Environment Authority

77. The Swaziland Environment Authority was established in 1992 with the mandate of coordinating government's efforts to incorporate environmental factors into the country's development process. It is run by a Board comprised of a chairperson, a secretary (the Director of the SEA), and representatives from eight ministries, four NGOs and four private citizens. At present, the SEA staff all fall under a single department headed by the Director. According to the Act, the SEA has four main responsibilities, which are to: promote the development of policies, legislation and enforcement mechanisms needed for sound environmental management; coordinate the activities of all bodies concerned with environmental matters and serve as liaison for national and international organisations on environmental matters; monitor trends in the state of the environment, and conduct and promote research on environmental matters, and promote environmental training and education to increase public awareness and participation. The SEA is directly responsible for reviewing EIAs and issuing compliance certificates where appropriate. Through this EIA process, the erosion of biodiversity in Swaziland has certainly been curbed. The SEA is also charged with increasing public awareness on environmental issues (which includes biodiversity conservation concerns).

78. The mission of the SEA is to ensure that Swaziland's development is environmentally, economically and socially sustainable, by means of promoting sound environmental policies, practices and development, which meets appropriate national and international standards. The Swaziland Environment Authority prepares every year a State of Environment Report (SOER). The report is usually submitted to Regional Workshops on the SADC (Southern African Development Committee) for assessment. The report addresses national circumstances, land use & energy, water resources, climate, urban environment & waste and forestry issues in Swaziland. The SEA also conducts Environmental Impact Assessments, Chemical and Waste management programmes as well as being involved in environmental education for the public.

Swaziland National Trust Commission

79. The Swaziland National Trust Commission was established by Act No. 9 of 1972, with later amendments, made effective from 27 July 1973. The Swaziland National Trust Commission is a parastatal responsible for the conservation of nature within institutions gazetted under the SNTC Act, and the cultural heritage of the Kingdom of Swaziland. The SNTC aims to conserve the natural and cultural heritage of Swaziland for which it is responsible through sustainable utilisation of these resources and promotion of environmental awareness throughout the nation.

The objectives of the Swaziland National Trust Commission are to: preserve natural and cultural heritage; continue to develop nature conservation within parks and reserves gazetted under the SNTC Act; Create awareness and educate the public on conservation of natural and cultural heritage; Promote tourism relating to the natural and cultural heritage of the country; Implementation of all activities relating to biodiversity conservation within Parks and Reserves gazetted under the SNTC Act, while taking full cognisance of the responsibilities of the Head of State for the wildlife of Swaziland.

80. It is run by a Board of Commissioners appointed by the Minister and has six departments: the Museum, Monuments, Relics and Antiques, National Parks and Reserves, Environmental Education, Community Outreach, and Accounts and Administration. The Museum, National Monuments and Archaeology Departments are responsible for the protection of Swaziland's cultural heritage. The Parks and Reserves Department is responsible for conservation of a representation of Swaziland's natural heritage within areas gazetted under the SNTC Act. The department is responsible for conserving natural ecosystems, and their plant and animal life, within its proclaimed institutions, and promoting the wise utilisation of these resources. Its objectives are to establish and maintain national parks and nature reserves; to create and promote environmental awareness within the general public; to promote conservation activities outside protected areas in harmony with the responsibilities of the King's Office, and to advise, promote and facilitate community managed activities that improve the quality of life while reducing undesirable impacts on the environment; to promote and provide advice on ecological research and monitoring.

Swaziland Tourism Authority

81. The Swaziland Tourism Authority is a parastatal body mandated with marketing the country as a destination to promote the tourism attractions of the Kingdom and to facilitate and encourage the growth of tourism enterprises to boost sustainable economic development in the country. The STA assisted a number of communities to establish community based tourism enterprises many of which are located in protection-worthy areas and are targeted towards eco-tourism. The STA is partly funded by the government of Swaziland and partly by bed-levies paid by accommodation enterprises. The STA also facilitates the establishment and monitoring of acceptable standards among tourism enterprises.

Ministry of Natural Resources and Energy

82. The Ministry'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 for socio-economic benefit of the Kingdom of Swaziland. The following strategic objectives are elucidated for the provision and management of resources for ensuring the optimal land use, mineral exploration, adequate water and energy to meet national aspirations:- To set goals and strategies to facilitate the coordination and implementation of Government priorities as outlined in the NDS, PRSAP, MDGs and other national priorities within the Ministry's portfolio; To develop, review and operationalise relevant policies ensuring optimal utilisation of natural resources; To provide general management of land, minerals, water and energy resources; To provide surveying, mapping, land and real rights registration and valuation services for Government and other public entities; To provide facilities for ensuring access to sustainable energy and security of energy supply; To ensure optimal development, management and supply of adequate water resources in a sustainable manner; To explore and identify mineral

targets with economic potential; To ensure extraction and value addition to mineral resources for sustainable development; and To develop relative policies, collect and maintain an up to-date database on land and natural resources.

Ministry of Agriculture

83. The obligation of the Ministry of Agriculture is to ensure household food security and increased sustainable agricultural productivity through diversification and enhancement of commercial agricultural activities. The Ministry is also responsible for the development and promotion of appropriate technologies and efficient extension services while ensuring stakeholder participation and sustainable development and management of natural resources in the country.

84. The Land Use Planning and Development Department under the MoA is responsible for promoting rational land use and the development of agricultural land and water resources, particularly on Swazi Nation Land (SNL).The department is composed of the following sections: Land Development, Land Use Planning and Irrigation Development. The major responsibilities of the Department are as follows: Carry out soil surveys in order to come up with soil maps and accompanying reports that characterize the various soil types occurring in the survey area; Produce Land Capability Maps in order to show different categories of Land Capability classes from prime arable land through marginal to non-arable land; Develop land use plans covering resettlement plans, crops and forestry land suitability plans; Determine irrigation potential of areas; Carryout engineering designs for farm roads, small earth dams and diversion weirs for small-scale irrigation development; Promote Soil Conservation practices on both arable land and rangelands to ensure sustainability in land utilisation; Rehabilitation of degraded lands; Construction, maintenance and rehabilitation of rural infrastructure such as feeder roads, low level bridges, water diversion structures and canals for irrigation; Construction and rehabilitation of earth dams and their downstream development.

University of Swaziland

85. The University of Swaziland (UNISWA) has both a main campus at Kwaluseni and an agricultural campus at Luyengo. Its main campus houses the biology department which teaches biology and ecology to students at both undergraduate and MSc level. UNISWA encourages students and lecturers to conduct research projects on relevant subjects and the biology department houses staff with research interests in small mammals, birds, insects and other aspects of biodiversity.

NON-GOVERNMENTAL ORGANISATIONS AND PRIVATE SECTOR

Big Game Parks

86. Big Game Parks (BGP) is a private non-profit Trust which manages three PAs in Swaziland: Hlane Royal National Park, Mlilwane Wildlife Sanctuary and Mkhaya Game Reserve. BGP is also the officially delegated Administrative and Management Authority of the Game Act and CITES and associated conventions and agreements on wildlife. BGP represents the Kingdom of Swaziland on all such fora. BGP answers to the Head of State and performs its mandate through the King's Office.

87. BGP has three main sections: National Conservation Agency; Conservation Division; and Tourism Division. The National conservation aspect of BGP materialised from official recognition that BGP had not only restored many species of animals to Swaziland after they had gone locally extinct, and provided protected habitat to ensure their survival, but also had the

skills and experience necessary to successfully manage and administer the legislation which saves wildlife from plunder and extinction in Swaziland.

88. BGP promotes and practices the IUCN philosophy of sustainable consumptive and non-consumptive utilization of self-renewing natural resources. BGP works closely with the Swaziland Game Ranchers Association and actively encourages the healthy growth of the wildlife estate of Swaziland. BGP and all its parks are self-sustaining on self-generated revenues.

Lubombo Conservancy

89. This is a collection of public sector, private sector and communal area stakeholders. The Lubombo Conservancy comprises of five established reserves that include Mlawula Nature Reserve, Shewula Nature Reserve, Mbuluzi Game reserve, Hlane National Park and Inyoni Yami Swaziland Irrigation Scheme (IYSIS). The Conservancy is unique in that it combines national, private and SNL community-owned reserves that have come together in a co-ordinated effort to ensure that there is proper and sustainable conservation of ecosystems, which also enhances the quality of life of people in this region.

Shewula Trust

90. This is a community trust established to represent the interests of the Shewula community in managing and developing their shared resources. The trust oversees the management of the Shewula Community Nature Reserve and other associated sustainable community development projects. The trust successfully oversees the management of the Shewula Mountain Camp and has facilitated a number of donor funded projects to benefit the community ranging from conservation agriculture to support for orphaned and vulnerable children.

Swaziland Game Ranchers Association (SGRA)

91. An association of private game ranchers in Swaziland with 26 current members, representing a total land area in excess of 70 000ha. Formed in 2011, SGRA has been instrumental in promoting a conservation agenda that supports and expands the wildlife ranching industry in Swaziland. SGRA is a platform for the private sector to have an active voice in national policy and programming. The Association acts as a liaison body with major State and Non-State conservation stakeholders; it lobbies for the expansion of an ethical and viable game ranching industry in Swaziland, and it coordinates cutting-edge research / educational and wildlife ranching activities.

All out Africa Foundation

92. A private non-profit foundation established in 2006 which supports education, research and grass-roots action projects to benefit vulnerable people and wildlife. It established and runs the Savannah Research Center in Mbuluzi Game Reserve which implements and facilitates ecological research and field-based education projects for Swazi and international students. It provides a free service of ecological research and monitoring to the Swaziland PAs that it partners with. It results in the production of a good number of international scientific publications on Swaziland's ecology each year. It also provides subsidised ecological extension, GIS mapping and conservation management advisory services. It implements a wide variety of community development projects ranging from building projects using traditional methods and materials to feeding and educating orphaned and vulnerable children.

Natural History Society

93. A public interest membership based association that promotes interest in and appreciation for Swaziland's natural heritage and campaigns for the interests of nature and conservation.

Part IB: Threats, Long-term Solution and Barriers

National Level Threats

94. Land degradation, fragmentation of habitats, invasive alien species (IAS), and rapid degradation of the biological resources are the key challenges to be addressed by the country. In addition, ever increasing poverty, particularly in the rural areas, and population growth is resulting in the rapid degradation of Swaziland's biodiversity in a vicious cycle of declining availability. Combined with recurrent drought, is resulting in a heavily degraded natural environment that responsible agencies are battling to address in light of higher national priorities. The various policy and legislative initiatives launched by the government have so far remained mostly on paper, are not cross sectoral or integrated and most importantly are not matched by adequate funding and expertise to implement the measures recommended by stakeholders[13].

95. **Invasive Alien Species:** In Swaziland, where by some estimates 20% of the land is covered by IAS, they pose a dire and immediate threat to biodiversity. The threat IASs pose is exacerbated by the dependence of the population on non-timber forest products for both household services and income.

96. **Habitat destruction** is probably the most important factor leading to the decline and, ultimately, the extinction of animal and plant populations around the world. In Swaziland, habitat destruction is acerbated by urbanisation as Swaziland's towns are expanding at rapid rates, and agricultural development, especially, commercial agricultural development, that has transformed many of Swaziland's natural systems through resource use, mono-cultures and pollution.

97. **Climate Change:** An emerging threat to Swaziland's sustainable development is climate change, with adverse effects already being observed on the environment itself, human health, food security, economic activity, and physical infrastructure. The country is currently threatened by a decrease in perennial surface drainage, which will have major impacts on river flow and soil-water content, with potentially serious socio-economic repercussions in rural areas.

98. **Overgrazing:** The density of livestock, especially cattle, on SNL in many communities is far higher than the carrying capacity of the land. As a result, severe overgrazing has occurred in these areas, leading to the loss of forest regeneration potential and grassland vegetation, thereby causing soil erosion and landslide problems.

99. **Hunting and Poaching:** Illegal and uncontrolled hunting has resulted in the extermination of

[13] SEA, 2009

most of Swaziland's large mammals, especially on SNL. Many species of fauna and flora are used in traditional medicine and are heavily exploited by the Tinyanga (traditional healers), but the effects of this exploitation have yet to be quantified. In addition, many species of vertebrates are killed for food and/or superstition. Crop and livestock depletion, and the expansion of cattle grazing area in the PAs and SNL, have also compelled hunting of the larger game animals.

Threats to Protected Areas

100. The PAs of Swaziland provide a means of conservation of critical biodiversity and ecosystems, however, these PAs face a variety of threats that would result in loss of biodiversity, reduced ecosystem resilience and loss of vital ecosystem processes.

UNPLANNED DEVELOPMENT AND POOR MANAGEMENT OF PAS

101. The inadequacy of the PA coverage originates from the history of PA establishment in the country, which was not based on systematic biodiversity planning, nor the assessment of ecosystems. Poor management of biodiversity in Swaziland has resulted in accelerated land degradation and biodiversity loss, loss of ecosystem resilience, reduction in water quantity and quality, increased infestation by invasive alien species, decline in land productivity and a shrinking economy.

UNSUSTAINABLE HARVESTING

102. Indigenous forests are harvested for fuel wood and building material without consideration for sustainability. A 2007 USAID biodiversity assessment reported that estimated annual wood consumption exceeds the total sustainable wood supply by 30%. Over-harvesting of woody plants has opened up forest patches, exposing them to fire and invasive species. A number of exotic woody species are rapidly encroaching into natural habitats, leading to the 2005 government proclamation on bush encroachment as a national disaster. This is also a problem in the aquatic and savannah ecosystems (inside and outside the PAs) where widespread overgrazing has altered the fire regimes leading to bush encroachment and reduction in species richness and productivity of the land. *Lantana camara, Psidium guajava, Chromolaena odorata and black wattle* have spread over large areas of the savannah ecosystem, while the herb *Parthenium hysterophorus* is often evident in the grass layer in disturbed areas.

LAND USE CONFLICT

103. Most land adjacent to the existing PAs or in protection worthy areas, where new PAs are planned is under multiple use. Uses range from commercial to subsistence agriculture, the harvest of forest and veldt products, livestock grazing, and settlements. Increasing human population in these areas has exerted pressure on biodiversity, particularly through agriculture (commercial and subsistence) and overharvesting of natural products from forests and woodlands. Large-scale irrigated agriculture, primarily sugarcane, pineapple and citrus, has cleared large tracts of grasslands, resulting in destruction of natural vegetation. The low productivity of the subsistence agriculture has driven overharvesting of natural resources without a mechanism for regeneration; expansion of agriculture into biodiversity important areas has resulted in encroachment into planned PAs and wildlife dispersal areas. The draining of natural wetlands for grazing and cropping has also degraded many wetland areas. Human wildlife conflict is also increasing with human settlement and the potential for a culture of compensation to be created where there is human-wildlife conflict poses a significant potential political and financial threat to conservation which will never be able to be sustained from

nature conservation generated resources. Such a culture should be discouraged from developing, and efforts made to rather encourage a conservation ethic with acceptance of the risks and rewards of wildlife.

CLIMATE CHANGE

104. The Intergovernmental Panel on Climate Change (IPCC) has established that the planet is experiencing a significant shift in climate, with human activity being the main causal factor. As the global climate as a whole increases in temperature, ecosystems are predicted to shift through increasing latitudes and altitudes, threatening the ecology of mountain and highland habitats in particular. With increased variability and a general decrease in precipitation, desert ecosystems are expected to expand and the sustainability of wetland ecosystems threatened. Most IPCC predictions indicate that the resilience of many ecosystems will be reduced by the changes expected over the course of this century. In general, the most threatened elements of biodiversity would be those with nowhere to shift, particularly mountaintop communities, island species or those living in isolated habitat refuges.

105. Projections of changes in mean annual temperature for 2020, 2050 and 2080 respectively show steady increases in the mean annual temperature while Projections of changes in mean annual rainfall for 2020, 2050 and 2080 respectively show steady decreases in the mean annual rainfall. The decreases appear most marked in the Lowveld and Lubombo areas. The implications of the above climate change analyses are that over the next 70 years there will be changes in climate which will influence plant growth, vegetation community composition, associated habitat suitability and the distribution and abundance of species. This will adversely affect the ability of PAs to conserve biodiversity.

Long-term Solution and Barriers to the Solution

LONG TERM SOLUTION

106. The long term solution is that Swaziland adopts a landscape conservation paradigm that allows a broader range of stakeholders to work together to manage biodiversity more effectively. Under this approach, PAs will be established and managed in critical biodiversity areas as clusters—different sites managed by the State, private landowners and SNL communities in proximity to one another. These PAs will need to be managed as part of a matrix of land uses across landscapes that allow biodiversity management objectives to be integrated in the strategies, production practices and decisions of a range of land and resource users occupying land immediately adjacent to PAs (and between them—so as to maintain functional corridors).

107. This will enhance a strengthened management system where critical biodiversity areas are managed as PAs; connectivity is created or maintained where needed to enhance biodiversity security and/or ecosystems functioning; and, land use and economic development immediately adjacent to PAs are compatible with biodiversity conservation. More importantly, it will expand the PA estate and reduce its vulnerability to the effects of climate change and human development. By allowing connectivity across landscapes, it will also allow the free movement of species, increasing the range for such species.

BARRIERS TO THE SOLUTION

Inadequate PA network coverage.

108. Based on the Baseline assessment of existing PAs, it is clear that the existing network of PAs, while relatively well placed, are insufficient to adequately represent the biodiversity of the country and also, insufficient portions of the PAs are legally gazetted. The area of gazetted PAs in Swaziland covers only 3.9% of the country (700 km^2). In addition to the six National PAs, other areas are currently being managed and treated as PAs but which are "not yet gazetted". These Informal PAs number at least 14 and cover at least 470 km^2 (2.7% of the country) and as such it appears their importance has been overlooked somewhat. The inadequacy of the PA coverage originates from the history of PA establishment in the country, which was not based on systematic biodiversity planning, nor the assessment of ecosystems. The oldest PAs, Ubombo and Hlathikhulu, were established in the late 1880s with the objective of protecting large mammals through *in-situ* and *ex-situ* conservation initiatives.

109. The last update of the protection-worthy areas assessment was done in 2002 and identified 44 important areas, however, none of these areas have been proclaimed as PAs to date. In addition to the fact that the PA estate falls short of the AICHI targets of 17%, most of the PAs are not suitable in size for long term sustainable conservation. Most of the PAs are too small to support viable populations of most species without connectivity with each other as well as inadequately representing the major ecosystems, with Grasslands, forests and aquatic ecosystems have only 2% under PA each, while the savannah woodlands has 5%. In addition, the spatial distribution of these conservation areas is skewed with most of the PAs situated in the north and the eastern parts of the country, leaving clear gaps in PA coverage in the southern and south-western parts.

110. Wildlife numbers have also been decimated, especially antelopes and their mammalian predators, and are now only found inside the protected areas. Many of the existing PAs have hard edges i.e. no transition zones or buffer zones, with production areas situated at the PA boundary, and remaining natural habitats outside these PAs and in planned PAs are fast being degraded leading to increasing habitat fragmentation. Corridor fragmentation constrains the migration of the already low numbers of wildlife across landscapes, further reducing the viability of the gene pools within the existing and planned PAs.

Weak capacity and governance of PAs to allow for a landscape approach to biodiversity conservation.

111. The current institutional capacity and governance framework is not adequate or effective for conservation with inefficiencies, gaps, overlaps and inconsistencies in the mandates and responsibilities for 1) the creation of a protected area network covering all ecosystems; 2) establishment of programs for sustainable utilisation of biodiversity (such as community-based natural resource management or CBNRM. This affects the ability of the government, SNTC and BGP to effectively manage and conserve biodiversity. The role of mainstreaming biodiversity considerations in land use decisions outside of the PA network is shared between the Swaziland Environment Authority (SEA) and the Ministry of Agriculture (MOA), as dictated by their individual mandates. However, these institutions have weak skills and capacities for enforcing biodiversity compatible land-use, particularly in PA adjacent areas; weak collaboration and coordination between the institutions further weakens their overall effectiveness.

112. This is further exacerbated by the general lack of skills and incentives for biodiversity friendly practices amongst the farmers and land users in these areas. Land use decisions are inadequately supported by land use planning, and even where this happens, it is rarely based on environmental assessments or biodiversity considerations. For instance the six gazetted PAs do not have comprehensive management plans that take into consideration management of the wider landscapes, integrating management of the PAs, and wildlife corridors/wildlife dispersal areas in multiple land use areas. Ecological corridors are in some areas being cleared for agriculture or allocated to other land uses that do not necessarily support biodiversity conservation, such as commercial and subsistence farming, livestock grazing, roads and settlements.

113. Increasing evidence suggests 3 important facts in support of the adoption of a landscape approach to PA management: i) that healthy, bio-diverse environments play a vital role in maintaining and increasing the resilience of ecological communities and societies; ii) that diverse, well-functioning ecosystems are better able to adapt to climate change than degraded systems; and that iii) functional connectivity in landscapes is a key aspect of ecosystem resilience. However, the country currently lacks the understanding of these concepts, the tools, skills and governance systems to enable the adoption of such a landscape approach.

Limited effectiveness of management and financing practices of Protected Areas.

114. PA management is not being adequately guided by relevant science or robust management plans; while enforcement, monitoring and service provision to tourism are ineffective. A 2010 review of the SNTC reported that its effectiveness was being limited by weak technical skills, low efficiency, lack of marketing strategy, poor infrastructure for tourism and out-dated practices. These capacity gaps are compounded by (and compounding) the inadequacy of PA financing.

115. The limited technical capacity for PA management constrains development of tourism strategies with the possibility of potential partnerships which could be exploited for the realisation of these additional products and services severely limited by the lack of capacity to pursue and sustain business partnerships. In addition, increasing tourism without concurrent technical capacity for PA management could have harmful impacts on biodiversity if not based on strategic environmental and tourism carrying capacity assessments. Unplanned expansion could lead to degradation of biodiversity sensitive areas, affecting wildlife feeding and breeding patterns, exacerbating soil erosion and degradation. Poor infrastructure development could also increase pollution from poor sewage and solid waste management already a problem in some Parks.

116. Despite the substantial economic potential, the PAs in Swaziland are severely underfunded with the government budget allocation to the Swaziland National Trust Commission (SNTC) as the main source of funding, supplemented by entry fees. In the fiscal year 2012/13, the budget shortfall is estimated at 27%, while community conservation areas (CCAs) are not funded at all. Moreover, the Protected Area System is considered inadequate to meet national conservation goals, and further investment is required to expand and improve it. The latter has been articulated as a vision for the effective development of the PAs, involving changes to the PAs included in the system and the surrounding areas. There is also a lack of skills, experience and knowledge within many PAs regarding identifying and accessing potential international sources of funds.

Baseline Course of Action

117. This project will build on a baseline of USD 37 million consisting of government and private sector investment in biodiversity management in the last 4 years.

Table 5: Baseline Programmes in Swaziland

Organisation/Institution		Amount (USD)	Elaboration
Ministry of Tourism and Environmental Affairs	SEA and Forestry	4,000,000	Regular investment in conservation related programs and in tourism through the SEA and forestry department
	SNTC PA management	7,000,000	Direct investment in the management of the 3 gazetted SNTC PAs
Ministry of Agriculture	Conservation support	3,000,000	Regular investments in conservation related aspects of the Land Use Planning and Development section
	Bilateral donor in agriculture project	8,000,000	EU support to small scale agriculture relevant to productive areas adjacent to PAs
Big Game Parks		7,000,000	Direct investment in the management of the 3 gazetted BGP PAs
Private Sector		5,000,000	Direct investment in the currently not gazetted PAs and tourism development
Total Baseline Investment		34,000,000	Of this total USD 19 million is direct investment in gazetted and ungazetted PAS. Another 4 million in invested directly into tourism support activities.

118. Investment in biodiversity management in Swaziland is channelled primarily through four national institutions: the Swaziland National Trust Commission; Big Game Parks (under the mandate of the King's Office); Swaziland Environment Authority and the Ministry of Agriculture. SNTC and SEA fall under the MTEA while BGP falls under the King's Office. The combined investment in the conservation aspects by these institutions in the last four years exceed USD 25 million, in addition, the government has invested more than USD 5 million in improving the financial sustainability of the SNTC through the restructuring and commercialisation process which is on-going.

119. **SNTC initiatives towards sustainable financing:** SNTC has embarked on a restructuring and commercialisation process, meant to make it more financially self-sustaining, by developing Public-Private Partnerships (PPP) for tourism development inside PAs. The restructuring process has been spearheaded in three steps, all aimed at increasing operational efficiencies and maximizing returns from tourism facilities in its parks, while ensuring adherence to international trends, requirements and standards of tourism management. The first step of the process was the Howarth Restructuring Plan, which was generated after a thorough review of the institutional structure of SNTC in 2002. The plan made several recommendations aimed at strengthening SNTC's core functions related to promoting nature-based tourism and ecotourism activities and programs for revenue generation. The recommendations included: the development of a five year Strategic Plan with a revised vision, revised mission, revised goals and strategic objectives, addressing infrastructure needs (develop appropriate infrastructure to meet staff and visitor needs), addressing marketing and communication needs (develop a clear brand and a marketing strategy), meeting human resource needs and an enabling staffing structure (establishment of a new organisational structure and the recruitment of skilled staff), improving monitoring and evaluation, and attending to financial needs including the need for public private partnerships to

generate sustainable financing. The second step of the process was the EU Private Sector Support to the SNTC's Parks Program, which started in 2006. The third step in the process was the development of technical recommendations for advancing the public-private joint ventures for tourism development in 2006.

120. **Swaziland Agricultural Development Project (SADP):** Through the MoA, this project focuses on increasing productivity of smallholder agriculture through: i) sustainable land management; ii) increased access to inorganic inputs; iii) improvement in agricultural research and service delivery; iv) removal of constraints in agricultural marketing; v) finance and agribusiness development. Funded by the EC and implemented by the government with technical support from the UN, the Project provides a crucial baseline to the proposed BD conservation project because the support provided to small holder agricultural in areas adjacent to protected areas will reduce pressure on biodiversity. The program is expected to contribute $8 million in baseline funding over the project lifespan.

121. **Private Sector Investment:** Collectively, the private sector invested at least USD 5 million over the last 4 years, primarily through development and maintenance of tourism facilities, protected areas planning, law enforcement and biodiversity monitoring and staff development. Big Game Parks, a privately owned body, manages three gazetted reserves; Mlilwane/Mkhaya Game Reserves, and, Hlane Royal National Park (held in trust for the Nation by the King). The private sector also manages Mbuluzi Game Reserve, Nisela Game Reserve Royal Jozini Big 6 Game Reserve, Emantini Game Reserve, Nkonyeni Game Reserve, Sibhetsamoya Game Reserve, Dombeya Game Reserve, Phophonyane Nature Reserve, Rosecraft Nature Reserve, Inyoni Yami Swaziland Irrigation Scheme Private Conservation Area, Panata Private Conservation Area and Libhetse Private Conservation Area and others. Involvement of the private sector in conservation has increased over the past decade and is set to increase further through initiatives such as the SGRA and the Lubombo Conservancy, an association spearheading a landscape approach to conservation, where collaboration among communities, the government and the private sector is expected to bring together five established reserves: Mlawula Nature Reserve, Shewula Community Nature Reserve, Mbuluzi Game Reserve, Hlane Royal National Park, and a conservation area within the Inyoni Yami Swaziland Irrigation Scheme. With financial and technical support from Peace Parks, this initiative will also increase the viability of ecotourism, increasing financial returns to the investments in biodiversity conservation. The Lubombo Conservancy model provides a good foundation for the development of other landscape-level collaborations across the country, a primary focus for this project.

STAKEHOLDER ANALYSIS

122. The key stakeholders involved in the project include nationally mandated conservation organisations, civil society organisations, private companies, landowners and rural communities on SNL.

Table 6: Key Stakeholders and their roles in the project

STAKEHOLDER	RELEVANT ROLES
Ministry of Tourism and Environmental Affairs	Leadership Ministry of Tourism and Environmental Affairs for the implementation of the project. implementing the project. Providing co-finance. Support to development and growth of the PAs under the mandate of the

STAKEHOLDER	RELEVANT ROLES
	SNTC Act and Flora Protection Act.
Swaziland National Trust Commission	Leadership and coordination for implementation of the project. Implementing the project. Providing co-finance. Day to day operational execution of the project. Technical consulting and capacity building. Marketing and infrastructure development. Support to development and growth of the PAs under the mandate of the SNTC Act.
Big Game Parks	Leadership and coordination for implementation of the project. Implementing the project. Providing co-finance. Day to day operational execution of the project. Technical consulting and capacity building. Marketing and infrastructure development. Support to development and growth of the PAs under the mandate of the Game Act.
Swaziland Environment Authority	Implementing the project activities. Technical consulting and capacity building.
Ministry of Natural Resources and Energy	Technical consulting and capacity building. Implementing the project. Support to development and growth of the different forms of PAs.
Ministry of Agriculture	Providing co-finance. Implementing the project. Technical consulting and capacity building.
University of Swaziland	Biodiversity surveys and ecological research. Technical consulting and capacity building. Formal training and education.
Lubombo Conservancy	Support to development and growth of the different forms of PAs. Technical consulting and capacity building. Implementing the project. Providing co-finance.
Swaziland Game Ranchers Association	Support to development and growth of the different forms of PAs. Technical consulting and capacity building. Implementing the project. Co-ordination and co-operation.
All Out Africa Foundation/Others consultancy firms/Researchers	Biodiversity surveys, ecological research and monitoring. Technical consulting and capacity building. . Field training and education.
Private PAs	Support to development and growth of the different forms of PAs. Implementing the project. Technical consulting and capacity building. Providing co-finance.
SNL Communities	Support to development and growth of the different forms of PAs. Technical consulting and capacity building. Implementing the project.

PART II: Project Strategy

Project Rationale

123. The project will contribute to GEF Biodiversity Focal Area Strategic Objectives one: *Improve Sustainability of Protected Area (PA) Systems*. It will advance a landscape approach that will operationalise PAs to ensure that Swaziland benefits from conservation and strengthen the management capacity and financial wherewithal of the BGP, SNTC, private sector and rural communities on SNL to manage existing and new PAs. In this regard, the project will facilitate the design and delivery of skills development programs suited to the various categories of stakeholders in the biodiversity management partnerships. It will in particular ensure that the design of the biodiversity management plans are led by inter-disciplinary teams (socio scientists, economists, conservation biologists, ecologists, etc.) that incorporate traditional technical knowledge on biodiversity conservation, livelihood support systems and coping mechanisms. This will be complemented by a specific package of training on advocacy and guidelines on BD friendly management practices for the extension service, which will be used to promote replication and upscaling of project experiences.

124. The project will facilitate PA business planning and establishment of private/public sector collaboration/joint venture, tourism product development and better marketing (taking into consideration the socio and environmental safeguards in the previous paragraph and others to be identified during the project). Financial management strategies including ten year business plans for existing and new PAs will be developed, building on the current drafts. These plans will be operationalised through the formulation and implementation of 3-year general work plans consisting of sustainable tourism development framework supported by new and additional tourism products (e.g. sky walk, nature trails), and; a branding and marketing strategy.

Project Goal, Objective, Outcomes and Outputs/Activities

125. **The project's goal is** to strengthen the management effectiveness of the PA system of Swaziland to ensure a viable set of representative samples of the country's full range of natural ecosystems are conserved, through a network of PAs. This will be through expanding and strengthening the PA network. The project will advance a landscape approach that will operationalise clusters of PAs in critical landscapes, under an admixture of State, private and community management, depending on tenure, to ensure Swaziland supports and benefits from conservation and strengthening the management capacity and financial sustainability of the existing and new PAs.

126. **The project objective is** to effectively expand, manage and develop Swaziland's protected area network in order to adequately protect the biodiversity and landscapes of the country. This will involve devising a system of integrating land and natural resource management that transforms the current PA patchwork into a protected areas network, while creating incentives for all Swazis (land management agencies, conservancies, private landowners and tourism operators) to work together toward conservation and sustainable economic development.

127. In order to achieve the above objective, and based on a barrier analysis as above (which identified the problem being addressed by the project and the barriers that need to overcome to actually address the problem), the project's intervention has been organised in three components (also in line with the concept presented at Project Identification Form, PIF, stage), under which three 'outcomes' and thirteen 'outputs' are expected from the project:

- **Component 1: Knowledge based platform operationalised at the National and regional level to address current and emerging threats to PAs and biodiversity conservation.**
- **Component 2: Landscape approach operationalised and leads to expansion of PA network.**
- **Component 3: Strengthening PA functioning through improved Conservation management and Operational support for existing and new PAs, including both formal and informal PAs.**

Component 1: Knowledge based platform operationalised at the National and regional level to address current and emerging threats to PAs and biodiversity conservation.

128. Under this component, the project will provide the tools, knowledge environment, partnerships and skills required to the expansion of the PA system. Under the project, field surveys will be carried out to fill biodiversity knowledge gaps and to improve information about ecosystem functioning and services. This will feed into a GIS based knowledge and information management system which will be operationalised to support systematic biodiversity planning and management. This leads to improved biodiversity and ecosystem information and decision making and an ecosystem focus in biodiversity conservation, identification of critical biodiversity areas, ecological support areas for maintaining ecosystem processes, biodiversity conservation targets (in line with Aichi targets and national plans), and determination of ecosystem management objectives (within PAs and immediately adjacent lands).

129. The project will also result in the hiring of an SNTC PM and BGP PM to guide the formulation and implementation of landscape-based management plans that integrate biodiversity conservation and sustainable economic development. In addition, the project will support field-based biodiversity monitoring and facilitate the adoption of the systematic biodiversity planning approach as the basis of formulation of the landscape approach to conservation in the target landscapes. The project will result in the development of systematic ecosystem and biodiversity management plans to enable the PA mangers and partnerships to comply with PA management regulations and effectively manage PAs. As far as possible the project will hire National and local experts to facilitate local and national applicability, sustainability and capacity development. Also for meetings and workshops PA venues will be used wherever possible in order to maximise use of PA facilities and direct as much revenue as possible towards PAs.

130. This will lead to the following outcome:

(i) PA management and biodiversity conservation guided by research, monitoring and knowledge, for improved and adaptive management practices within and outside PAs. <u>Indicator:</u> *Development of 18 Management Plans for new formal and informal protected areas and for three landscape clusters.*

131. The outputs necessary to achieve these outcomes are described below.

> *Output 1.1: Biodiversity field surveys, vegetation assessments and tourism assessments carried out in PAs and surrounding landscapes to fill information gaps. This results in*

enhanced research and monitoring, improved information on biodiversity, ecosystems, tourism and ecosystem services, improved understanding and awareness of biodiversity and the benefits of PAs including stakeholder consultations and dissemination of information as well as increased understanding of knowledge-based mechanisms for improved management of PAs and the wider landscapes. Biodiversity field surveys, vegetation unit mapping, veld and forest assessments, carrying capacity assessments, tourism facility and asset mapping, tourism visitation analyses, and conservation management inventories are carried out on PAs (existing National PAs, informal PAs and potential new PAs) and in the surrounding landscapes. Research is carried out on ecosystem services to identify and measure benefits derived from PAs by stakeholders and market research is carried out for tourism and game product development and research carried out on law-enforcement successes and challenges. Stakeholder consultations are conducted to disseminate information on benefits of PAs for enhanced PA management and to improve support for conservation.

Output 1.2: GIS-based knowledge and information management system operationalised and supports systematic biodiversity planning through identification of critical biodiversity areas, ecological support areas for maintaining ecosystem processes, biodiversity conservation targets (in line with Aichi targets and national plans) and determination of ecosystem and species management objectives. PA and landscape management plans that integrate conservation efforts with sustainable economic development practices in the four identified landscapes are developed incorporating field monitoring and knowledge-based management mechanisms. This will involve the establishment and operation of GIS-based knowledge and information management systems for the ecological monitoring of PAs and the wider landscapes in the target areas of the project. Information collated in component 1.1 will be managed, maintained and shared developing protocols for such. Existing PA management plans and existing land-use plans within the target landscapes will be assessed. The knowledge and information management system will be developed at the PA scale then expanded to the landscape scale and eventually be expanded to form a national programme for management based on its effectiveness at the PA level. Biodiversity conservation targets for each PA and for Swaziland will be reviewed, including national plans and Aichi targets for the determination of ecosystem and biodiversity management objectives. This will result in the development of systematic ecosystem, vegetation unit and species management plans at the PA and landscape scale based on best practices, recommendations and reviews conducted, for the management of PAs, critical ecosystems and biodiversity in the target landscapes and future expansion to national level.

Output 1.3: PA and Landscape based management plans that integrate conservation efforts with sustainable economic development practices in the wider landscape are developed and implemented, incorporating field monitoring and knowledge-based management mechanisms. Stakeholder consultations and prioritisation of the 18 new formal and informal PAs as per land-owner application, feasibility studies and boundary demarcation and clarification of the appropriate legal framework for each PA to be gazetted. Business plans developed for the prioritised existing and new PAs. Public awareness campaigns implemented to promote a conservation ethic. Assessment of existing land use plans and economic activities in the target landscapes of the project will be conducted; including the development of recommendations and incorporating stakeholder consultations. Integrated landscape-based management plans for the different PAs will then be developed that incorporate field monitoring and knowledge-based management mechanisms, best practices and recommendations for biodiversity

conservation and sustainable economic development. Information on the landscape-based management plans will be disseminated to stakeholders for effective land use planning. Training programmes conducted for selected personnel from SNTC and BGP and Private sector and local communities on landscape-based management planning, field monitoring and knowledge-based management mechanisms. Stakeholder consultations will be conducted for the existing informal PAs identified in the PPG to determine and prioritise those suitable for and desirous of gazettement. The 18 potential new PAs identified in the PPG will be prioritised based on the information from subcomponent 1.1 to determine those suitable and desirous of gazettement. Feasibility studies will be done on these prioritised informal and new PAs including boundary demarcation and clarification of the appropriate legal framework and operational arrangements for each PA to be gazetted. Business plans will be developed for these prioritised new PAs in line with the management plans developed in subcomponent 1.2. Public awareness and information sharing campaigns will be developed to promote a conservation ethic, support for the development of PAs and to develop pride in the Kingdom's natural heritage.

Component 2: Landscape approach operationalised and leads to expansion of PA network.

132. Under this component, the project will facilitate the formalisation and expansion of the current PA network and facilitate the establishment of new PAs as well as identification and mobilisation of arrangements such as community PAs, drop-fence agreements between different small PAs with potential for, or necessary for conservation of biodiversity or ecological processes, etc. In this regard, it will support the establishment of at least 6 new PAs which are not currently under any conservation management, including the establishment of infrastructure for conservation management and eco-tourism development based on assessments at the PPG stage on their importance as critical ecosystems and biodiversity-rich areas which will be further assessed during project implementation. It also will facilitate the development of the requisite institutional and organisational support to manage the new PAs effectively and sustainably. The project will also support the gazettement, or other appropriate legal designation, of at least 6 existing non-gazetted PAs (i.e. informal PAs that wish to be gazetted) as well as the new PAs and parts of National PAs not yet gazetted. The project will result in the formalisation of these 12 or more conservation areas under different forms of PA management (SNTC, BGP, private companies/individuals, Conservancies and Community Conservancy Areas) under the appropriate legal framework (SNTC Act, Game Act, Flora Protection Act), based on existing laws and policies for the legal protection of these PAs and the interests of the relevant stakeholders. The project will also facilitate the demarcation of boundaries for the different forms of PAs based on stakeholder consultations as part of the formalisation process.

133. Based on the Baseline assessments at PPG, below are the new PAs prioritised for establishment.

Table 7: Proposed New PAs, Size, Management and Formalisation Status

Proposed New PAs	PA Size (ha)	Management	Proposed Formalisation Status
Ngwempisi (Ntungulu)	11,487	Community (SNL)	Protected Landscape
Manzimnyame	17,886	Private	Nature Reserve or Protected Landscape
Mahhuku	9,039	Royal/Private	Managed Resource Reserve

Proposed New PAs	PA Size (ha)	Management	Proposed Formalisation Status
Shewula	3,215	Community (SNL)	Managed Resource Reserve or Nature Reserve
Makhonjwa	8,159	Community (SNL)	Nature Reserve or Protected Landscape
Sibebe	2,856	Community/private	Nature Reserve or Protected Landscape
Motjane vlei	397	Community/Private	Nature Reserve
Jilobi Forest	1,763	Community (SNL)	Managed Resource Reserve
Bulembu Mountain	552	Community (SNL)	Protected Landscape
Mambane	9,290	Community (SNL)	Managed Resource Reserve or Protected Landscape
Nkhalashane	4,343	Government	Managed Resource Reserve
Mkhaya West	85	Community (SNL)	Managed Resource Reserve

134. However there were gaps in the available information, so surveys of all the areas in the above and below tables are proposed under component I of the project with the potential for information derived from these surveys to adjust the prioritisation of proposed new PAs. In the below table are the other potential new PAs considered for establishment. Should the assessments in component 1 result in the prioritisation of these areas as well, it is proposed that Mdzimba, Nyonyane and Mhlumeni be facilitated by the SNTC; and that BGP facilitate Nsongweni, Mahamba and Ndlotane.

Table 8: Potential other New PAs, Size, Management and Formalisation Status

Potential New PAs	PA Size (ha)	Management	Proposed Formalisation Status
Mdzimba	8,315	Community (SNL)	Protected Landscape
Nyonyane	19,295	Government/Community	Managed Resource Reserve or Protected Landscape
Mahamba	2,104	Community (SNL)	Nature Reserve or Protected Landscape
Ndlotane	7,781	Community/private	Managed Resource Reserve or Protected Landscape
Nsongweni	4,714	Private/Community	Protected Landscape
Mhlumeni	2,319	Community (SNL)	Managed Resource Reserve

135. Below are the existing informal PAs prioritised for gazetting, based on the Baseline Reportduring PPG. Other informal PAs may come forward with requests for gazetting during the project implementation.

Table 9: Informal PAs proposed for Gazetting, Size, Management and Formalisation Status

Existing PAs proposed for gazettement	PA Size (ha)	Management	Proposed Formalisation Status
Phophonyane Conservancy	504	Private	Nature Reserve
Mbuluzi	2,357	Private company	Game Reserve

Existing PAs proposed for gazettement	PA Size (ha)	Management	Proposed Formalisation Status
IYSIS	20,016	Private company	Game Reserve
Muti-muti Conservancy	2,079	Private	Nature Reserve
Jozini Big 6	12,662	Private Company	Game Reserve
Libhetse	1,576	Private	Managed Resource Reserve

136. There are four clusters of existing and proposed PAs which with co-operation may facilitate corridors, species movements and sustained ecosystem processes improving resilience to external threats and climate change. The land-scape approach will facilitate the development of conservancies in these four clusters/landscape areas. Three of these clusters contain existing National PAs (Lubombo, Malolotja and Mkhaya) and will be led by the relevant management institution associated (Lubombo Conservancy, SNTC and BGP respectively). Two of these clusters/landscapes form part of Trans-frontier Conservation Area initiatives (Lubombo and Malolotja), which are consistent with the goals of this project and which shall be further integrated with this landscape approach. The other cluster/landscape (Ngwempisi) does not contain an existing National PA but based on consultations during PPG the likely lead conservation agency here will be BGP. The project will support this land-scape approach within these four areas facilitating co-operation for the benefit of biodiversity conservation and ecosystem functioning. These clusters and the proposed PAs that will fall under each are listed below:

Table 10: Protected Area Clusters

Cluster	National PA	Informal PA	Proposed New PA
Lubombo Conservancy Cluster	Hlane Royal National Park, Mlawula Nature Reserve	Mbuluzi, IYSIS, Muti-muti Conservancy	Mahhuku, Manzimnyame, Nkhalashane, Shewula, Jilobi, Mhlumeni and Mambane
Malolotja Cluster	Malolotja National Park	Phophonyane Conservancy	Motjane vlei, Bulembu Mountain, Makhonjwa,
Mkhaya Cluster	Mkhaya Game Reserve	Mhlosinga/Big Bend Conservancy	Mkhaya West, Mambane
Ngwempisi Cluster		Libhetse, Nkonyeni, Emantini, Wide Horizons	Ngwempisi,

137. This will result in the following outcome:

a) Legally designated PA estate expanded and effectively managed through the establishment of 18 formal and informal PAs covering an additional 71,973 hectares and implementation of Implementation of landscape management plans within three landscapes. *Indicators: Gazettement of thirteen (13) PAs under three mandated PA authorities (SNTC, BGP & Forestry);*
Development of agreements between the land-owner/community and national agencies for the establishment of 5 informal PAs by 2020, encompassing various types of land uses

138. The outputs necessary to achieve this outcome are described below.

Output 2.1: Gazettement of informal PAs prioritised in Component 1 in accordance with land-owner application. Investments in the establishment of these informal PAs as part of the National PA system based on the PA management plans and feasibility studies from Component 1 including matching grants for fencing, reintroduction of native species, conservation equipment and machinery, staffing and other appropriate PA establishment costs. Land-owner and SNTC/BGP agreements will be developed for the informal PAs prioritised for gazettement in component 1 committing to the long-term conservation of these areas. Cabinet papers for the gazettement of these areas will be developed and submitted for approval. PAs will be established as identified in the management plans, feasibility studies and business plans during component 1. Matching grants will be made to the informal PAs (according to the size and biological importance of the PA) for the infrastructure, native species re-introductions, conservation equipment, machinery and staffing necessary to establish the PA as a National PA.

Output 2.2: Selected areas of significant biodiversity established as new Protected Areas under the SNTC Act including: ***Shewula and Nkalashane, Makhonjwa, Sibebe, Motjane vlei, Mambane and Muti-muti****; with management structures developed including hiring of PA staff, fencing, reintroduction of native species, conservation equipment and machinery, and other appropriate PA establishment requirements as identified based on the PA management plans and feasibility studies from Component 1.* Land-owner/community authority and SNTC agreements will be developed for the new PAs prioritised for gazettement under the SNTC act committing to the long-term conservation of these areas. Cabinet papers for the gazettement of these areas will be developed and submitted for approval. In the case of title deed land, matching grants will be made by the project to the land-owners (according to the size of the PA) based on equivalent matching funds provided by the land-owner and programmes will be developed for the infrastructure, native species re-introductions, ecosystem restoration, conservation equipment, machinery and staffing necessary to establish the PA as a National PA as identified in the management plans, feasibility studies and business plans developed in component 1. In the case of SNL land, programmes will be developed for the infrastructure, native species re-introductions, ecosystem restoration, conservation equipment, machinery and staffing necessary to establish the PA as a National PA as identified in the management plans, feasibility studies and business plans during component 1. With the proposed Mambane PA facilitated by SNTC, BGP will play an assisting role given its location in relation to the Mkhaya PA cluster.

Output 2.3: Selected areas of significant biodiversity established as new Protected Areas under the Game Act including: ***Mahhuku, Ngwempisi, Manzimnyame and Mkhaya west****; with management structures developed including hiring of PA staff, fencing, reintroduction of native species, conservation equipment and machinery, and other appropriate PA establishment requirements as identified based on the PA management plans and feasibility studies from Component 1.* Land-owner/community authority and BGP agreements will be developed for the new PAs prioritised for gazettement under the Game act committing to the long-term conservation of these areas. Cabinet papers for the gazettement of these areas will be developed and submitted for approval. In the case of title deed land, matching grants will be made by the project to the land-owners (according to the size of the PA) based on equivalent matching funds provided by the land-owner and programmes will be developed for the infrastructure, native species re-introductions, ecosystem restoration, conservation equipment, machinery and staffing necessary to establish the PA as a National PA as

identified in the management plans, feasibility studies and business plans developed in component 1. In the case of SNL land, programmes will be developed for the infrastructure, native species re-introductions, ecosystem restoration, conservation equipment, machinery and staffing necessary to establish the PA as a National PA as identified in the management plans, feasibility studies and business plans during component 1. With the proposed Manzimnyame PA facilitated by BGP, SNTC will play an assisting role given its location in relation to the Lubombo Conservancy cluster.

Output 2.4: Selected areas of significant biodiversity established as new Protected Areas under the Flora Protection Act including: ***Jilobi*** *and* ***Bulembu*** *and new Community Conservancies in* ***Mdzimba, Nyonyane, Mahamba, Ndlotane*** *and* ***Nsongweni****; with management structures developed including hiring of PA staff, fencing, reintroduction of native species, conservation equipment and machinery, and other appropriate PA establishment requirements as identified based on the PA management plans and feasibility studies from Component 1.* Land-owner/community authority and Forestry Department agreements will be developed for the new PAs prioritised for gazettement under the Flora Protection act as well as for the community conservancies; committing to the long-term conservation of these areas. Cabinet papers for the gazettement of these areas will be developed and submitted for approval. In the case of title deed land, matching grants will be made by the project to the land-owners (according to the size of the PA) based on equivalent matching funds provided by the land-owner and programmes will be developed for the infrastructure, native species re-introductions, ecosystem restoration, conservation equipment, machinery and staffing necessary to establish the PA as a National PA as identified in the management plans, feasibility studies and business plans developed in component 1. In the case of SNL land, programmes will be developed will be made by the project for the infrastructure, native species re-introductions, ecosystem restoration, conservation equipment, machinery and staffing necessary to establish the PA as a National PA as identified in the management plans, feasibility studies and business plans during component 1.

Output 2.5: Implementation of land-scape management plans within the ***Lubombo, Mkhaya, Malolotja and Ngwempisi*** *landscapes; with appropriate sustainable management structures and co-operation emplaced including livestock stocking rates, shared game management agreements, eco-tourism traversing agreements, forest product harvesting quotas and harvesting permits and enforcement structures as well as field based monitoring.* The project will support the establishment and operation of conservancies or other suitable co-operative landscape conservation structures. It will involve the identification of key needs for co-operation from a biodiversity and ecosystem functioning perspective, and the implementation of such co-operation. It will involve creation and formalisation of Conservancies and Co-operative conservation initiatives where appropriate and support for the development of these structures. It will include identification of opportunities for collaborative income generating ventures such as game ranching or the connecting up of eco-tourism products where appropriate to improve the prospects of sustainability and economies of scale. It will include support for a locally based landscape/conservancy co-ordinator, office, meetings, communication, transport and any necessary joint marketing or promotional efforts. It will support the development of joint law-enforcement, eco-tourism, ecosystem restoration and game management needs where appropriate as identified in the landscape management plans developed in component 1. It will support regular field-based ecological monitoring to inform management progress and decision making.

Component 3: Strengthening PA functioning through improved Conservation management and Operational support for existing and new PAs, including both formal and informal PAs.

139. Under this component, the project will build the capacity of the SNTC, BGP, Private sector, local communities, NGOs and PA management in order to boost technical and operational capacity. A Project TA will be hired to advise and guide the PMU, TAs and key project stakeholders towards successful implementation of the project. The project will boost the technical skills of the PA managers and support them in developing, communicating and implementing PA management plans that are in line with the current PA and ecosystems science. In this regard, PA managers will be involved in participatory planning for protected area tourism (including policy, stakeholder involvement, conflict management, development and implementation of plans). The project will establish systematic staff training programmes that cover all aspects of PA operations to ensure rangers, guides and other field staff meet necessary competencies for planning, administration, marketing, customer care, conflict resolution, reporting, monitoring, policing and enforcement in PAs. As far as possible the project will hire National and local experts to facilitate local and national applicability, sustainability and capacity development. Also for meetings and workshops PA venues will be used wherever possible in order to maximise use of PA facilities and direct as much revenue as possible towards PAs.

140. The project will support the control of invasive alien species within PAs and in the landscapes around them to enhance biodiversity conservation, habitat integrity and sustainable economic development. Proposals will be invited for alien invasive species control projects based on cost effective, innovative and, where possible, sustainable mechanisms including the development of income generating products from alien invasive species and clearing mechanisms associated.

141. The project will assist SNTC, BGP, Private PAs and Community PAs to reintroduce native species and acquire the conservation equipment and infrastructure needed to effectively manage the PAs. This may include reintroduction of equipment and infrastructure necessary for game production, game capture and translocation, wildlife protection, control of resource harvesting and other conservation activities. Proposals will be invited for conservation equipment and infrastructure projects based on cost effective, innovative and, where possible, sustainable mechanisms for improving biodiversity conservation.

142. The project will assist SNTC, BGP, Private PAs, Community PAs and informal PAs in tourism products development and marketing for revenue generation and financial sustainability in PAs. The project will assist in developing a PA sub-system enterprise development plan to increase financial returns from conservation and to develop a sustainable tourism framework backed by a viable marketing strategy. The project will focus on marketing PA facilities and attractions to the local and regional market in particular. In addition, the project will assist PAs to develop private sector joint venture initiatives and ensure that PA managers have a good understanding and knowledge of contemporary and innovative sustainable financing mechanisms for biodiversity and protected areas, and that they have sound business plans, M&E plans and Indicator Tracking Tables which they use to monitor all aspects of the PA management and conservation.

143. The project will facilitate employment of selected members of rural communities to facilitate and develop CBNRM programmes within their respective communities and will support

members of the communities either as individuals, companies, CBOs or NGOs to initiate and grow conservation friendly enterprises and to implement conservation initiatives. Proposals will be invited from rural community residents for conservation initiatives that will result in improved conservation of natural resources.

144. This will result in the following outcome:

(i) Technical and Operational capacity improved with respect to planning, financing, surveillance, policing, monitoring and infrastructure maintenance in the new and existing PAs.
Indicator: Indicator scores on the Capacity Development Scorecard show an improvement of at least 30% over the project period.

145. The outputs necessary to achieve this outcome are described below.

Output 3.1: Systematic training and Capacity development for key personnel and stakeholders in the different forms of PAs, to enhance PA management and landscape based management including technical capacity building on PA management, planning, administration, marketing, customer care, conflict resolution, reporting, monitoring, policing and enforcement in PAs, ecotourism development and management, CBNRM practices and management, monitoring and enforcement and sustainable financing management. This will involve specialist training for selected personnel from SNTC, BGP, local communities, Private PAs, NGOs, conservancies and CCA management in a number of key fields including species identification, ecological field techniques, veld assessment, game management, field guiding, customer service, eco-tourism, marketing and advertising, GIS use, conservation management, law-enforcement, etc. as well as the knowledge-based management systems. Wherever possible, local organisations and specialists will be hired to provide the training in order to build local capacity and sustainability. Dedicated training programmes for women's groups on PA management and sustainable economic development will be developed, including the establishment of women's empowerment programmes to enhance women's inclusion in training and management of PAs. Specialist training will also be provided to selected personnel, management and planning staff from SNTC, BGP, Private PAs and local communities on integrating all aspects of PA operations through an integrated planning mechanism. Training of personnel from SNTC, BGP, Private PAs, local communities, conservancies and CCA management will be conducted on ecotourism development and sustainable financing management including training on management of rural income generation programmes and other alternative income practices. In addition, personnel from SNTC, BGP, Private PAs, local communities, conservancies and CCA management will be trained on monitoring systems and enforcement including establishing anti-poaching and enforcement units.

Output 3.2: Establishment and implementation of a mobile alien invasive species harvesting, milling and removal business with grants for other alien invasive species control projects utilising cost-effective and efficient practices across the different forms of PAs in order to improve biodiversity conservation and habitat integrity. A programme will be developed to establish and implement a sustainable mobile alien invasive species harvesting, milling and removal business, based on proposals submitted including the purchase of the necessary machinery and equipment. Proposals will be invited for the establishment of a mobile alien

invasive plant harvesting, milling and removal business as identified during the PPG. Proposals will be evaluated based on the principles of a) likely positive impact on biodiversity and b) likelihood of sustainability. The successful proposal will be supported by the project with a grant matching the investment made by the successful applicant in establishing and operationalising the alien plan control operation. Programmes will be developed for on-the-ground control of alien invasive species with matching grants made available for alien species control projects in the various forms of PA (SNTC, BGP, Private, Community, Conservancy) based on needs identified during component 1 which shall be evaluated based on a) current threat to biodiversity b) cost effectiveness and c) likelihood of success.

Output 3.3: Strengthening of PA wildlife management through reintroduction of native species and for conservation equipment and infrastructure including fencing, bomas, equipment for game ranching, game product development and marketing, and other sustainable resource use initiatives across the different forms of PAs in order to improve the success of conservation initiatives. Matching grants will be made by the project to the PA management based on equivalent matching funds provided by the PA and programmes will be developed for the fencing (or other necessary conservation infrastructure), native species re-introductions, ecosystem restoration, conservation equipment, machinery and staffing necessary to strengthen the conservation management of the PA as identified in the management plans, feasibility studies and business plans developed in component 1.

Output 3.4: Strengthening of PA eco-tourism through eco-tourism equipment and infrastructure (including camps and trails), product development, branding and marketing across the different forms of PAs in order to improve PA revenue generation and sustainability. Matching grants will be made by the project to the PA management based on equivalent matching funds provided by the PA and programmes will be developed for the development or refurbishment of eco-tourism camps, lodges, interpretation centres, hiking trails, mountain bike trails (or other necessary eco-tourism infrastructure), and for the development of eco-tourism products, branding, marketing and advertising in the various forms of PA (SNTC, BGP, Private, Community as well as informal PAs) as identified in the feasibility studies and business plans developed in component 1.

Output 3.5: Employment of individuals from rural communities to co-ordinate and develop community based conservation initiatives and to monitor biodiversity in community PAs; matching grants for entrepreneurs resident in rural communities to establish conservation friendly businesses; and grants for residents of rural communities (as individuals, companies or CBOs) to establish conservation initiatives within their PAs or landscapes. Individuals resident within rural communities will be employed to co-ordinate and develop community conservation and CBNRM programs working in close collaboration with the SNTC or BGP PM as appropriate and the NPM and they will be supported to perform this co-ordination role. This will involve the co-ordinators developing appropriate consultation mechanisms and working with traditional leaders to facilitate progress. Within the PAs, opportunities for community based conservation projects and conservation friendly entrepreneurship will be identified and supported. Programmes will be developed and matching grants will be provided by the project to entrepreneurs' resident within the rural communities for conservation friendly businesses based on proposals submitted. The proposals shall be evaluated on the basis of a) likely positive impact on biodiversity and b) likelihood of sustainability. Programmes will be developed for residents of rural communities (as

individuals, NGOs, companies or CBOs) for the establishment of conservation initiatives within their PAs or landscapes based on proposals submitted. The proposals shall be evaluated on the basis of a) likely positive impact on biodiversity and b) likelihood of sustainability.

Project Indicators

146. The project indicators contained in Section II / Part II (Strategic Results Framework) include only impact (or 'objective') indicators and outcome (or 'performance') indicators. They are all 'SMART'[14]. The project may however need to develop a certain number of process-oriented indicators to compose the 'M&E framework' at the site level. For this reason, activity1.5.3 foresees exactly the establishment of a 'site-level M&E framework'. These indicators are also expected to feed into the project's overall M&E framework (below).

147. The organisation of the logical framework is based on the general assumption that: *if* (1) baseline conditions in the selected areas can be extrapolated to other critical ecosystems; *if* (2) increased awareness and capacity leads to changes in behaviour with respect to biodiversity conservation and sustainable economic development; *and if* (3) knowledge-based, landscape-based PA management and sustainable financial management becomes a national priority for conservation and development; *then* the project will mainstream biodiversity conservation and sustainable use into production landscapes and improve the sustainability of Protected Area systems. This logic is based on the barrier analysis carried out (as above). In turn, the choice of indicators was based on two key criteria: (i) their pertinence to the above assumption; and (ii) the feasibility of obtaining / producing and updating the data necessary to monitor and evaluate the project through those indicators The following are therefore the project's key indicators:

Table 11: Elaboration on Project Indicators

INDICATOR	EXPLANATORY NOTE
At objective level **–** To effectively expand, manage and develop Swaziland's protected area network in order to adequately protect the biodiversity and landscapes of the country.	
1. Legally protected PA network increased.	▪ Current PA system covers 3.9% of the country. At the Project end, the PA system is expected to cover approximately 6%.
2. Number of capacity building programmes developed for improved PA management	▪ At least 3 PA capacity building programmes to improve the management and operations of PAs
At Component 1 level **–** Knowledge based management platform operationalised at the National and regional level to address current and emerging threats to PAs and biodiversity conservation.	
1. Number of biodiversity field surveys	▪ At least 6 PA and 3 landscape level biodiversity surveys carried out
2. Number of information management systems at national level	▪ 1 GIS-based knowledge and information management system
3. Number of landscape-based management plans	▪ At least 3 landscape based management plans
At Component 2 level **–** Landscape approach operationalised and leads to expansion of PA network.	

[14]Specific, Measurable, Achievable, Relevant and Time-bound.

INDICATOR	EXPLANATORY NOTE
1. Number of informal PAs gazetted	▪ 6 informal PAs are gazetted and formalised
2. Number of new PAs established and operationalised	▪ 6 new PAs are established, formally demarcated and managed for biodiversity conservation
3. Number of streamlined landscape management structures and plans implemented	▪ At least 3 streamlined landscape management structures and management plans implemented based on international conservation standards
At Component 3 level **–** Strengthening PA functioning through improved Conservation management and Operational support for existing and new PAs including both formal and informal PAs.	
1. Number of training programmes developed	▪ At least 8 capacity building programmes on PA management, planning, administration, marketing, customer care, conflict resolution, reporting, monitoring, policing and enforcement in PAs, ecotourism development and management, CBNRM practices and sustainable finance management and at least a third of the participants should be women
2. Number of invasive alien species control programmes	▪ At least 1 sustainable control programme per type of PA (SNTC, BGP, Private, Community)
3. Number of conservation infrastructure and equipment programmes	▪ At least 1 sustainable conservation equipment or infrastructure programme per type of PA (SNTC, BGP, Private, Community)
4. Number of ecotourism infrastructure, product development or marketing programmes	▪ At least 1 sustainable ecotourism infrastructure, product development or marketing programme per type of PA (SNTC, BGP, Private, Community)
5. Number of CBNRM programmes developed	▪ At least 4 CBNRM co-ordinators employed and capacitated and at least 2 successful CBNRM programs developed.

Risks and Assumptions

148. The project strategy, described in detail within this project document, makes the following key assumptions in proposing the GEF intervention:

- The baseline conditions in the selected areas can be extrapolated with a high confidence level to other PAs, critical ecosystems and buffer zones bordering protected areas, and lessons learnt can be successfully disseminated leading to the establishment and operationalisation of more PAs.

- Increased awareness and capacity will lead to a change in behaviour with respect to the biodiversity conservation and sustainable economic development. Stakeholders buy-in to the expansion and formalisation of new PAs has been ascertained. Clear and defined interest in economic engagement by appropriate stakeholders including women.

- Knowledge-based, landscape-based PA management and sustainable financial management becomes a national priority for conservation and development. Continued interest and support of government and staff in the implementation of strategies and programmes to mainstream biodiversity conservation and economic development in national planning.

149. During the PPG phase, projects risks were updated from what has been presented at the PIF stage. They were further elaborated and classified according to UNDP/GEF Risk Standard Categories[15], and assessed according to criteria of 'impact' and 'likelihood' (Box 1):

Table 12: Elaboration of Risks

Identified Risks	Category	Rating	Elaboration
Resistance by local communities to the expansion or establishment of PAs.	OPERATIONAL	Medium	Communities continue to hold strong negative perceptions about PAs because in the past they have not been adequately compensated for the opportunity cost of not accessing natural products in the PAs. This might compromise the success of the community conservation areas and other forms of PAs, particularly as short-term costs may appear to be greater than benefits due to stronger enforcement elements.
PA financial sustainability measures meet resistance as well as slow operationalisation.	OPERATIONAL	High	Increasing sustainability of PA financing depends, to a large extent, on increasing domestic and international tourism. Swaziland has a conservative entrepreneurship culture, which might hinder increasing domestic tourism. The drive to increase international tourist numbers might also be affected by the global economic and financial down-turn. Stakeholders might also be hindered in implementing the financing measures by the limited capacity and technical support.
Climate change could lead to change in distribution of biodiversity.	ENVIRONMENTAL	Medium	Climate change might affect ecosystems and biodiversity negatively: Swaziland's NAPA reports that the climate is likely to get more unpredictable but certainly drier, even if the global levels of GHG stabilise at the current levels. Swaziland has in the recent past been affected by large variations in rainfall and recurring droughts.
Land use pressure from local communities hamper landscape based management efforts.	ENVIRONMENTAL/ OPERATIONAL	High	Local community and other stakeholders hamper the efforts of landscape based management strategies due to conflicting and unsustainable land use practices that lead to further degradation. Unsustainable practices such as agriculture also expand into PAs reducing the ecosystem integrity.
Limited cooperation between stakeholders and stakeholders are reluctant to establish PAs.	OPERATIONAL/ STRATEGIC	Low	The fear of loss of autonomy and resistance to the proposed management plans results in limited implementation of the project activities and low stakeholder response in expansion and establishment of PAs.
Limited political will to gazette PAs owing to fear of lost resource use opportunities.	OPERATIONAL/ STRATEGIC	High	The fear of loss of economic development opportunities especially mining on areas to be established as PAs may result in reluctance to gazette PAs under Swazi law.
Limited participation by women due to cultural norms.	OPERATIONAL	Medium	Swaziland is a strongly patriarchal society in which women's participation in leadership is limited especially in activities considered to be the domain of men. Lack of awareness of the potential benefits of the project in wealth creation and securing livelihoods also results in limited involvement by women.

[15] Includes the following eight categories: environmental; financial; operational; organisational; political; regulatory; strategic; and other.

Box 1. Risk Assessment Guiding Matrix						
	Impact					
Likelihood		**CRITICAL**	**HIGH**	**MEDIUM**	**LOW**	**NEGLIGIBLE**
	CERTAIN / IMMINENT	**Critical**	**Critical**	**High**	**Medium**	**Low**
	VERY LIKELY	**Critical**	**High**	**High**	**Medium**	**Low**
	LIKELY	**High**	**High**	**Medium**	**Low**	**Negligible**
	MODERATELY LIKELY	**Medium**	**Medium**	**Low**	**Low**	**Negligible**
	UNLIKELY	**Low**	**Low**	**Negligible**	**Negligible**	Considered to pose no determinable risk

Table 13: Project Risks Assessment and Mitigation Measures

Identified Risks	Impact	Likeli-hood	Risk Assessment	Mitigation Measures
Resistance by local communities to the expansion or establishment of PAs.	Medium	Likely	High	The project will build on the strong community education and BD advocacy program of the baseline (particularly the SNCT) to cultivate support and this will be complemented by the implementation of the land use plans and increased participation in tourism business (through CBNRM) which will demonstrate the returns from biodiversity conservation. The project will also raise awareness on the financial benefits of eco-tourism and ecosystem services. The communities around the PA buffer zones and areas proposed for the CCA have been involved in the discussion on the PA work at various stages: during the initial assessment of the protection-worthy areas; in the processes of establishing the Lubombo Conservancy and TFCA initiatives; during PIF formulation and at the PPG stage. These consultations are intended to raise awareness on the benefits of the different forms of PAs and to enhance local community participation.
PA financial sustainability measures meet resistance as well as slow operationalisation.	High	Moderately Likely	High	The project aims to develop the technical capacity of stakeholders in order to enhance their ability to implement financing measures as well as facilitating investment and donor support for these financing measures. Domestic tourism is being addressed by the baseline program (restructuring and commercialisation of SNTC), which is mounting an aggressive national campaign to encourage domestic tourism. The project will support this effort by developing tourism products targeted at the various segments of potential tourists. The project will also develop branding and marketing strategies for Swaziland as a tourist destination. Combined with the baseline initiative on developing the infrastructure further, these measures will contain this risk.
Climate change could lead to change in distribution of biodiversity.	Low	Likely	Medium	Maintaining healthy ecosystems plays a key role in adapting to and mitigating effects of climate change; the project will contribute to improving the integrity of the ecosystem and therefore contribute to improving resilience to climate change. A focus on landscape level management (as opposed to small

Identified Risks	Impact	Likeli-hood	Risk Assessment	Mitigation Measures
				areas); with sufficient buffer zone protection mitigates against climate change. The maintenance of a landscape approach in the PAs of Swaziland encourages the adoption of improved and sustainable land use practices to improve resilience to climate change.
Land use pressure from local communities hamper landscape based management efforts	Medium	Moderately Likely	Medium	The project will implement landscape based management strategies that integrate multiple uses particularly sustainable land use practices that enhance conservation efforts. The project will seek to manage trade-offs between real development needs and conservation actions within the PA system. Improved enforcement will serve as a deterrent against encroachment into PAs. The project will also introduce alternative income activities and improved technologies that will promote sustainable development.
Limited cooperation between stakeholders and stakeholders are reluctant to establish PAs.	Low	Moderately Likely	Low	The project aims to develop management strategies that take into consideration stakeholder needs. The benefits to be accrued by the different forms of PAs are explored and explained to stakeholders including the autonomy of PAs under different forms of PA management. Interest in the project was also generated during the PPG activities and stakeholders interested in the project were identified. In addition, matching grants for the different types of PAs will provide significant incentive for stakeholder involvement.
Limited political will to gazette PAs owing to fear of lost resource use opportunities.	Medium	Likely	High	The project aims to improve education and awareness around opportunities to conserve biodiversity whilst still allowing certain resource use and extraction. The project aims to facilitate additional categories of PA which will enable consumptive use and extraction of resources in a controlled manner, such PAs will be enabled by the SNTC amendment bill anticipated to be passed in the near future.
Limited participation by women due to cultural norms.	Medium	Likely	Medium	The role of women in economic development and conservation is emphasised in the project. The participation of women in the project will be ensured through engaging the participation through women's groups and the development of alternative income-generating activities geared towards women such as beekeeping and silk worm rearing. The project will also provide education and access to markets for the products from sustainable economic activities.

*Risk rating – H (High Risk), M (Modest Risk), and L (Low Risk). Risks refer to the possibility that assumptions, defined in the logical framework, may not hold.

Incremental reasoning and expected global, national and local benefits

150. The proposed project seeks to strengthen the management effectiveness of the PA system of Swaziland to ensure a viable set of representative samples of the country's full range of natural ecosystems are conserved, through a network of PAs. Given the small size of the country and

the distribution of biodiversity important areas, the project will advance a landscape approach that will operationalise a cluster of PAs in critical landscapes, under an admixture of State, private and community management, depending on tenure, to ensure that communities participate in, and benefit from conservation and strengthen the management capacity and financial sustainability of the existing and new PAs.

151. The project will increase the area under PA through the expansion and establishment of different forms of PAs under different management systems, and will include critical biodiversity and ecologically important areas as part of better managed ecosystems. These measures will increase the integrity and functionality of the ecosystems as well as the resilience to better withstand human-induced pressures from ecosystems disturbance processes such as fires, fragmentation, invasion of alien species, etc. The project will develop knowledge based systems to enhance PA management and conservation.

152. The project will put in place governance and institutional frameworks including knowledge-based management systems and mechanism, to facilitate inclusive landscape level management of the PA system of Swaziland for integrated biodiversity conservation and economic development. This will deliver global benefits through enhanced habitat integrity and through the maintenance of ecosystem function and resilience. The multi-use landscape level approach demonstrated by the project is expected to serve as a new model for managing similar systems throughout Swaziland – one which maximises environmental, economic and social benefits to the society.

153. Improved management of the PAs and wider landscapes through the implementation of a landscape based integrated land use plan while lead to the dissemination of multiple benefits to a wide range of users and reduce threats to wildlife and conservation. The identification of areas of high biodiversity and wildlife movement, as well as the establishment of PAs, Conservancies or CCAs in these areas, will reduce pressures from competing land uses, improve wildlife movement and reduce degradation of soil and water resources in the ecosystem. This project will deliver benefits to local communities and PA stakeholders: i) direct and immediate livelihood benefits resulting from increased sustainability of natural resource uses and from tourism activities: ii) indirect benefits from improved ecosystems structure and functionality, such as resilience—critical to the provision of ecosystem services. The project will lead to improvement in the management of natural resources in the community PAs, which will increase food productivity and availability of natural products on the farms, with direct benefits to the communities.

154. The project will lead to the development of sustainable financing mechanisms for the different forms of PAs that will result in the improved PA management. In addition, the project's attention to increasing the role of local communities and women in conservation will increase direct tourism benefits from the different forms of PAs while reducing the burden placed by wildlife conservation. Benefits from an increased PA estate and more effective management are intended to improve the viability of the tourism industry and the project will lead to increased benefits from tourism for local communities, through increased participation. Women are identified as active natural resource users and will be targeted as key beneficiaries. The project will expend efforts in carrying out, wherever possible, gender analysis for the design of project interventions and shall take steps to ensure that perceptions of both women and men are taken into consideration as well as fair and equitable access to and distribution of project benefits.

Table 14: Current Practices and the GEF Alternative

Current Practice	Alternative to be put in place by the project
Inadequate PA network coverage	Improved planning and management of PAs through: - Development of knowledge-based systems for biodiversity conservation and PA management. - Establishment of different forms of PAs in critical ecosystems and establishment of forums for stakeholder participation. - Development of streamlined landscape based management plans for within and outside PAs. Global benefits include establishment of more PA and increased participation of local communities.
Weak capacity and governance of PAs to allow for landscape approach to biodiversity conservation	Formulation and implementation of a landscape based integrated land use plan that allows tor multiple uses thus delivering benefits to a wide range of stakeholders. This is through: - Establishment of different forms of PAs, conservancies and CCAs that allow for integrated sustainable land use practices. - Improved land use management integrated with biodiversity conservation. Delivers the following benefits: reduced pressures from competing land uses, reduced threats to wildlife and conservation, reduce degradation of soil and water resources and improved wildlife movement.
Limited effectiveness of mgmt. and financing practices of PAs	Development of sustainable financing mechanisms for PAs and tourism and distribution of responsibilities and benefits equitably among stakeholders through: - Formulation of a tourism development plan and finance management mechanisms. - Diversification of tourism products and improved community conservancy management practices. - Development of income alternatives. Benefits generated include sustainable PA financing, improved and secure livelihoods for the local communities, reduced burden of conservation on local communities and increased participation of women in economic activities.

RATIONALE AND SUMMARY OF GEF ALTERNATIVE

155. In the baseline scenario, it is clear that the existing network of PAs, while relatively well placed, are insufficient to adequately represent the biodiversity of the country and also, insufficient portions of the PAs are legally gazetted. . In addition to the fact that the PA estate falls short of the AICHI targets of 17%, most of the PAs are not suitable in size for long term sustainable conservation. Most of the PAs are too small to support viable populations of most species without connectivity with each other as well as inadequately representing the major ecosystems. In addition, the spatial distribution of these conservation areas is skewed with most of the PAs situated in the north and the eastern parts of the country, leaving clear gaps in PA coverage in the southern and south-western parts. Many of the existing PAs have hard edges i.e. no transition zones or buffer zones, with production areas situated at the PA boundary, and remaining natural habitats outside these PAs and in planned PAs are fast being degraded leading to increasing habitat fragmentation.

156. In the business-as-usual scenario, there is weak capacity and governance of PAs to allow for landscape approach to biodiversity conservation. The current institutional capacity and governance framework is not adequate or effective and this affects the ability of the government, SNTC and BGP to effectively manage and conserve biodiversity. This is further exacerbated by

the general lack of skills and incentives for biodiversity friendly practices amongst the farmers and land users in these areas. Land use decisions are inadequately supported by land use planning, and even where this happens, it is rarely based on environmental assessments or biodiversity considerations. Increasing evidence suggest 3 important facts in support of the adoption of a landscape approach to PA management: i) that healthy, bio-diverse environments play a vital role in maintaining and increasing the resilience of ecological communities and societies; ii) that diverse, well-functioning ecosystems are better able to adapt to climate change than degraded systems; and that iii) functional connectivity in landscapes is a key aspect of ecosystem resilience. However, the country currently lacks the understanding of these concepts, the tools, skills and governance systems to enable the adoption of such a landscape approach.

157. In the baseline scenario, the limited effectiveness of management and financing practices of PAs results in unsustainable PA management. PA management is not being adequately guided by relevant science or robust management plans; while enforcement, monitoring and service provision to tourism are ineffective. The limited technical capacity for PA management constrains development of tourism strategies and financial management strategies with the possibility of potential partnerships which could be exploited for the realisation of these additional products and services severely limited by the lack of capacity to pursue and sustain business partnerships. In addition, increasing tourism without concurrent technical capacity for PA management could have harmful impacts on biodiversity if not based on strategic environmental and tourism carrying capacity assessments.

GEF ALTERNATIVE

158. Under the GEF alternative Knowledge-based platform will be operationalised at the National and regional level to address current and emerging threats to PAs and biodiversity conservation. GIS based knowledge and information management system will be operationalised to support systematic biodiversity planning. This leads to an ecosystem focus in biodiversity conservation, identification of critical biodiversity areas, ecological support areas for maintaining ecosystem processes, biodiversity conservation targets (in line with Aichi targets and national plans), and determination of ecosystem management objectives (within PAs and immediately adjacent lands). The project will also result in the formulation and implementation of landscape-based management plans that integrate biodiversity conservation and sustainable economic development.

159. Under the GEF alternative, a landscape approach operationalised which will lead to the expansion of the PA network. The project will support the gazettement of 16 conservation areas based on assessments at the PPG stage on their importance as critical ecosystems and biodiversity-rich areas. The project will result in the formalisation of 16 conservation areas under different forms of PA management i.e. those under the SNTC Act, Game Act, Forest Reserves, Conservancies and Community Conservancy Areas (CCAs); based on existing laws and policies for the legal protection of these proposed PAs. It will also facilitate the development of the requisite community institutional and organisational support to manage the new PAs effectively and sustainably.

160. Under the GEF alternative, PA function will be strengthened by improving Conservation management and Operational support. The project will build the capacity of the SNTC, BGP, local communities and PA management in order to boost technical and operational capacity, but most importantly, will increase opportunities for revenue generation and financial sustainability

of PA management. The project will boost the technical skills of the PA managers and support them in developing, communicating and implementing PA management plans that are in line with the current PA and ecosystems science. The project will also result in the development of control mechanism for invasive alien species to enhance biodiversity conservation, habitat integrity and sustainable economic development. The project will assist SNTC and BGP in tourism products development and marketing for revenue generation and financial sustainability in PAs. In addition, the project will ensure that PA managers have a good understanding and knowledge of contemporary and innovative sustainable financing mechanisms for biodiversity conservation and protected areas.

FIT WITH THE GEF FOCAL AREA STRATEGY AND STRATEGIC PROGRAMME

161. This proposed project in Swaziland is in line with GEF Biodiversity Focal Area Strategic Objective 1 of GEF5: **Improve sustainability of Protected Area (PA) systems** and in particular Outcome 1.1: *Improved management effectiveness of new and existing protected areas* and Outcome 1.2: *Increased revenue for protected area systems to meet total expenditures required for management.*

Table 15: Project Contribution to GEF BD-1 Indicators

Strategic Outcome	Outputs	Project's contribution
Outcome 1.1: Improved management effectiveness of new and existing protected areas. *Indicator 1.1: PA management effectiveness score as recorded by METT.*	Output 1. New Protected Areas that cover unprotected ecosystems (24,845 ha).	Establishment of different forms of PAs, conservancies and CCAs thus expanding the protected area coverage, for conservation of biodiversity and critical ecosystems and movement of wildlife within the Swazi PA landscape, with streamlined implementation plans for improved landscape level management.
Outcome 1.2: Increased revenue for protected area systems to meet total expenditures required for management. *Indicator 1.2: Funding gap for management of PA systems as recorded by PA financing scorecards.*	Output 2. Sustainable financing plans	The project will lead to the development and establishment of sustainable financing mechanisms for PAs and tourism products and distribution of responsibilities and benefits equitably among stakeholders including the development of alternative income generating activities that are environmentally-friendly and sustainable.

LINKAGES TO UNDP COUNTRY PROGRAMME

162. The United Nations Development Programme's (UNDP) work on biodiversity and ecosystems involves integrating biodiversity into development, unlocking the potential of PAs and ecosystem-based mitigation of/ and adaptation to climate change, in order to secure livelihoods and the provision of food, water and health. It aims to enhance resilience of ecosystems and biodiversity, conserve threatened species and their habitats; reduce vulnerability to climate change and increase carbon storage and sequestration. UNDP's comparative advantage lies in its capacity to support governments in accessing finance, encouraging innovation for development and provide technical and legal advice.

163. In its ecosystems and biodiversity portfolio, UNDP draws on its extensive technical expertise and experience in successfully supporting inter-country and country-level programming for biodiversity management. The UNDP's biodiversity and ecosystems portfolio contains 512 projects, working in 146 countries. The UNDP's Biodiversity and Ecosystems Framework for

2012-2020 organises its work into three signature programmes which contribute to its overall strategic objective to *Maintain and enhance the goods and services provided by biodiversity and ecosystems in order to secure livelihoods, food, water and health, enhance resilience, conserve threatened species and their habitats, and increase carbon storage and sequestration*. The three signature programmes are:

a. Integrating biodiversity and ecosystem management into development planning and production sector activities to safeguard biodiversity and maintain ecosystem services that sustain human wellbeing.

b. Unlocking the potential of protected areas, including indigenous and community conserved areas, to conserve biodiversity while contributing towards sustainable development.

c. Managing and rehabilitating ecosystems for adaptation to and mitigation of climate change.

164. UNDP partners with the GEF, national and local governments, NGOs and CBOs to fund and implement projects in these thematic areas. GEF-funded projects and activities are integrated into UNDP's programme of work on environment and energy.

165. UNDP is well placed to support countries in integrating biodiversity and ecosystems management into development processes. With its on-the-ground presence, local knowledge, and ability to promote the important interface between local, national, and global communities and scientific research, UNDP assists developing countries in removing barriers to effective biodiversity and ecosystems management based on their national priorities and strategies, and improving system capacity through integrated policy development, institutional strengthening, and non-governmental and community participation.

166. UNDP"s role in Swaziland, in line with its mandate set internationally, is to support the implementation of the national Poverty Reduction Strategy and Action Plan. UNDP contributes to the Under the UN System wide UNDAF 2011-2015 Outcome 2: Increased and more equitable access of the poor to assets and other resources for sustainable livelihoods ; UNDP CPAP 2011-15 Programme Outcome: National institutions have the capacity and providing guidance on the utilisation of natural resources in a sustainable and equitable manner. This includes supporting the integration of the environment into development planning, and building capacity to reduce the risks of disasters. Among other comparative advantages that the UNDP has in the context of the climate change adaptation, the following stand out:

167. UNDP has worked and supported numerous projects on poverty reduction, disaster risk reduction, environment, energy and capacity development in Swaziland. UNDP completed a project in July 2010 aimed at strengthening national and local resilience to disaster risks within the context of sustainable development. In addition, UNDP is the implementing agency for the programme, "Enabling Activities for the Preparation of Swaziland's Second National Communication (SNC) to the UNFCCC" and was the implementing agency for the development of Swaziland's INC in 2000. Additionally, UNDP supported the process to ensure Swaziland's compliance to the Montreal Protocol, which is the terminal phasing out of ozone depleting substances (2009-2011). UNDP was also integral in the implementation of two disaster risk reduction projects within Swaziland, supported by resources from the Bureau for the Crisis

Prevention and Recovery (BCPR) and target for resource assignments from the core (TRAC). As a result of these projects, a National Disaster Risk Management Strategy was developed.

168. Overall, UNDP is well positioned to provide implementation support to the design and implementation of the adaptation measures at the community level, and on policy and institutional mainstreaming of adaptation. This is largely owing to its country presence, its coordination mandate, its established networks and its working relationships in-country.

LINKAGES WITH GEF FINANCED PROJECTS

169. This initiative forms part of a suite of GEF supported initiatives that aim at biodiversity conservation. The project will collaborate closely with other related initiatives in Swaziland supported by both GEF and other co-financiers.

Table 16: Additional GEF Approved Projects in Swaziland

GEF ID	Country	Project Name	Focal Area	Agency	Project Type
4255	Swaziland	To Promote the Implementation of National and Transboundary Integrated Water Resource Management that is Sustainable and Equitable Given Expected Climate Change	Climate Change	UNDP	FSP
3352	Swaziland	Second National Communications	Climate Change	UNDP	EA
231	Swaziland	National Biodiversity Strategies, Action Plan, and the Report to the COP	Biodiversity	UNDP	EA
2149	Swaziland	National Capacity Self-Assessment for Environmental Management	Multi-Focal	UNDP	EA

170. This project will collaborate closely with, and build on the findings of, other GEF projects in Swaziland, without repeating the efforts made in those projects. Notably, these are:

171. **To Promote the Implementation of National and Transboundary Integrated Water Resource Management that is Sustainable and Equitable Given Expected Climate Change**. The goal of the project was to ensure that the management of Swaziland's water resources is adapted to take into account the anticipated impacts of climate change. The interventions planned would indirectly improve the status of the communities as they will be better equipped to manage climate risks and adapt to climate change.

172. **National Biodiversity Strategies, Action Plan, and the Report to the COP**. The project aimed at helping SEA, relevant government ministries, NGOs, local communities and research institutions to formulate a National Biodiversity Strategy and Action Plan (NBSAP) and the first country report to the COP. The NBSAP would determine the current status of, pressures on, options and priority actions to ensure conservation and sustainable use of the country's biodiversity.

173. **National Capacity Self-Assessment for Environmental Management**. The project aims were to take stock of existing capacities and establish needs and priorities for capacity development to assist Swaziland to implement multilateral environmental conventions to which it is signatory. Through a country driven process, the project will analyse capacity gaps and capacity development needs for each of three Convention thematic areas, namely biodiversity, climate change and land degradation. Capacity will be assessed at the individual, institutional and systemic (policy and legislative framework) levels, including by assessing vertical (local & regional authorities –national government) and horizontal (government – NGOs/CBOs – private sector) coordination structures.

Project consistency with national priorities/plans

174. The project conforms to Swaziland's overall commitment to implement environmentally-sound policies and practices for sustainable development as defined in its environment action plan (Swaziland Environmental Action Plan (SEAP), 1997) and its long-term development strategy (National Development Strategy (NDS), 1999). Additionally, the project will directly contribute to the achievement of the national poverty reduction goal set out in the Poverty Reduction Strategy and Action Programme (PRSAP) (2007) as well as the achievement of Swaziland's Millennium Development Goals (MDGs), particularly Goal 1 (extreme poverty and hunger eradication), and Goal 7 (environmental sustainability).

175. In 1999, the Government of Swaziland established a 25-year National Development Strategy (NDS) to guide the long-term socio-economic development of the country through the formulation of development plans designed to eradicate HIV/AIDS, food insecurity and poverty; create employment; and achieve gender equity, social integration and environmental protection. The vision statement in the NDS states that: "by the Year 2022, Swaziland will be in the top 10% of the medium human development group of countries founded on sustainable economic development, social justice and political stability". The NDS identified key macro strategies areas, which included environmental management as a necessary condition for sustainable development. Swaziland is committed to the concept of sustainable development and to the implementation of Agenda 21. Sustainable environmental management is expected to forge a development path that provides prosperity for the country's present and future generations[16].

176. The project is in line with the country's NBSAP, the Ministry of Tourism and Environmental Affairs 2010-2015 development strategy, Game Act and the Swaziland National Trust Commission (SNTC) restructuring and commercialization strategy; as well as its 2011-2015 implementation strategy. All the strategies call for (amongst other things) increasing financial sustainability, ecological viability and broader participation of private sector and communities in PA management. They jointly aim to achieve these objectives through the development of a sustainable tourism framework; adoption of a business approach in PA management, development of new tourism products, branding and renewed marketing of Swaziland as a tourist destination and improvement of capacities for all the institutions involved in PA management. The project is in line with Swaziland's commitments to the international conventions on BD (expressed in the NBSAP). The project is also in line with the country's commitment to TFCA conservation co-operation as well as the RAMSAR Convention focussing on restoring and protecting natural wetlands and the African-Eurasian Waterfowl Agreement

[16] National Development Strategy, 1999, Government of Swaziland.

protecting waterfowl and migratory species habitats and flyways.

Country Ownership, Eligibility and Drivenness

177. Swaziland is signatory to the Convention on Biological Diversity and ratified this convention as well as the Framework Convention on Climate Change. The CBD considers protected areas as cornerstones for biodiversity conservation and as critical tools for reducing the current rate of loss of species and habitats in all types of ecosystems. In addition, Swaziland has ratified a number of other environmental conventions such as CITES, the Ramsar Convention, the WHC and UNCCD as well as the UNFCCC. Swaziland is eligible for technical assistance from UNDP.

178. This project addresses multiple priorities for the development of a mainstreaming approach to biodiversity conservation and responds to the NBSAP. GEF is the main funding mechanism for providing assistance to developing countries to facilitate them to achieve the targets set out within the CBD – to which they are signatories. Further the constitution of Swaziland places obligations on the government to promote conservation of habitats and species as well as the sustainable utilisation and conservation of the environment and natural resources.

179. Swaziland has made the following strides to ensure the conservation of biodiversity : Ratification of the Convention on Biological Diversity (1994); Prepared a National Biodiversity Strategy and Action Plan (NBSAP) under revision in 2010; Acceded to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) (1997); Formulated a National Environment Action Plan (1997); Formulated a Forest Policy (2000), a National Forest Programme (2002) and Forestry Bill (2008); Carried out a study to identify protection worthy areas with a view to declare them protected areas (2001). Big Game Parks carried out a comprehensive National Protection Worthy Areas Survey under the aegis of SNTC in 1979 which formed the basis of the 2001 survey; Established 3 Transfrontier Conservation Areas (TFCA), focusing on an ecosystem wide management approach in areas of highly significant biodiversity shared by Swaziland, Mozambique and South Africa; Established the country's first Community-Based Management Area in Shewula and prepared Community Nature Reserve Conservation Strategy (2007).

Cost-effectiveness

180. The project's cost effectiveness is evident in the inclusive strategy it has employed. The project will work with a wide range of stakeholders, building support for the implementation of the project activities across multiple sectors and local communities. The inclusive nature will lead to the development of a management and governance framework that incorporates stakeholder interests and enhances adaptive conservation management measures. The project thus enhances ownership of management plans leading to effective implementation and reduced resistance to the management plans.

181. The cost efficiency of biodiversity management will be addressed in the project by:

    (i) Managing productive landscapes rather than a patchwork of protected areas as well as expanding PAs to include critical ecosystems, thus generating significant economies of scale in overall biodiversity management operations.

(ii) Improving institutional effectiveness and capacity for PA and landscape management, thus ensuring that resource utilisation is improved and threats to wildlife reduced.

182. The project is also considered cost effective as it builds on the best practices and recommendations of other similar systems such as the **National Capacity Self-Assessment for Environmental Management**, by ensuring timely sharing of information and resources and by avoiding biodiversity degrading and economically unsound investments, which would require additional resource.

183. The incorporation of privately owned land into the PA estate through contracts and agreements such as conservation easements enable land to be used for conservation purposes, either for a long time period or in perpetuity, while allowing land owners to retain their ownership of the lands and title deeds. This is a cost effective means of PA expansion as the government does not have to buy the land from the owners and management costs are shared with the land owners resulting in lower costs per hectare for PAs.

184. The landscape-based management and multiple use approach aims to reduce degradation of the ecosystem by encouraging a shift from unsustainable to sustainable practices such as sustainable pastoralism and tourism. The project will increase biodiversity benefits without undermining the economic viability of production systems. This has the added benefit of mitigating potential land degradation thereby avoiding potential rehabilitation costs.

185. The project aims to increase the benefits from tourism through diversification of tourism products and the equitable sharing of these benefits. The alternative livelihoods proposed offer some solutions for generating suitable revenues that are sustainable. The project puts emphasis on the inclusion of women in the implementation of these economic activities to reduce vulnerability to environmental risk such as droughts. The Project adopts a strategy of hiring local and national experts wherever possible in the interests of project success by ensuring local applicability, cost effectiveness and sustainability, and with the added advantages of building local capacity.

Sustainability and Replication Strategy

186. The sustainability of the project will be in its ability to continue functioning at the end of the programme and that from the lessons learnt and practices employed; the project can then be replicated across other ecosystems, eventually extending towards the other critical ecosystems and eventually replicated throughout Swaziland.

SUSTAINABILITY

187. The project proposed is integral for the ecological, social, institutional and financial sustainability of the PA system in Swaziland. Without this GEF intervention, land subdivision and habitat conversion will continue with attendant PA financing and technical capacity challenges, resulting in further land degradation on many areas and the loss of globally significant biodiversity as well as poor management of some PAs. This will result in the potential loss of future revenue from tourism, further degradation of these PAs and increased vulnerability of the local communities to environmental risk.

188. Sustainability is incorporated in this project through the provision of an enabling framework for

biodiversity conservation, financial sustainability of PAs and economic development. Project sustainability is also by effective PA management through an integrated landscape based conservation and development plan that builds technical capacity for long-term management. It is also through livelihood enhancement activities that are tied to sustainable management of wider landscapes outside PAs.

Ecological Sustainability

189. The establishment of new PAs promotes the expansion of protected areas for biodiversity conservation and the restoration and enhancement of the productivity of land so that animal and plant wildlife can flourish as well as promoting the harmonious existence of wildlife with other sustainable economic activities. This reduces pressure on ecosystem resources while also enhancing biodiversity conservation. Integrated management at a landscape level will take into account ecological processes such as water flow and the ecological processes affecting the entire ecosystem. This leads to the development of protocols to monitor the use of ecosystem goods and services to reduce over-utilisation and degradation resulting in environmental sustainability.

Social Sustainability

190. Social sustainability is addressed through the development of landscape-based management strategies, which incorporates stakeholder interests, participation capacity and potential conflicts and their mitigation measures. This ensures community ownership and participation in the implementation of the project as well as ensuring their continued involvement in the established activities after the completion of the project. An integrated landscape-based, multiple-use management plan will provide guidelines on responsibilities and rights, reducing the risk of conflicts on utilisation and benefit sharing. The project's social sustainability is also addressed through its emphasis on the role of women in conservation and development. The empowerment of women will be through the utilisation of women's self-help groups to provide training, access to resources and forums for women's participation.

Institutional Sustainability

191. The project aims to build institutional capacity and establish institutions that incorporate the stakeholders and sustainable ecosystem management priorities. Institutional sustainability is therefore attained through the training and capacity building programmes developed for improved PA management. The application of best practices and lessons learnt from similar projects and the adaptation of these models to suit local situations results in the institutional sustainability of the project. The project strategy will lead to more effective planning and management of the PAs and the landscape outside PAs.

Financial Sustainability

192. The project will enhance financial sustainability by developing innovative financing mechanisms and financial management strategies to enhance access to financial resources and markets for sustainably produced tourism and non-tourism products. The financial sustainability of this project rests in part on the development of tourism and diversification of incomes and tourism products. The establishment of the different forms of PAs will not only lead to the expansion of protected areas but will secure legal protection for these areas, especially for communal areas allowing for the development of alternative livelihoods. Further, the

diversification of incomes through development of a wider range of tourism products as well as establishment of alternative livelihood activities such as beekeeping and PES schemes will result in financial sustainability. The inclusion of women in economic activities will also boost local economies, household incomes and wealth creation.

REPLICATION STRATEGY

193. The overall replication strategy will involve the implementation of the model developed by the project in other regions of Swaziland resulting in a comprehensive PA system.

194. The GIS-based knowledge and information system developed will result in informed decision-making at regional and national levels for PA management, conservation and sustainable economic development as well as the development of landscape-based management plans. The results from the implementation of the landscape based integrated land use management in the different forms of PAs and the wider landscapes will enable a comprehensive assessment and plan for appropriate replication and adaptation for other landscapes in the future. Lessons learnt, recommendations and guidelines developed from the utilisation of the knowledge and information system and landscape management plans will be disseminated to other PAs in Swaziland; to eventually be established at the national level resulting in a national knowledge based platform for PA management.

195. The expansion of the PA network will result in the effective conservation of critical biodiversity and ecosystems. The expanded PA network will result in enhanced ecosystem resilience and the legal protections provided by the formalisation process will lead to improved management standards for PAs. The lesson learnt from the development of PA management standards will be documented and disseminated at national and international forums; with project support "codes of practice" drawn from the lessons learned to guide landscape conservation, wildlife and tourism development activities.

196. The improved operation support to PA through the development of a proven approach to boosting the operational capacity in the PAs and support the development of new financing mechanisms and diversification of tourism products and revenues will provide opportunity for replication in the landscape and further afield. The formulation of a tourism development plan to be applied in the different forms of PAs will attract greater tourism revenues and attract interest from other stakeholders and tourism investors. This will lead to the retention of tourism revenues within the region and further development of the tourism market in Swaziland. Lessons learned from strategic and business planning approaches (financial management and tourism development strategies) and from and devising incentives will be captured and shared with all the biodiversity conservation, tourism and PA and local community stakeholders. The lessons from new training initiatives will be disseminated nationally and internationally.

Table 17: Replication Strategy by Component

Component	Needs/ Opportunities for Replication	Project Strategy for Replication
COMPONENT 1. Knowledge based platform operationalised at the National and regional level to address current and emerging threats to PAs and biodiversity conservation.	The GIS-based knowledge and information system developed will result in informed decision-making as well as the development of landscape-based management plans.	Lessons learnt, recommendations and guidelines developed from the utilisation of the knowledge and information system and landscape management plans will be disseminated to other PAs in Swaziland; to eventually be established at the national level resulting in a national knowledge based platform for PA management.
COMPONENT 2. Landscape approach operationalised and leads to expansion of PA network.	Expansion of the PA network will result in the effective conservation of critical biodiversity and ecosystems.	The expanded PA network will result in enhanced ecosystem resilience and the legal protections provided by the formalisation process will lead to improved management standards for PAs. With project support "codes of practice" will be drawn from the lessons learned to guide landscape conservation, wildlife and tourism development activities.
COMPONENT 3. Strengthening PA functioning through improved Conservation management and Operational support for existing and new PAs, including both formal and informal PAs.	A proven approach to boosting the operational capacity in the PAs and support the development of new financing mechanisms and diversification of tourism products and revenues will provide opportunity for replication in the landscape and further afield.	Lessons learned from strategic and business planning approaches (financial management and tourism development strategies) and from and devising incentives will be captured and shared with all the biodiversity conservation, tourism and PA and local community stakeholders. The lessons from new training initiatives will be disseminated nationally and internationally.

CLIMATE CHANGE ADAPTATION

197. Climate change will disrupt the interaction of flora and fauna; reduce the ecological viability of habitats and threaten the survival of many species. Other impacts include loss of wildlife habitats, shift in species' ranges and increased drought incidence resulting in massive deaths of livestock and wildlife. Climate change adaptation involves improving society's ability to cope with climatic variability and the associated risks.

198. The expansion of the PA network and the landscape-based approach of the project will enhance ecosystem resilience to climate variability by reducing habitat fragmentation and enhancing wildlife movement through the establishment and protection of critical ecosystems. This will allow for wildlife movement during periods of drought into drought refuges and reduce the pressure placed on these critical ecosystems by allowing the dispersal of animals throughout the ecosystem rather than concentrating in a few areas within the national parks.

199. Spatial planning that takes ecosystem requirements with a landscape scope into consideration will be increasingly crucial. The adoption of landscape based management strategies by this project will help mitigate some of the impacts of climate change such as providing alternative income sources for the local communities thus buffering them from the effects of climate variability such as drought.

200. The development of financing mechanisms for the PAs, enhanced benefit sharing for local communities and PES systems by the project will aid in mitigating the impacts of climate change. The development of alternative livelihoods and improved production technologies will reduce the vulnerability of local communities to the vagaries of climate change. The development of PES will encourage conservation and enhance ecosystem resilience providing local communities with additional income resources as well as a natural buffer against extreme weather conditions through the maintenance of ecosystems and ecosystem processes.

PART III: Management Arrangements

Project Management & Implementation

201. The project will be implemented over a period of six years beginning in late 2014. The project implementation plan is presented below. An inception period will be used to refine the project design where appropriate and bring on board fully the relevant stakeholders for implementation.

EXECUTION MODALITY

202. The project will be executed under National Implementation Modalities (NIM) where UNDP will act as the provider of the services and facilities that come about through a successful proposal. The project will be funded by GEF through UNDP, which is accountable to GEF for project delivery, as well as through other forms of financing (UNDP TRAC, and co-finance parallel and in-kind contributions). UNDP thus has overall responsibility for supervision, project development, guiding project activities through technical backstopping and logistical support.

Implementing Partner

203. Swaziland National Trust Commission (SNTC), a parastatal organisation, will work in close cooperation with the Ministry of Tourism and Environmental Affairs (MTEA), and the GEF Focal Point. SNTC will also coordinate activities on a local pilot level through direct engagement with its PA staff. The MTEA is responsible for regional and national mainstreaming whereas SNTC is ultimately responsible for site activity implementation, however site implementation by SNTC will be managed in close collaboration with BGP and other responsible parties.. Within the government, the Ministry of Tourism and Environmental Affairs (MTEA) Swaziland Environment Authority will be the GEF Focal point for this project and have a close association to other Ministries, SNTC and BGP senior officials in ensuring top-level project oversight.

204. The project will thus be implemented by SNTC but in close collaboration on an implementation level with other government divisions as well as with civil society and private sector stakeholders (‘responsible parties’ and others) and with financial and technical support from UNDP. The primary role of SNTC will be to coordinate the project, as an Implementing Partner and Chair of the Project Steering Committee. SNTC will also assist in the liaison with local government and other government agencies at the landscape level to ensure buy in and engagement.

Responsible Parties

205. Several organisations may be appointed "responsible parties". That is to say they will report directly to the steering committee and SNTC as the implementing partner. All responsible parties will have to avail their legal instruments and also undergo the UNDP mandatory assessment to facilitate the harmonised approach cash transfer (HACT) modality. The appointed responsible parties may vary according to their specialist skills and mandates and their geographical locations and spheres of influence

206. The primary appointed responsible party is **Big Game Parks** (BGP). The appointed responsible party will have defined roles and responsibilities and allocated budget, which is laid out in summary below and in further detail in the project budget below. The primary role and responsibility of BGP will be for the implementation of project activities within the PAs that it manages and overseeing the implementation of project activities in other PAs Gazetted under the Game Act and for supporting the application of the Game Act nationally (as delegated by the King's Office) and for supporting the application of the landscape approach within the landscapes where BGP is designated lead responsibility (likely the Mkhaya and Ngwempisi landscapes).

207. Big Game Parks working with its existing partners in the landscape will provide support to the development of the project in a number of key ways. In particular, BGP will support the development of a leadership structure for the project based on PA membership in the different forms of PAs to be established in the target landscapes. BGP will support the development of landscape-based management plans and strategies as well as supporting the operationalisation of the knowledge and information management systems. BGP will act as a service provider to the project in the creation and facilitation of functional PAs in the target landscapes. Further, BGP will carry out a range of ecological development activities including aliens invasive species control strategies and the development of dry season refugia through the formalisation of PAs. BGP will also support development of improved financing mechanisms, tourism development, rural income generation and alternative income generation activities for enhanced benefit sharing among different stakeholders.

IMPLEMENTATION MODALITY

208. Coordination among the Government ministries, SNTC and BGP will be achieved through creation of a **Project Management Unit** (PMU). A **Project Steering Committee** (PSC) overseen by a **Project Board** (PB) will allow for project oversight and assurance with technical advisory support from UNDP, and will oversee the PMU. The PB and PSC will allow not only high-level coordination between government and the responsible parties, but will also provide a mechanism for open and effective project management.

209. Project activities will be implemented at the overall management and the landscape level. The PMU will be responsible for overall coordination of project activities, but in particular, it will coordinate national and intra-landscape level activities that are largely linked to policy and systematic and institutional capacities for managing PAs landscapes. The PMU will also be responsible for coordination and mainstreaming of lessons and experiences into government operations, lessons learnt from activities in other related GEF funded projects and linking with additional on-going related projects. The PMU will be headed by a National Project Manager (NPM) who shall be a fulltime resource acquired competitively. Funds will flow from UNDP to

a dedicated project account, managed by SNTC. Similarly for BGP responsible activities, funds will flow from UNDP to a dedicated project account, managed by BGP. At the PA level, the NPM will be supported by a finance and administration officer. The project will support SNTC to employ an SNTC Project Manager and BGP to employ a BGP Project Manager under component I subcomponent III and it will also employ community members under component III subcomponent V who will mobilise CBNRM initiatives. The PMU will also engage the support of short-term consultants and researchers where necessary. The PMU will be guided by the PSC which in turn will be guided by the PB.

PROJECT BOARD

210. The PB will be chaired by the Principal Secretary (PS) of the MTEA. In total one representative of each of the key government Ministries shall be members (MNRE, MoA, MEPD and King's Office) as well as the Ministry of Finance which is always member of the PB for all UNDP projects. UNDP will have one representative present who will advise the PB in its deliberations and may vote in cases where a majority has not been met. Members shall have been elected during the Inception meeting. The PB will include as ex-officio members responsible for technical input: one senior representative from the Implementing Agency, SNTC and the other responsible party BGP as well as the GEF Focal Point, the Executive Director of the SEA. The PB shall report to the Government of Swaziland and UNDP. The NPM will be a member of the PB as an ex-officio observer responsible for taking and distributing minutes

211. The PB members shall meet at least twice in a year following PSC meetings.

212. The role of the PB will be to:
    - Provide policy advice to the PSC for the implementation of project activities to ensure the integration of project activities with ongoing political programmes and strategies.
    - Provide political support for the project to facilitate achievement of the objectives
    - Provide guidance to the PSC and monitor performance of the PSC.

PROJECT STEERING COMMITTEE

213. The Project Steering Committee (PSC) will be chaired by the SNTC CEO, who will also take the role of National Project Director and shall be responsible for supervising project development, guiding project activities through technical backstopping and for contracting staff where necessary. In total one representative of each key government or parastatal agency shall be members (SEA, Department of Forestry, Swaziland Tourism Authority, MNRE, MEPD, UNISWA), a representative from the responsible party (BGP) and members from key civil society organisations (SGRA, a relevant NGO, a private PA, a community PA). UNDP will have one representative present who will advise the PSC in its deliberations and may vote in cases where a majority has not been met. Members shall have been elected during the Inception meeting. The PSC shall report to PB, UNDP and GEF National Focal Point.

214. The PSC members shall meet as the needs require but at least four times in a year following PMU meetings. The NPM will be a member of the PSC as an ex-officio observer responsible for taking and distributing minutes. Other PMU staff working under the NPM shall attend meetings of the PB by invitation and only on a need to basis.

215. The role of the PSC will be to:

- Provide strategic advice to the PMU for the implementation of project activities to ensure the integration of project activities with poverty alleviation and sustainable development objectives.
- Ensure coordination between the project and other on-going activities in the country.
- Ensure interagency coordination and ensure full participation of stakeholders in project activities.
- Policy technical/advice in adherence of GoS, UNDP and GEF policies and procedures.
- Provide technical backstopping to the project.
- Assist with organisation of project reviews and contracting consultancies under technical assistance as well as approval of annual work plans and budgets.
- Provide guidance to the PMU and monitor performance of the PMU.

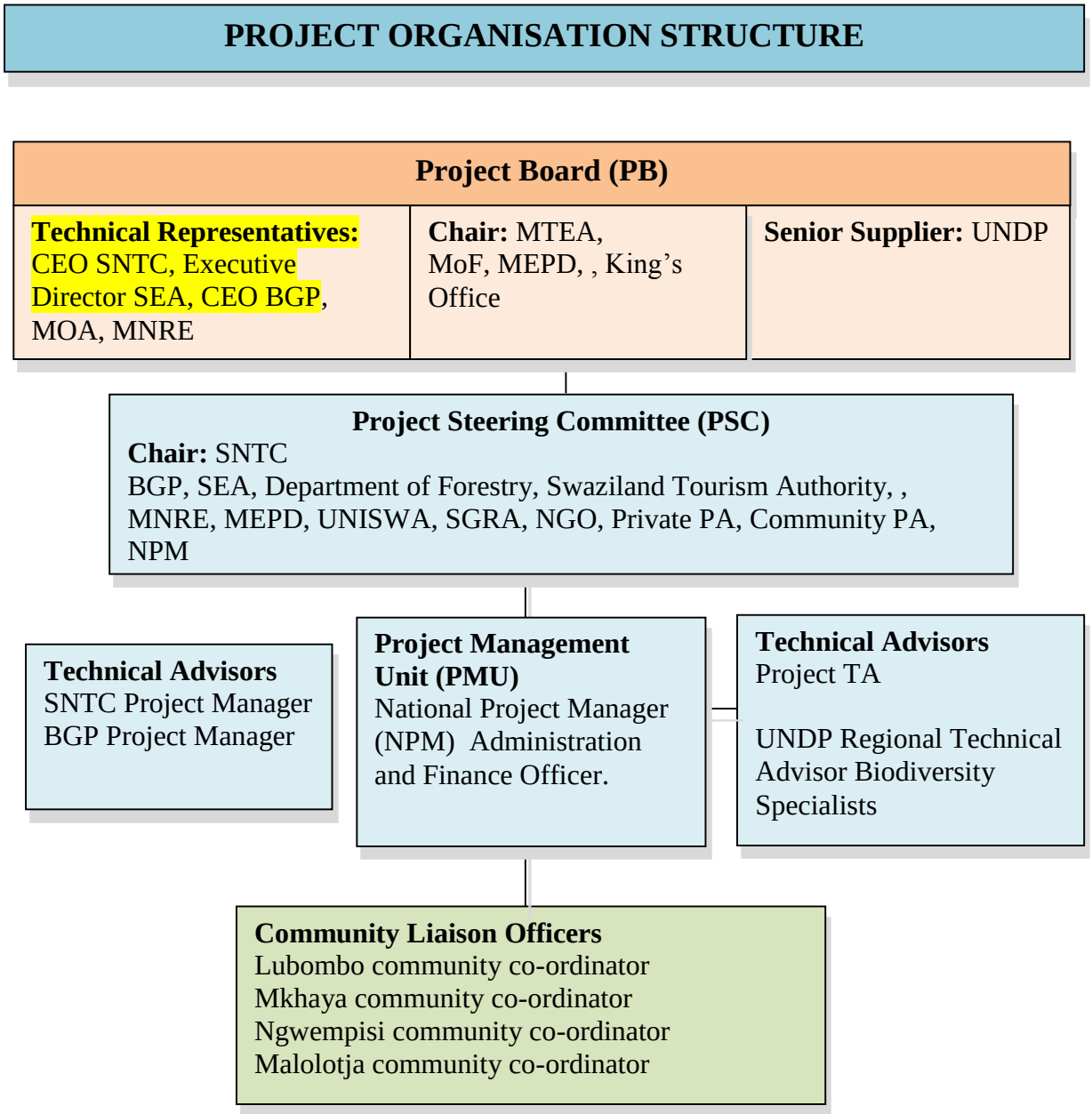


Figure 4: Overview of Project Organisation Structure

PROJECT COORDINATION

216. The PMU project management team will be responsible for day-to-day oversight and coordination on implementation of project activities including supervision of activities contracted to consultants by Government. The NPM heading the PMU will report to the PSC, on a quarterly basis and maintain a direct liaison with UNDP through the Energy and Environment portfolio. The NPM shall be assisted by an Administrator and Finance Assistant and will be based at SNTC headquarters in Lobamba. The NPM will receive reports and feedback from the project sites, fed through the SNTC and BGP Project Managers. The NPM shall act as a lynch pin to coordinate activities between the partners. The PMU together with the SNTC and BGP PMs will serve as the Project Technical Committee who will receive occasional guidance from the Project TA and may co-opt other expertise as required on a short-term basis and will provide the technical and field implementation 'think tank' as well as clearing all documents (outputs of consultants and responsible parties other GEF and UNDP reports, work plans/budgets) before they are presented to the PSC.

217. The NPM will link with other GEF project coordinators sharing lessons learnt relevant to mainstreaming activities and also to other government led initiatives such as institutional strengthening activities, policy and preparation of management plans. The NPM will report directly to the PSC on the basis of approved work plan participate directly at the PSC with the agencies reports and work plan approved at the same meeting, and shall work under the guidance of outputs from PAC meetings.

LANDSCAPE/PA LEVEL PROJECT IMPLEMENTATION

218. Overall management of activities in these pilots will be coordinated by the PMU through the NPM and his/her team under the guidance of the PSC with the SNTC taking lead responsibility in two (2) landscapes and BGP taking lead responsibility in two (2) landscapes as geographically appropriate. In order to gain maximum efficiency in project implementation, under the management of the NPM and with guidance and assistance from the SNTC and BGP PMs (with regular site visits required) there will be dedicated CBNRM community co-ordinators hired by the project from within each of the relevant rural communities within the four target landscapes. These community co-ordinators will be based within the relevant landscape and will report to the NPM and be guided by the relevant TA. Where there are lessons learnt, intra-landscape crossover issues, or higher-level engagement is required, responsibility will be decreed to the NPM. Specific responsible parties may take defined roles at landscape level. It is envisaged that SNTC will take lead responsibility for the Lubombo landscape (working through the Lubombo Conservancy) and for the Malolotja landscape. It is envisaged the BGP will take lead responsibility for the Mkhaya landscape (working through the Big Bend Conservancy) and the Ngwempisi landscape.

PROJECT COMPONENTS

219. The project will comprise three complementary components. Each addresses a different barrier and has distinct outcomes. Overall management of these shall be coordinated by the PMU under the leadership of the Project Board.

INCEPTION SESSION

220. The project will begin with an inception session. The PSC, with the support of the NPM will review the project document prior to the meeting and recommend revisions in light of the prevailing situation. This may include updating the log-frame and institutional arrangements.

The NPM will present the finalised work plan and first quarterly plan to the PSC, copied to the PB. All key stakeholders will participate and the workshop will offer an opportunity to ensure coordination between all the players and establish a common ground of understanding necessary to ensure the smooth running of project implementation.

221. A fundamental objective of the Inception Session (IS) will be to assist the project team to understand and take ownership of the project's goals and objectives, as well as finalise preparation of the project's first annual work plan on the basis of the project's logframe matrix. This will include reviewing the logframe (indicators, means of verification, assumptions), imparting additional detail as needed, and on the basis of this exercise finalise the Annual Work Plan (AWP) with precise and measurable performance indicators, and in a manner consistent with the expected outcomes for the project.

222. Additionally, the purpose and objective of the IS will be to: (i) introduce project staff with the UNDP-GEF expanded team which will support the project during its implementation, namely the CO and responsible Regional Coordinating Unit (RCU) staff; (ii) detail the roles, support services and complementary responsibilities of UNDP-CO and the project team; (iii) provide a detailed overview of UNDP-GEF reporting and M&E requirements, with particular emphasis on the Annual Project Implementation Reports (PIRs) and related documentation, the Annual Project Report (APR), Tripartite Reviews, as well as mid-term and final evaluations. Equally, the IS will provide an opportunity to inform the project team on UNDP project related budgetary planning, budget reviews, and mandatory budget re-phasing.

223. The IS will also provide an opportunity for all parties to understand their roles, functions, and responsibilities within the project's decision-making structures, including reporting and communication lines, and conflict resolution mechanisms. The Terms of Reference for project staff and decision-making structures will be discussed again, and broadened, as needed, in order to clarify each party's responsibilities during the project's implementation phase.

TECHNICAL ASSISTANCE

224. Part-time national technical assistance will be provided by the Project in the form of a Project Technical Advisor who will work at least 3 days per month to give broad level technical guidance and oversight. Long-term national technical assistance will be provided by the Project in the form of a Project Manager for SNTC and a Project Manager for BGP in order to build the capacity within these organisations to meet the requirements of implementing the project and to overcome barriers and achieve the project outputs/outcomes. Other short-term technical assistance may be sought as needed on a consultancy basis. All Technical Assistance will be directly contracted by the PSC, through a transparent procurement process (i.e. the development of Terms of References and recruitment) following UNDP regulations and will directly assist the implementing entities and report to the PSC. Selection of the SNTC PM will be done with the SNTC having right of refusal. Selection of the BGP PM will done with the BGP having right of refusal. Many of the project components are innovative and need some level of consultancy input. These include issues such as: Biodiversity Field Surveys, Landscape planning, PA Economics, Business Plans, Institutional Capacity Building, Gap analysis and Climate change adaptation strategies, etc. Where needed these local consultancy inputs have been identified and budgeted. Wherever possible local or national consultants will be hired in order to facilitate applicability, sustainability and to build local expertise.

FUNDS FLOW

225. Funds will be available to the Implementing Partner (SNTC) and designated responsible party (BGP) following UNDP NIM guidelines.

PUBLIC INVOLVEMENT PLAN

226. At the national level the project will engage with governments, the private sector, communities, donors, NGOs and experts over meeting the project objective according to its strategy. The project will also seek to inform all stakeholders of the values of landscape level activities, the problems that they are facing, why they need to support project outcomes and how this should go about in an equitable and efficient manner.

REPORTING

227. As head of the PMU, under the PSC, the NPM will be responsible for the preparation of reports for the PSC and UNDP on a regular basis, including the following: (i) Project Inception Report (ii) APR; (iii) Project Implementation Report (PIR); (iv) Quarterly Progress Reports; and (v) Project Terminal Report. The Quarterly progress reports will provide a basis for managing project disbursements. These reports will include a brief summary of the status of activities, explaining variances from the work plan, and presenting work-plans for each successive quarter for review and endorsement. The APR will be prepared annually, and will entail a more detailed assessment of progress in implementation, using the set indicators. It will further evaluate the causes of successes and failures, and present a clear action plan for addressing problem areas for immediate implementation.

228. *Annual Monitoring* will occur through the *Tripartite Review (TPR).* The TPR will be composed of Government representatives, UNDP and the Project. This will serve as the highest policy-level meeting of the parties directly involved in the implementation of the project. The project will be subject to TPR at least once every year. The first such meeting will be held within the first twelve months of implementation. The APR will be prepared and submitted to UNDP-CO and the UNDP-GEF Regional Office at least two weeks prior to the TPR for review and comments. The project will be subjected to at least two independent external evaluations.

AUDIT

229. Audit will be conducted according to UNDP Financial Regulations and Rules and applicable Audit policies.

- **Mid-term Review** - will be undertaken at the end of the second year of implementation. The Mid-Term Evaluation will determine progress being made towards the achievement of outcomes and will identify course correction if needed;
- **Final Technical Evaluation** - will take place three months prior to the terminal TPR meeting, and will focus on the same issues as the mid-term evaluation. The final evaluation will also look at impact and sustainability of results, including the contribution to capacity development and the achievement of global environmental goals.

PART IV: Monitoring and Evaluation Plan and Budget

Monitoring and reporting[17]

230. A Project Inception Workshop (IW) will be conducted with the full project team, relevant government counterparts, co-financing partners, the UNDP-CO and representation from the UNDP-GEF Regional Coordinating Unit. A fundamental objective of this Inception Workshop will be to assist the project team to understand and take ownership of the project's goal and objective, as well as finalise preparation of the project's first AWP. This will include reviewing the log-frame (indicators, means of verification, assumptions), imparting additional detail as needed, and on the basis of this exercise, finalising the AWP with precise and measurable performance indicators, and in a manner consistent with the expected outcomes for the project.

231. Additionally, the purpose and objective of the IW will be to: (i) introduce project staff with the UNDP-GEF team which will support the project during its implementation, namely the CO and responsible RCU staff; (ii) detail the roles, support services and complementary responsibilities of UNDP-CO and RCU staff vis-à-vis the project team; (iii) provide a detailed overview of UNDP-GEF reporting M&E requirements, with particular emphasis on the Annual Project Implementation Reportr (PIRs) and related documentation, the Annual Review Report (ARR), as well as mid-term and final evaluations. Equally, the IW will provide an opportunity to inform the project team on UNDP project related budgetary planning, budget reviews, and mandatory budget re-phasing. The IW will also provide an opportunity for all parties to understand their roles and responsibilities within the project's decision-making structures, including reporting and communication lines.

232. A detailed schedule of project review meetings will be developed by project management, in consultation with project implementation partners and stakeholder representatives and incorporated in the PIR. Such a schedule will include: (i) tentative time frames for Project Board Meetings (PBM) and (ii) project related M&E activities. Day-to-day monitoring of implementation progress will be the responsibility of the NPM based on the project's AWP and agreed indicators. The NPM will inform the UNDP-CO of any delays or difficulties faced during implementation so that the appropriate support or corrective measures can be adopted in a timely and remedial fashion. The NPM will also fine-tune the progress and performance/impact indicators of the project in consultation with the full project team at the Inception Workshop with support from UNDP-CO and assisted by the UNDP-GEF Regional Coordinating Unit. Specific targets for the first year implementation progress indicators together

[17] As per GEF guidelines, the project will also be using the BD 1 Management Effectiveness Tracking Tool (METT). New or additional GEF monitoring requirements will be accommodated and adhered to once they are officially launched.

with their means of verification will be developed at this Workshop. These will be used to assess whether implementation is proceeding at the intended pace and in the right direction and will form part of the AWP. Targets and indicators for subsequent years would be defined annually as part of the internal evaluation and planning processes undertaken by the project team.

233. Measurement of impact indicators related to global biodiversity benefits will occur according to the schedules defined in the Inception Workshop, using tracking tool scores, assessments of forest cover, wildlife movements and other means. Periodic monitoring of implementation progress will be undertaken by the UNDP-CO through quarterly meetings with the Implementing Partner, or more frequently as deemed necessary. This will allow parties to take stock and to troubleshoot any problems pertaining to the project in a timely fashion to ensure smooth implementation of project activities. Annual Monitoring will occur through the Project Board Meetings (PBM).This is the highest policy-level meeting of the parties directly involved in the implementation of a project. The project will be subject to PBMs four times a year. The first such meeting will be held within the first six months of the start of full implementation.

234. A terminal PBM will be held in the last month of project operations. The NPM is responsible for preparing the Terminal Report and submitting it to UNDP-CO and UNDP-GEF RCU after close consultation with the PBM. It shall be prepared in draft at least two months in advance of the terminal PBM in order to allow review, and will serve as the basis for discussions in the PBM. The terminal meeting considers the implementation of the project as a whole, paying particular attention to whether the project has achieved its objectives and contributed to the broader environmental objectives. It decides whether any actions are still necessary, particularly in relation to sustainability of project results, and acts as a vehicle through which lessons learnt can be captured to feed into other projects under implementation.

235. UNDP COs and UNDP-GEF RCU as appropriate, will conduct yearly visits to project sites based on an agreed upon schedule to be detailed in the project's PIR/AWP to assess first hand project progress. A Field Visit Report/BTOR will be prepared by the CO and UNDP-GEF RCU and circulated no less than one month after the visit to the project team, all PSC members, and UNDP-GEF.

Project Reporting

236. The core project management team (under the NPM) in conjunction with the UNDP-GEF extended team will be responsible for the preparation and submission of the following reports that form part of the monitoring process. The first six reports are mandatory and strictly related to monitoring, while the last two have a broader function and their focus will be defined during implementation.

237. A Project Inception Report (PIR) will be prepared immediately following the Inception Workshop. It will include a detailed First Year Work Plan divided in quarterly time-frames detailing the activities and progress indicators that will guide implementation during the first year of the project. This Work Plan will include the dates of specific field visits, support missions from the UNDP-CO or the Regional Coordinating Unit (RCU) or consultants, as well as time-frames for meetings of the project's decision making structures. The Report will also include the detailed project budget for the first full year of implementation, prepared on the basis of the AWP, and including any M&E requirements to effectively measure project performance during the targeted 12 months' time-frame.

238. The PIR will include a more detailed narrative on the institutional roles, responsibilities, coordinating actions and feedback mechanisms of project related partners. In addition, a section will be included on progress to date on project establishment and start-up activities and an update of any changed external conditions that may affect project implementation. When finalised, the report will be circulated to project counterparts who will be given a period of one calendar month in which to respond with comments or queries. Prior to this circulation of the PIR, the UNDP CO and UNDP-GEF's Regional Coordinating Unit will review the document.

239. The Annual Project Report/ Project Implementation Review must be completed once a year. The APR/ PIR is an essential management and monitoring tool for UNDP, the Executing Agency and PCs and offers the main vehicle for extracting lessons from on-going projects at the portfolio level.

240. Quarterly progress reports: Short reports outlining main updates in project progress will be provided quarterly to the local UNDP CO and the UNDP-GEF RCU by the project team, headed by the Policy Specialist using UNDP formats.

241. UNDP ATLAS Monitoring Reports: A Combined Delivery Report (CDR) summarising all project expenditures, is mandatory and should be issued quarterly. The NPM will send it to the PSC for review and the Executing Partner will certify it. The following logs should be prepared: (i) the Issues Log is used to capture and track the status of all project issues throughout the implementation of the project. It will be the responsibility of the NPM to track, capture and assign issues, and to ensure that all project issues are appropriately addressed; (ii) the Risk Log is maintained throughout the project to capture potential risks to the project and associated measures to manage risks. It will be the responsibility of the NPM to maintain and update the Risk Log, using Atlas; and (iii) the Lessons Learned Log is maintained throughout the project to capture insights and lessons based on the positive and negative outcomes of the project. It is the responsibility of the NPM to maintain and update the Lessons Learned Log.

242. Project Terminal Report: During the last three months of the project the project team under the NPM will prepare the Project Terminal Report. This comprehensive report will summarise all activities, achievements and outputs of the Project, lessons learnt, objectives met, or not achieved, structures and systems implemented, etc. and will be the definitive statement of the Project's activities during its lifetime. It will also lay out recommendations for any further steps that may need to be taken to ensure the long term sustainability and the wide replicability of the Project's outcomes.

243. Periodic Thematic Reports: As and when called for by UNDP, UNDP-GEF or the Implementing Partner, the project team will prepare Specific Thematic Reports, focusing on specific issues or areas of activity. The request for a Thematic Report will be provided to the project team in written form by UNDP and will clearly state the issue or activities that need to be reported on. These reports can be used as a form of lessons learnt exercise, specific oversight in key areas, or as troubleshooting exercises to evaluate and overcome obstacles and difficulties encountered.

244. Technical Reports are detailed documents covering specific areas of analysis or scientific specialisations within the overall project. As part of the PIR, the project team will prepare a draft Reports List, detailing the technical reports that are expected to be prepared on key areas of activity during the course of the Project, and tentative due dates. Where necessary this Reports List will be revised and updated, and included in subsequent APRs. Technical Reports may also

be prepared by external consultants and should be comprehensive, specialised analyses of clearly defined areas of research within the framework of the project and its sites. These technical reports will represent, as appropriate, the project's substantive contribution to specific areas, and will be used in efforts to disseminate relevant information and best practices at local, national and international levels.

245. Project Publications will form a key method of crystallising and disseminating the results and achievements of the Project. These publications may be scientific or informational texts on the activities and achievements of the Project, in the form of journal articles, multimedia publications, etc. These publications can be based on Technical Reports, depending upon the relevance, scientific worth, etc. of these Reports, or may be summaries or compilations of a series of Technical Reports and other research. The project team, under the NPM, will determine if any of the Technical Reports merit formal publication, and will also (in consultation with UNDP, the government and other relevant stakeholder groups) plan and produce these Publications in a consistent and recognisable format. Project resources will need to be defined and allocated for these activities as appropriate and in a manner commensurate with the project's budget.

Independent Evaluations

246. The project will be subjected to at least two independent external evaluations as follows: An independent Mid-Term Evaluation will be undertaken at exactly the mid-point of the project lifetime. The Mid-Term Evaluation will determine progress being made towards the achievement of outcomes and will identify course correction if needed. It will focus on the effectiveness, efficiency and timeliness of project implementation; will highlight issues requiring decisions and actions; and will present initial lessons learned about project design, implementation and management. Findings of this review will be incorporated as recommendations for enhanced implementation during the final half of the project's term. The organisation, terms of reference and timing of the mid-term evaluation will be decided after consultation between the parties to the project document. The Terms of Reference for this Mid-term evaluation will be prepared by the UNDP CO based on guidance from the UNDP-GEF Regional Service Centre.

247. An independent Final Technical Evaluation will take place three months prior to the terminal Project Steering Committee meeting, and will focus on the same issues as the mid-term evaluation. The final evaluation will also look at impact and sustainability of results, including the contribution to capacity development and the achievement of global environmental goals. The Final Technical Evaluation should also provide recommendations for follow-up activities.

Table 18: Project Monitoring and Evaluation Plan and Budget

Type of M&E activity	Responsible Parties	**Budget USD** *Excluding project team Staff time*	Time frame
Inception Workshop	▪ National Project Manager ▪ UNDP CO ▪ UNDP GEF	$10,000	Within first two months of project start up
Inception Report	▪ Project Team ▪ UNDP CO	None	Immediately following Inception Workshop
Measurement of Means of Verification for Project Purpose	▪ National Project Manager will oversee the hiring of specific studies and	To be finalised in Inception Phase.	Start, mid and end of project

Type of M&E activity	Responsible Parties	Budget USD *Excluding project team Staff time*	Time frame
Indicators	institutions, and delegate responsibilities to relevant team members		
Measurement of Means of Verification for Project Progress and Performance (measured on an annual basis)	▪ Oversight by National Project Manager ▪ Monitoring and Evaluation Officer ▪ Project team	To be determined as part of the Annual Work Plan's preparation.	Annually prior to ARR/PIR and to the definition of annual work plans
ARR and PIR	▪ Project Team ▪ UNDP-CO ▪ UNDP-GEF	None	Annually
Quarterly progress reports	▪ Project team	None	Quarterly
CDRs	▪ National Project Manager	None	Quarterly
Issues Log	▪ National Project Manager UNDP CO Programme Staff	None	Quarterly
Risks Log	▪ National Project Manager ▪ UNDP CO Programme Staff	None	Quarterly
Lessons Learned Log	▪ National Project Manager ▪ UNDP CO Programme Staff	None	Quarterly
Mid-term Evaluation	▪ Project team ▪ UNDP- CO ▪ UNDP-GEF Regional Coordinating Unit ▪ External Consultants (i.e. evaluation team)	$30,000	At the mid-point of project implementation.
Final Evaluation	▪ Project team, ▪ UNDP-CO ▪ UNDP-GEF Regional Coordinating Unit ▪ External Consultants (i.e. evaluation team)	$30,000	At the end of project implementation
Terminal Report	▪ Project team ▪ UNDP-CO ▪ local consultant	Funds are budgeted for local consultants to assist where needed	At least one month before the end of the project
Lessons learned	▪ Project team ▪ Monitoring and Evaluation Officer ▪ UNDP-GEF Regional Coordinating Unit (suggested formats for documenting best practices, etc.)	0	Yearly
Audit	▪ UNDP-CO ▪ Project team	$3,000 per annum	Yearly
Visits to field sites	▪ UNDP Country Office ▪ UNDP-GEF Regional Coordinating Unit (as appropriate) ▪ Government representatives	Paid from IA fees and operational budget	Yearly
TOTAL INDICATIVE COST **Excluding project team staff time and UNDP staff and travel expenses**		**USD 150,000***	

PART V: Legal Context

248. This Project Document shall be the instrument referred to as such in Article I of the Standard Basic Assistance Agreement between the Government of Swaziland and the United Nations Development Programme, signed by the parties. The host country-implementing agency shall, for the purpose of the Standard Basic Assistance Agreement, refer to the government co-operating agency described in that Agreement.

249. UNDP acts in this Project as Implementing Agency and all rights and privileges pertaining to UNDP as per the terms of the SBAA shall be extended mutatis mutandis to GEF.

250. The UNDP Resident Representative in Mbabane is authorised to effect in writing the following types of revision to this Project Document, provided that he/she has verified the agreement thereto by the UNDP-EEG Unit and is assured that the other signatories to the Project Document have no objection to the proposed changes:

a) Revision of, or addition to, any of the annexes to the Project Document;

b) Revisions which do not involve significant changes in the immediate objectives, outputs or activities of the project, but are caused by the rearrangement of the inputs already agreed to or by cost increases due to inflation;

c) Mandatory annual revisions which re-phase the delivery of agreed project inputs or increased expert or other costs due to inflation or take into account agency expenditure flexibility; and

d) Inclusion of additional annexes and attachments only as set out here in this Project Document.

SECTION II: STRATEGIC RESULTS FRAMEWORK (SRF) AND GEF INCREMENT

PART I: Strategic Results Framework, SRF (formerly GEF Logical Framework) Analysis

Indicator framework as part of the SRF

Objective/Outcome	Indicator	Baseline	End of Project target	Source of Information	Risks and Assumptions
Objective – To effectively expand, manage and develop Swaziland's protected area network in order to adequately protect the biodiversity and landscapes of the country.	Legally protected PA network increased.	Current baseline of 3.9% of the country	PA system covers at least 6%	PA Formalisation and gazettement notices Independent mid-term and final evaluations Project reports Land use plans and GIS maps	Risk: - Limited cooperation between stakeholders and stakeholders are reluctant to establish PAs. Assumption: - Continued interest and support of government and staff in the implementation of strategies and programmes to mainstream biodiversity conservation and economic development in national planning
	Number of capacity building programmes developed for improved PA management	0	At least 3 PA capacity building programmes to improve the management and operations of PAs	Capacity building curriculums and reports Project reports Independent mid-term and final evaluations	
Component 1 – Knowledge based management platform operationalised at the National and regional level to address current and emerging threats to PAs and biodiversity conservation.					
Outcome: PA management and biodiversity conservation guided by research and knowledge, for improved and adaptive management practices within and	1.1 Biodiversity field surveys, vegetation assessments and tourism assessments carried out in PAs and surrounding landscapes to fill information gaps. This results in enhanced research and monitoring, improved information on biodiversity, ecosystems, tourism and ecosystem services, improved understanding and awareness of biodiversity and the benefits of PAs including stakeholder consultations and dissemination of information as well as increased understanding of knowledge-based mechanisms for improved management of PAs and the wider landscapes. 1.2 GIS-based knowledge and information management system operationalised and supports systematic biodiversity planning through identification of critical biodiversity areas, ecological support areas for maintaining ecosystem processes, biodiversity conservation targets (in line with Aichi targets and national				Risks: -Complexity in stakeholder collaboration due to differing interests and wide range of stakeholders, resulting in slow operationalisation of knowledge management platform. Assumptions: - Governance systems will enable the necessary cohesion and pace of implementation of the

Objective/Outcome	Indicator	Baseline	End of Project target	Source of Information	Risks and Assumptions
outside PAs.	plans) and determination of ecosystem and species management objectives. PA and landscape management plans that integrate conservation efforts with sustainable economic development practices in the four identified landscapes are developed incorporating field monitoring and knowledge-based management mechanisms. 1.3 PA and Landscape based management plans that integrate conservation efforts with sustainable economic development practices in the wider landscape are developed and implemented, incorporating field monitoring and knowledge-based management mechanisms. Stakeholder consultations and prioritisation of the 18 new formal and informal PAs as per land-owner application, feasibility studies and boundary demarcation and clarification of the appropriate legal framework for each PA to be gazetted. Business plans developed for the prioritised existing and new PAs. Public awareness campaigns implemented to promote a conservation ethic.				knowledge management platforms and landscape management plans.
	Number of biodiversity field surveys	0	At least 6 PA and 3 landscape level biodiversity surveys carried out	Field survey reports; Independent mid-term and final evaluations; Project reports	
	Number of information management systems at regional and national level	0	1 GIS-based knowledge and information management system	System database reports; Operational guidelines, manuals and reports; Independent mid-term and final evaluations; Project reports	
	Number of landscape-based management plans	None	4 landscape based management plans	Government and GIS maps PA assessment reports PA management plans; Landscape management plans; SNTC and BGP PM reports Project reports	
Component 2 – Landscape approach operationalised and leads to expansion of PA network.					
Outcome: Legally protected PA estate expanded and results in*: (i) maintenance of wildlife populations and ecosystems functionality in the*	2.1 Gazettement of informal PAs prioritised in Component 1 in accordance with land-owner application. Investments in the establishment of these informal PAs as part of the National PA system based on the PA management plans and feasibility studies from Component 1 including matching grants for fencing, reintroduction of native species, conservation equipment and machinery, staffing and other appropriate PA establishment costs. 2.2 Selected areas of significant biodiversity established as new Protected Areas under the SNTC Act including: **Shewula, Nkalashane, Makhonjwa, Sibebe, Motjane vlei, Mambane** and **Muti-muti**; with				<u>Risks</u>: - Resistance by local communities to the expansion or establishment of PAs including the risk of requests for compensation for human wildlife conflict. - Land use pressure from local

Objective/Outcome	Indicator	Baseline	End of Project target	Source of Information	Risks and Assumptions
PAs under Community, SNTC and BGP management; (ii) compatibility of land uses in adjacent communities with overall biodiversity management goals; (iii) containment of threats from Commercial agriculture, infrastructure placement and tourism impacts	management structures developed including hiring of PA staff, fencing, reintroduction of native species, conservation equipment and machinery, and other appropriate PA establishment requirements as identified based on the PA management plans and feasibility studies from Component 1. 2.3 Selected areas of significant biodiversity established as new Protected Areas under the Game Act including: **Mahhuku, Ngwempisi, Manzimnyame** and **Mkhaya west**; with management structures developed including hiring of PA staff, fencing, reintroduction of native species, conservation equipment and machinery, and other appropriate PA establishment requirements as identified based on the PA management plans and feasibility studies from Component 1. 2.4 Selected areas of significant biodiversity established as new Protected Areas under the Flora Protection Act including: **Jilobi** and **Bulembu** and new Community Conservancies in **Mdzimba, Nyonyane, Mahamba, Ndlotane** and **Nsongweni**; with management structures developed including hiring of PA staff, fencing, reintroduction of native species, conservation equipment and machinery, and other appropriate PA establishment requirements as identified based on the PA management plans and feasibility studies from Component 1. 2.5 Implementation of land-scape management plans within the *Lubombo, Mkhaya, Malolotja* and *Ngwempisi* landscapes; with appropriate sustainable management structures and co-operation emplaced including livestock stocking rates, shared game management agreements, eco-tourism traversing agreements, forest product harvesting quotas and harvesting permits and enforcement structures as well as field based monitoring.				communities hamper landscape based management efforts. - Climate change could lead to both changed distributions of BD components, and changes in demands on biodiversity-based resources. <u>Assumptions</u>: - Stakeholders buy-in to the expansion and formalisation of new PAs has been ascertained and that a compensation culture will be dispelled. - Landscape approach understood and bought into by stakeholders
	Number of informal PAs established as National PAs	None	At least 4 informal PAs gazetted and managed as National PAs	Government gazettement notices PA legal documents Project reports Independent mid-term and final evaluations	
	Number of new PAs gazetted and operationalised	0	6 new PAs are established, gazetted and managed for biodiversity conservation	Government gazettement notices PA legal documents Project reports Independent mid-term and final evaluations	
	Number of streamlined PA and landscape management structures and standards developed	0	At least 3 streamlined landscape management structures and management plans	Management guidelines and reports Landscape management structure reports Project reports	

Objective/Outcome	Indicator	Baseline	End of Project target	Source of Information	Risks and Assumptions
			implemented based on international conservation standards	Independent mid-term and final evaluations	
Component 3 – Strengthening PA functioning through improved Conservation management and Operational support for existing and new PAs including both formal and informal PAs.					
Outcome: Technical and Operational capacity improved with respect to planning, financing, surveillance, policing, monitoring and infrastructure maintenance in the new and existing PAs; particularly for the formal and informal PAs identified at PPG and to be developed by the projects interventions in component 2.	3.1 Systematic training and capacity development for key personnel and stakeholders in the different forms of PAs, to enhance PA management and landscape based management including technical capacity building on PA management, planning, administration, marketing, customer care, conflict resolution, reporting, monitoring, policing and enforcement in PAs, ecotourism development and management, CBNRM practices and management, monitoring and enforcement and sustainable financing management. 3.2 Establishment and implementation of a mobile alien invasive species harvesting, milling and removal business through a matching grant, with implementation of other alien invasive species control projects utilising cost-effective and efficient practices across the different forms of PAs in order to improve biodiversity conservation and habitat integrity. 3.3 Strengthening of PA wildlife management through reintroduction of native species and for conservation equipment and infrastructure including fencing, bomas, equipment for game ranching, game product development and marketing, and other sustainable resource use initiatives across the different forms of PAs in order to improve the success of conservation initiatives. 3.4 Strengthening of PA eco-tourism through eco-tourism equipment and infrastructure (including camps and trails), product development, branding and marketing across the different forms of PAs (including informal PAs) in order to improve PA revenue generation and sustainability. 3.5 Employment of individuals from rural communities to co-ordinate and develop community based conservation initiatives and to monitor biodiversity in community PAs; matching grants for entrepreneurs resident in rural communities to establish conservation friendly businesses; and grants for residents of rural communities (as individuals, companies or CBOs) to establish conservation initiatives within their PAs or landscapes.				Risks: - PA financial sustainability measures meet resistance as well as slow operationalisation. - Climate change could lead to change in distribution of biodiversity. - Limited participation by women due to lack of awareness and cultural norms. Assumptions: - Clear and defined interest in economic engagement by appropriate stakeholders including women.
	Number of training programmes developed	0	At least 8 programmes on PA management, planning, administration, marketing, customer care, conflict resolution, reporting, monitoring, policing and enforcement in PAs, ecotourism	Training programmes curriculums and reports Project reports	

Objective/Outcome	Indicator	Baseline	End of Project target	Source of Information	Risks and Assumptions
			development and management, CBNRM practices and sustainable financing management and at least a third of the participants should be women		
	Number of invasive alien species control programmes	None	At least 1 sustainable control programme per PA management category (SNTC, BGP, Private, Community)	AIS control reports Project reports Independent mid-term and final evaluations	
	Number of conservation infrastructure or equipment programmes	0	At least 1 conservation infrastructure or equipment programme per PA management category (SNTC, BGP, Private, Community)	Equipment or infrastructure purchase receipts Project reports Independent mid-term and final evaluations	
	Number of ecotourism infrastructure, product development or marketing programmes	0	At least 1 ecotourism infrastructure, product development or marketing programme per PA management category (SNTC, BGP, Private, Community)	Infrastructure purchase receipts Product development reports Tourism marketing and branding reports Project reports Independent mid-term and final evaluations	
	Number of CBNRM programs developed	0	At least 4 CBNRM co-ordinators employed and capacitated and at least 2 sustainable CBNRM programs	Employment contracts CBNRM reports Project reports Independent mid-term and final evaluations	

Objective/Outcome	Indicator	Baseline	End of Project target	Source of Information	Risks and Assumptions
			developed.		

List of Outputs per Outcome as part of the SRF

Project's Development Goal: To strengthen the management effectiveness of the Protected Area System of Swaziland to ensure a viable set of representative samples of the country's full range of natural ecosystems are conserved, through a network of Protected Areas.

Project Objective: To effectively expand, manage and develop Swaziland's protected area network in order to adequately protect the biodiversity and landscapes of the country.	
Outcomes	**Outputs**
Component 1: Knowledge based management platform operationalised at the National and regional level to address current and emerging threats to PAs and biodiversity conservation.	1. 1 Biodiversity field surveys, vegetation assessments and tourism assessments carried out in PAs and surrounding landscapes to fill information gaps. This results in enhanced research and monitoring, improved information on biodiversity, ecosystems, tourism and ecosystem services, improved understanding and awareness of biodiversity and the benefits of PAs including stakeholder consultations and dissemination of information as well as increased understanding of knowledge-based mechanisms for improved management of PAs and the wider landscapes.
	1.2 GIS-based knowledge and information management system operationalised and supports systematic biodiversity planning through identification of critical biodiversity areas, ecological support areas for maintaining ecosystem processes, biodiversity conservation targets (in line with Aichi targets and national plans) and determination of ecosystem and species management objectives. PA and landscape management plans that integrate conservation efforts with sustainable economic development practices in the four identified landscapes are developed incorporating field monitoring and knowledge-based management mechanisms.
	1.3 PA and Landscape based management plans that integrate conservation efforts with sustainable economic development practices in the wider landscape are developed and implemented, incorporating field monitoring and knowledge-based management mechanisms. Stakeholder consultations and prioritisation of the 18 new formal and informal PAs as per land-owner application, feasibility studies and boundary demarcation and clarification of the appropriate legal framework for each PA to be gazetted. Business plans developed for the prioritised existing and new PAs. Public awareness campaigns implemented to promote a conservation ethic.
Component 2: Landscape approach operationalised and leads to expansion of PA network.	2.1 Gazettement of informal PAs prioritised in Component 1 in accordance with land-owner application. Investments in the establishment of these informal PAs as part of the National PA system based on the PA management plans and feasibility studies from Component 1 including matching grants for fencing, reintroduction of native species, conservation equipment and machinery, staffing and other appropriate PA establishment costs.
	2.2 Selected areas of significant biodiversity established as new Protected Areas under the SNTC Act including: **Shewula, Nkalashane, Makhonjwa, Sibebe, Motjane vlei, Mambane** and **Muti-muti**; with management structures developed including hiring of PA staff, fencing, reintroduction of native species, conservation equipment and machinery, and other appropriate PA establishment requirements as identified based on the PA management plans and feasibility studies from Component 1.

Project Objective: To effectively expand, manage and develop Swaziland's protected area network in order to adequately protect the biodiversity and landscapes of the country.	
Outcomes	**Outputs**
	2.3 Selected areas of significant biodiversity established as new Protected Areas under the Game Act including: **Mahhuku, Ngwempisi, Manzimnyame** and **Mkhaya west**; with management structures developed including hiring of PA staff, fencing, reintroduction of native species, conservation equipment and machinery, and other appropriate PA establishment requirements as identified based on the PA management plans and feasibility studies from Component 1.
	2.4 Selected areas of significant biodiversity established as new Protected Areas under the Flora Protection Act including: **Jilobi** and **Bulembu** and new Community Conservancies in **Mdzimba, Nyonyane, Mahamba, Ndlotane** and **Nsongweni**; with management structures developed including hiring of PA staff, fencing, reintroduction of native species, conservation equipment and machinery, and other appropriate PA establishment requirements as identified based on the PA management plans and feasibility studies from Component 1.
	2.5 Implementation of land-scape management plans within the *Lubombo, Mkhaya, Malolotja and Ngwempisi* landscapes; with appropriate sustainable management structures and co-operation emplaced including livestock stocking rates, shared game management agreements, eco-tourism traversing agreements, forest product harvesting quotas and harvesting permits and enforcement structures as well as field based monitoring.
Component 3: Strengthening PA functioning through improved Conservation management and Operational support for existing and new PAs including both formal and informal PAs.	3.1 Systematic training and capacity development for key personnel and stakeholders in the different forms of PAs, to enhance PA management and landscape based management including technical capacity building on PA management, planning, administration, marketing, customer care, conflict resolution, reporting, monitoring, policing and enforcement in PAs, ecotourism development and management, CBNRM practices and management, monitoring and enforcement and sustainable financing management.
	3.2 Establishment and implementation of a mobile alien invasive species harvesting, milling and removal business through a matching grant, with implementation of other alien invasive species control projects utilising cost-effective and efficient practices across the different forms of PAs in order to improve biodiversity conservation and habitat integrity.
	3.3 Strengthening of PA wildlife management through reintroduction of native species and for conservation equipment and infrastructure including fencing, bomas, equipment for game ranching, game product development and marketing, and other sustainable resource use initiatives across the different forms of PAs in order to improve the success of conservation initiatives.
	3.4 Strengthening of PA eco-tourism through eco-tourism equipment and infrastructure (including camps and trails), product development, branding and marketing across the different forms of PAs (including informal PAs) in order to improve PA revenue generation and sustainability.
	3.5 Employment of individuals from rural communities to co-ordinate and develop community based conservation initiatives and to monitor biodiversity in community PAs; matching grants for entrepreneurs resident in rural communities to establish conservation friendly businesses; and grants for residents of rural communities (as individuals, companies or CBOs) to establish conservation

Project Objective: To effectively expand, manage and develop Swaziland's protected area network in order to adequately protect the biodiversity and landscapes of the country.	
Outcomes	**Outputs**
	initiatives within their PAs or landscapes.

251. A detailed activity list and a chronogram of activities per output will be finalised upon project inception through the first Annual Work Plan.

SECTION III: Total Budget and Work Plan

Award ID:	00081957
Project ID:	00091061
Award Title:	PIMS 4932 Strengthening National Protected Areas System

Business Unit:	Swaziland
Project Title:	Strengthening the National Protected Area System of Swaziland
Implementing Partner	Swaziland National Trust Commission (SNTC) parastatal organisation, in close cooperation with the Ministry of Tourism and Environmental Affairs (MTEA),

Budget with Atlas Codes

GEF Component/Atlas Activity	ResParty (IA)	SoF	Atlas Budget Account Code	Input/ Descriptions	Amount (USD) Year 1 (2014-15)	Amount (USD) Year 2 (2015-16)	Amount (USD) Year 3 (2016-17)	Amount (USD) Year 4 (2017-18)	Amount (USD) Year 5 (2018-19)	Amount (USD) Year 6 (2018-19)	Total (USD)	Budget Notes
COMPONENT 1: Knowledge based management platform operationalised at the National and regional level to address current and emerging threats to PAs and biodiversity conservation.												
	SNTC	GEF	71200	International Consultants	5000	10000	0	0	0	0	15000	1
	SNTC	GEF	71300	Local Consultants	95300	95300	81800	81800	81800	80000	516000	2
	SNTC	GEF	72100	Contractual Services – Companies	50000	55000	0	0	0	0	105000	3

	SNTC	GEF	72200	Equipment & Furniture	5000	0	0	0	0	0	5000	4
	SNTC	GEF	75700	Training, Workshops and Conferences	3334	3333	3333	0	0	0	10000	5
	SNTC	GEF	74100	Professional Services	500	0	1500	0	0	0	2000	6
	SNTC	GEF	74200	Audio Visual & Print Prod Costs	500	500	0	0	0	0	1000	7
	SNTC	GEF	71600	Travel	1000	1000	1000	1000	1000	1000	6000	8
	Total Component 1 (GEF)				**160634**	**165133**	**87633**	**82800**	**82800**	**81000**	**660000**	
COMPONENT 2: Landscape approach operationalised and leads to expansion of PA network.												
	SNTC	GEF	71300	Local Consultants	18000	10000	5000	5000	5000	5000	48000	9
	SNTC	GEF	72100	Contractual Services – Companies	60000	128500	128500	86000	36000	16000	455000	10
	SNTC	GEF	72200	Equipment & Furniture	301666	449167	446667	192500	55000	0	1445000	11
	SNTC	GEF	75700	Training, Workshops and Conferences	3000	3000	1000	1000	1000	1000	10000	12
	SNTC	GEF	74100	Professional Services	13000	1000	1000	1000	1000	1000	18000	13
	SNTC	GEF	74200	Audio Visual & Print Prod Costs	0	200	500	500	500	300	2000	14
	SNTC	GEF	71600	Travel	5000	5000	3000	3000	3000	3000	22000	15
	Total Component 2 (GEF)				**400666**	**596867**	**585667**	**289000**	**101500**	**26300**	**2000000**	
COMPONENT 3: Strengthening PA functioning through improved Conservation management and Operational support for existing and new PAs including both formal and informal PAs.												
	SNTC	GEF	71300	Local Consultants	30000	30000	80000	70000	30000	30000	270000	16

	SNTC	GEF	72100	Contractual Services – Companies	0	179000	154000	114000	84000	64000	595000	17
	SNTC	GEF	72200	Equipment & Furniture	0	488000	528000	263000	188000	88000	1555000	18
	SNTC	GEF	75700	Training, Workshops and Conferences	3000	4000	3000	3000	3000	3000	19000	19
	SNTC	GEF	74100	Professional Services	1000	1000	1000	1000	1000	1000	6000	20
	SNTC	GEF	71600	Travel	3000	3000	3000	2000	2000	2000	15000	21
	Total Component 3 (GEF)				**37000**	**705000**	**769000**	**453000**	**308000**	**188000**	**2460000**	
PROJECT MANAGEMENT: Effective project administration, M&E and coordination has ensured timely and efficient implementation of project activities.												
	SNTC	GEF	71300	Local Consultants	35000	35000	35000	35000	35000	35000	210000	22
	SNTC	GEF	72200	Equipment & Furniture	50000	0	0	0	0	0	50000	23
	SNTC	GEF	74200	Audio Visual & Print Prod Costs	166	166	167	167	167	167	1000	24
	SNTC	GEF	71600	Travel	1500	1500	1500	1500	1500	1500	9000	25
	Total Project Management (GEF)				**86666**	**36666**	**36667**	**36667**	**36667**	**36667**	**270000**	
	PROJECT TOTAL										**5390000**	

Budget Notes

Budget Notes	
	COMPONENT 1
1	**International Consultants:** International consultants will: assist with specialist input in the conducting of biodiversity field surveys (Output 1.1.1 USD 5,000); research into ecosystem services and functioning (Output 1.1.2 USD 5,000); development of conservation targets, PA management plans and

Budget Notes	
	landscape management plans (Output 1.2.3 USD 5,000). **Subtotal USD 15,000.**
2	**Local Consultants:** Local consultants will: conduct biodiversity field surveys (Output 1.1.1 USD 15,000); operate the GIS unit and gather and organise GIS biodiversity information (Output 1.2.2 USD 80,000); Assess and develop landscape management plans for the different PAs, conduct trainings and disseminate information on these management plans (Output 1.3.1 USD 400,000); conduct stakeholder consultations, prioritisations of potential PAs and develop PA business plans (Output 1.3.2 USD 12,000); dissemination of information on Swaziland's biodiversity and other relevant GIS information and awareness campaigns to develop a conservation ethic (Output 1.3.3 USD 9,000). **Subtotal USD 516,000.**
3	**Contractual Services – Companies:** Contractual services will be sought to: conduct biodiversity field surveys (Output 1.1.1 USD 50,000); conduct research into ecosystem services and functioning (Output 1.1.2 USD 25,000); development of conservation targets, PA management plans and landscape management plans (Output 1.2.3 USD 15,000); conduct assessments and prioritisations of potential PAs and develop PA business plans (Output 1.3.2 USD 15,000). **Subtotal USD 105,000**.
4	**Equipment & Furniture:** In support of the achievement of Component 1, equipment will be purchased to support the establishment of GIS-based knowledge and information management systems (Output 1.2.1 USD 5,000). **Subtotal USD 5,000.**
5	**Training, Workshops and Conferences:** Stakeholder meetings and Training will be held for: stakeholder consultations for prioritisation of potential PAs and the development of PA business plans (Output 1.3.2 USD 5,000); dissemination of information on Swaziland's biodiversity and other relevant GIS information and awareness campaigns to develop a conservation ethic (Output 1.3.3 USD 5,000). **Subtotal USD 10,000.**
6	**Professional Services**: Legal and/or accountancy specialists will be recruited in support of the securing of agreement between the government offices and other involved authorities for an appropriate protocol for the completion of EIAs and assessments during the planning of development projects and the development and implementation of land use strategies for the hotspots. Procurement, capacity support and auditing specialists will also be recruited to ensure compliance with procurement regulations and to ensure that finances are accounted for. **Subtotal USD 2,000.**
7	**Audio Visual & Print Prod Costs:** Funds will be required for the printing of documents for various awareness raising strategies and the management plans and strategies developed, as well as for training materials, monitoring and reporting documents and other informative documents for dissemination to key stakeholders as appropriate. **Subtotal USD 1,000.**
8	**Travel:** Funds will be required for travel for consultants, contractors and project staff to reach project headquarters and landscape sites whether for research, training or project management and implementation**. Sub Total USD 6,000**.
	COMPONENT 2

Budget Notes	
9	**Local Consultants:** Local consultants will be hired to: support of the gazettement of PAs and development of agreements between the land-owner/community and national mandated PA authority and assistance with the development of the necessary cabinet papers for gazettement (Output 2.1.1 USD 3,000); facilitate the implementation of the matching grants for the infrastructure, native species re-introductions, conservation equipment, machinery and staffing of the informal PAs to be formalised as part of the National PA system (Output 2.1.2 USD 10,000); creation of conservancies and other appropriate co-operative structures for implementation of landscape-based conservation (Output 2.5.1 USD 15,000); co-ordinate, facilitate and help implement the landscape management plans (Output 2.5.2 USD 20,000). **Subtotal USD 48,000.**
10	**Contractual Services – Companies:** Contractual services will be sought for implementation of the matching grants for the infrastructure, native species re-introductions, conservation equipment and staffing of the new PAs to be established as part of the National PA system including for the informal PAs to be established (Output 2.1.2 USD 20,000); for the following under the SNTC act: Shewula (Output 2.2.1 USD 25,000); Nkhalashane (Output 2.2.2 USD 20,000); Makhonjwa (Output 2.2.3 USD 40,000); Sibebe (Output 2.2.4 USD 25,000); Motjane vlei (Output 2.2.5 USD 15,000); Mambane (Output 2.2.6 USD 50,000); Muti-muit conservancy (Output 2.2.7 USD 10,000); and the following under the Game act: Mahhuku (Output 2.3.1 USD 40,000); Ngwempisi (Output 2.3.2 USD 50,000); Manzimnyame (Output 2.3.3 USD 50,000); Mkhaya west (Output 2.3.4 USD 10,000); and the following under the Flora Protection act: Jilobi and Bulembu (Output 2.4.1 USD 10,000); Mdzimba, Nyonyane, Mahamba, Ndlotane and Nsongweni (Output 2.4.2 USD 10,000). Contractual services will be sought for implementation of the landscape management plans within each of the four target landscapes (Output 2.5.2 USD 80,000). **Subtotal USD 455,000.**
11	**Equipment & Furniture:** In support of the achievement of Component 2, equipment, machinery and infrastructure will be purchased to establish and operationalize the infrastructure, native species, conservation equipment, conservation machinery and other similar needs for the new PAs to be part of the National PA system including for the informal PAs to be established as to be identified in component 1 (Output 2.1.2 USD 500,000); for the following under the SNTC act: Shewula (Output 2.2.1 USD 55,000); Nkhalashane (Output 2.2.2 USD 50,000); Makhonjwa (Output 2.2.3 USD 110,000); Sibebe (Output 2.2.4 USD 55,000); Motjane vlei (Output 2.2.5 USD 35,000); Mambane (Output 2.2.6 USD 115,000); Muti-muit conservancy (Output 2.2.7 USD 30,000); and the following under the Game act: Mahhuku (Output 2.3.1 USD 85,000); Ngwempisi (Output 2.3.2 USD 160,000); Manzimnyame (Output 2.3.3 USD 160,000); Mkhaya west (Output 2.3.4 USD 30,000); and the following under the Flora Protection act: Jilobi and Bulembu (Output 2.4.1 USD 30,000); Mdzimba, Nyonyane, Mahamba, Ndlotane and Nsongweni (Output 2.4.2 USD 30,000). **Subtotal USD 1,445,000.**
12	**Training, Workshops and Conferences:** Stakeholder meetings and workshops will be held for: creation of conservancies and other appropriate co-operative structures for landscape-based conservation (Output 2.5.1 USD 5,000); implementation of landscape-based conservation management plans (Output 2.5.2 USD 5,000). **Subtotal USD 10,000.**

Budget Notes	
13	**Professional Services**: Legal specialists will be recruited in support of the gazettement of PAs and development of agreements between the land-owner/community and national mandated PA authority (Output 2.1.1 USD 12,000). Procurement, capacity support and auditing specialists will also be recruited to ensure compliance with procurement regulations and to ensure that finances are accounted for (USD 6,000). **Subtotal USD 18,000.**
14	**Audio Visual & Print Prod Costs:** Funds will be required for the printing of documents for various awareness raising strategies and the management plans and strategies developed, as well as for training materials, monitoring and reporting documents and other informative documents for dissemination to key stakeholders as appropriate. **Subtotal USD 2,000.**
15	**Travel:** Funds will be required for travel for consultants, contractors and project staff to reach project sites whether for research, training or project management and implementation. **Sub Total USD 22,000.**
	COMPONENT 3
16	**Local Consultants:** Local consultants will be hired for conducting: training programs on species identification and field guiding (Output 3.1.2 USD 35,000); training programs for women on CBNRM, field guiding, eco-tourism, conservation management and GIS use for conservation (Output 3.1.3 USD 10,000); training programs for conservation management including GIS, game management, veld management and ecological management (Output 3.1.3 USD 15,000); training programs for eco-tourism including customer service, product development and marketing (Output 3.1.5 USD 15,000); training programs for conservation law-enforcement including legislation, anti-poaching, scene of crime investigation, evidence presentation (Output 3.1.6 USD 15,000). Selected residents from rural communities will be hired as consultants as CBNRM co-ordinators within selected SNL communities to identify and initiate conservation programs (Output 3.5.1 USD 180,000). **Subtotal USD 270,000.**
17	**Contractual Services – Companies:** Contractual services will be sought for conducting: training programs on species identification and field guiding (Output 3.1.2 USD 60,000); training programs for women on CBNRM, field guiding, eco-tourism, conservation management and GIS use for conservation (Output 3.1.3 USD 20,000); training programs for conservation management including GIS, game management, veld management and ecological management (Output 3.1.4 USD 20,000); training programs for eco-tourism including customer service, product development and marketing (Output 3.1.5 USD 20,000); training programs for conservation law-enforcement including legislation, anti-poaching, scene of crime investigation, evidence presentation (Output 3.1.6 USD 20,000); alien invasive species control programs in SNTC PAs (Output 3.2.2 USD 60,000); alien invasive species control programs in BGP PAs (Output 3.2.3 USD 60,000); alien invasive species control programs in private PAs (Output 3.2.4 USD 60,000); alien invasive species control programs in SNL community PAs (Output 3.2.5 USD 60,000); eco-tourism development and marketing programs in SNTC PAs (Output 3.4.1 USD 30,000); eco-tourism development and marketing programs in BGP PAs (Output 3.4.2 USD 25,000); eco-tourism development and marketing programs in private PAs (Output 3.4.3 USD 25,000); eco-tourism development and marketing programs in SNL Community PAs (Output 3.4.4 USD 30,000); eco-tourism development and marketing programs in informal PAs (Output 3.4.5 USD 25,000).

Budget Notes	
	Contractual services will be sought for implementing the conservation friendly entrepreneurship projects within community areas (Output 3.5.2 USD 30,000); and for supporting and facilitating CBNRM programs within selected SNL communities (Output 3.5.1 USD 50,000). **Subtotal USD 595,000.**
18	**Equipment & Furniture:** Equipment, machinery and materials will be purchased to control alien invasive species: through establishing an alien invasive species harvesting, processing and removal business (Output 3.2.1 USD 35,000); through clearing programs in SNTC PAs (Output 3.2.1 USD 60,000); through clearing programs in BGP PAs (Output 3.2.2 USD 60,000); through clearing programs in private PAs (Output 3.2.3 USD 60,000); through clearing programs in SNL community PAs (Output 3.2.4 USD 60,000). Equipment and machinery will be purchased and infrastructure developed for the improved conservation management of game, vegetation, habitats and law-enforcement: in SNTC PAs (Output 3.3.1 USD 150,000); in BGP PAs (Output 3.3.2 USD 150,000); in private PAs (Output 3.3.3 USD 150,000); in SNL community PAs (Output 3.3.4 USD 150,000). Equipment and machinery will be purchased and infrastructure developed for improved eco-tourism revenue generation and product development within: SNTC PAs (Output 3.4.1 USD 100,000); BGP PAs (Output 3.4.2 USD 95,000); Private PAs (Output 3.4.3 USD 95,000); SNL community PAs (Output 3.4.4 USD 100,000); informal PAs (Output 3.4.5 USD 90,000). Equipment and machinery will be purchased and infrastructure developed for: conservation friendly businesses and entrepreneurship projects for residents of rural SNL communities in target areas (Output 3.5.2 USD 70,000); and improved CBNRM programs within selected SNL communities (Output 3.5.2 USD 130,000). **Subtotal USD 1,555,000.**
19	**Training, Workshops and Conferences:** Training programmes and Stakeholder meetings will be conducted for the development and management of CBNRM programs (Output 3.5.1 USD 10,000; Output 3.5.3 USD 9,000). **Subtotal USD 19,000.**
20	**Professional Services**: Procurement and auditing specialists will also be recruited to ensure compliance with procurement regulations and to ensure that finances are accounted for. **Subtotal USD 6,000.**
21	**Travel:** Funds will be required for travel for consultants, contractors and project staff to reach project sites whether for research, training or project management and implementation. **Subtotal USD 15,000.**
	PROJECT MANAGEMENT
22	**Local Consultants:** A skilled National Project Manager and Finance Officer will be recruited to manage and coordinate the project including achievement of the project goals and objectives and successful implementation of the project components and activities; **Subtotal USD 210,000**.
23	**Equipment & Furniture:** A project vehicle and other equipment will be purchased to assist with the establishment of the project office and meeting the transport needs of the PMU. The office equipment may include laptops, printer etc. **Subtotal USD 50,000.**
24	**Audio Visual & Print Prod Costs:** Funds will be required for the printing of documents for various project management, communication, monitoring and reporting documents and other informative documents for dissemination to key stakeholders as appropriate. **Subtotal USD 1,000.**

Budget Notes	
25	**Travel:** Funds will be required for travel for consultants and project staff to reach project sites for project management, monitoring and implementation. **Subtotal USD 9,000.**

Budget and Indicative Activities

Table 19: Budgeted Outputs and Indicative Activities at National/Landscape level by IA/Responsible Party

Outputs	Indicative Activities at National and Landscape Level	Budget	Responsibility
Component 1: Knowledge based management platform operationalised at the National and regional level to address current and emerging threats to PAs and biodiversity conservation. 660,000			
1.1 Biodiversity field surveys, vegetation assessments and tourism assessments carried out in PAs and surrounding landscapes to fill information gaps. This results in enhanced research and monitoring, improved information on biodiversity, ecosystems, tourism and ecosystem services, improved understanding and awareness of biodiversity and the benefits of PAs including stakeholder consultations and dissemination of information as well as increased understanding of knowledge-based mechanisms for improved management of PAs and the wider landscapes.	1.1.1 Biodiversity field surveys, vegetation assessments and tourism assessments carried out on existing National PAs, informal PAs and the 18 proposed new PAs to inform management plans, fill biodiversity and tourism information gaps and provide a basis for conservation and tourism planning and management. 1.1.2 Field research into ecosystem services and functioning within the four identified PA clusters or landscapes.	70,000 30,000	PMU PMU
1.2 GIS-based knowledge and information management system operationalised and supports systematic biodiversity planning through identification of critical biodiversity areas, ecological support areas for	1.2.1 Establishment of a national GIS-based biodiversity database unit within the PMU. 1.2.2 Support for the operation of the GIS biodiversity database unit including the hiring of a GIS operator, gathering and organising of up-to-date information on Swaziland's biodiversity, its PAs, vegetation types, ecosystems and threats to conservation. Development of guidelines and protocols for managing, sharing and updating this	5,000 80,000	PMU PMU

Outputs	Indicative Activities at National and Landscape Level	Budget	Responsibility
maintaining ecosystem processes, biodiversity conservation targets (in line with Aichi targets and national plans) and determination of ecosystem and species management objectives. PA and landscape management plans that integrate conservation efforts with sustainable economic development practices in the four identified landscapes are developed incorporating field monitoring and knowledge-based management mechanisms.	information and for facilitating public access to it. 1.2.3 Conservation manager consultations conducted and assessments of existing PA and land use plans and economic activities in the target landscapes. Development of biodiversity conservation objectives and targets for the PAs, landscapes and Swaziland in line with Aichi targets. Development of systematic management plans for PAs and the four identified landscapes based on best practices for the management of ecosystems and biodiversity incorporating field based monitoring and evaluation with knowledge-based adaptive management mechanisms.	25,000	PMU
1.3 PA and Landscape based management plans that integrate conservation efforts with sustainable economic development practices in the wider landscape are developed and implemented, incorporating field monitoring and knowledge-based management mechanisms. Stakeholder consultations and prioritisation of the 18 new formal and informal PAs as per land-owner application, feasibility studies and boundary demarcation and clarification of the appropriate legal framework for each PA to be gazetted. Business plans developed for the prioritised existing and new PAs. Public awareness campaigns implemented to	1.3.1 Assessment of existing land use plans and economic activities in the target landscapes of the project including the development of recommendations and incorporating stakeholder consultations. Development of integrated landscape-based management plans for the different PAs and incorporating field monitoring and knowledge-based management mechanisms, best practices and recommendations for biodiversity conservation and sustainable economic development. Dissemination of information on the landscape-based management plans to stakeholders for effective land use planning. Training programmes conducted for selected personnel from SNTC and BGP and Private sector and local communities on landscape-based management planning, field monitoring and knowledge-based management mechanisms.	400,000	PMU, SNTC, BGP
	1.3.2 Stakeholder consultations and prioritisation of the 18 potential new PAs and informal PAs as per land-owner application, boundary demarcation and clarification of the appropriate legal framework for each PA to be gazetted. Feasibility studies and business plans developed for the prioritised PAs to be added to the National system.	35,000	PMU
	1.3.3 Dissemination of information on Swaziland's biodiversity including maps of PAs, vegetation types, species distributions and other information of technical and more general public and national interest. Information sharing campaigns on benefits of PAs to	15,000	PMU

Outputs	Indicative Activities at National and Landscape Level	Budget	Responsibility
promote a conservation ethic.	develop support for conservation and engender a national conservation ethic.		
Component 2: Landscape approach operationalised and leads to expansion of PA network. 2,000,000			
2.1 Gazettement of informal PAs prioritised in Component 1 in accordance with land-owner application. Investments in the establishment of these informal PAs as part of the National PA system based on the PA management plans and feasibility studies from Component 1 including matching grants for fencing, reintroduction of native species, conservation equipment and machinery, staffing and other appropriate PA establishment costs.	2.1.1 Development of land-owner and SNTC/BGP agreements for the informal PAs prioritised for gazettement as well as the proposed new PAs committing to the long-term conservation of these areas. Development of cabinet papers for the gazettement of the PAs and support towards the process of gazettement.	15,000	PMU
	2.1.2 PAs established as identified in the management plans, feasibility studies and business plans during component 1. Matching grants will be made to the informal PAs (according to the size and biological importance of the PA) for the infrastructure, native species re-introductions, conservation equipment, machinery and staffing necessary to establish the PA as a National PA.	535,000	PMU
2.2 Selected areas of significant biodiversity established as new Protected Areas under the SNTC Act including: **Shewula, Nkalashane, Makhonjwa, Sibebe, Motjane vlei, Mambane** and **Muti-muti**; with management structures developed including hiring of PA staff, fencing, reintroduction of native species, conservation equipment and machinery, and other appropriate PA establishment requirements as identified based on the	2.2.1 Programmes developed for the fencing (and other infrastructure), law-enforcement, native species re-introductions, conservation equipment, machinery and staffing necessary to establish Shewula as a National PA as identified in the management plan, feasibility study and business plan during component 1.	80,000	SNTC
	2.2.2 Programmes developed for the fencing (and other infrastructure), law-enforcement, native species re-introductions, conservation equipment, machinery and staffing necessary to establish Nkalashane as a National PA as identified in the management plan, feasibility study and business plan during component 1.	70,000	SNTC
	2.2.3 Programmes developed for the fencing (and other infrastructure), law-enforcement, native species re-introductions, conservation equipment, machinery and staffing necessary to establish Makhonjwa as a National PA as identified in the management plan, feasibility study and business plan during component 1.	150,000	SNTC

Outputs	Indicative Activities at National and Landscape Level	Budget	Responsibility
PA management plans and feasibility studies from Component 1.	2.2.4 Programmes developed for the fencing (and other infrastructure), law-enforcement, native species re-introductions, conservation equipment, machinery and staffing necessary to establish Sibebe as a National PA as identified in the management plan, feasibility study and business plan during component 1.	80,000	SNTC
	2.2.5 Programmes developed for the fencing (and other infrastructure), law-enforcement, wetland rehabilitation, conservation equipment and staffing necessary to establish Motjane Vlei as a National PA as identified in the management plan, feasibility study and business plan during component 1.	50,000	SNTC
	2.2.6 Programmes developed for the fencing (and other infrastructure), law-enforcement, native species re-introductions, conservation equipment, machinery and staffing necessary to establish Mambane as a National PA as identified in the management plan, feasibility study and business plan during component 1.	165,000	SNTC
	2.2.7 Programmes developed for the fencing (and other infrastructure), law-enforcement, native species re-introductions, conservation equipment, machinery and staffing necessary to establish Muti-muti Conservancy as a National PA as identified in the management plan, feasibility study and business plan during component 1.	40,000	SNTC
2.3 Selected areas of significant biodiversity established as new Protected Areas under the Game Act including: **Mahhuku, Ngwempisi, Manzimnyame** and **Mkhaya west**; with management structures developed including hiring of PA staff, fencing, reintroduction of native species, conservation equipment and machinery, and other appropriate PA establishment requirements as identified based on the PA management plans and feasibility studies from Component 1.	2.3.1 Programmes developed for the fencing (and other infrastructure), law-enforcement, native species re-introductions, conservation equipment, machinery and staffing necessary to establish Mahhuku as a National PA as identified in the management plan, feasibility study and business plan during component 1.	125,000	BGP
	2.3.2 Programmes developed for the fencing (and other infrastructure), law-enforcement, native species re-introductions, conservation equipment, machinery and staffing necessary to establish Ngwempisi (Ntungulu) as a National PA as identified in the management plan, feasibility study and business plan during component 1.	210,000	BGP
	2.3.3 Programmes developed for the fencing (and other infrastructure), law-enforcement, native species re-introductions, conservation equipment, machinery and staffing necessary to establish Manzimnyame as a National PA as identified in the management plan, feasibility study and business plan during component 1.	210,000	BGP
	2.3.4 Programmes developed for the fencing (and other infrastructure), law-enforcement,	40,000	BGP

Outputs	Indicative Activities at National and Landscape Level	Budget	Responsibility
	native species re-introductions, conservation equipment, machinery and staffing necessary to establish Mkhaya west as a National PA as identified in the management plan, feasibility study and business plan during component 1.		
2.4 Selected areas of significant biodiversity established as new Protected Areas under the Flora Protection Act including: **Jilobi** and **Bulembu** and new Community Conservancies in **Mdzimba, Nyonyane, Mahamba, Ndlotane** and **Nsongweni**; with management structures developed including hiring of PA staff, fencing, reintroduction of native species, conservation equipment and machinery, and other appropriate PA establishment requirements as identified based on the PA management plans and feasibility studies from Component 1.	2.4.1 Programmes developed for the fencing (and other infrastructure), law-enforcement, native species re-introductions, conservation equipment, machinery and staffing necessary to establish Jilobi and Bulembu as a National PA as identified in the management plan, feasibility study and business plan during component 1. 2.4.2 Programmes developed for the fencing (and other infrastructure), law-enforcement, native species re-introductions, conservation equipment, machinery and staffing necessary to establish Mdzimba, Nyonyane, Mahamba, Ndlotane and Nsongweni as Community Conservancies as identified in the management plan, feasibility study and business plan during component 1.	40,000 40,000	PMU PMU
2.5 Implementation of land-scape management plans within the *Lubombo, Mkhaya, Malolotja and Ngwempisi* landscapes; with appropriate sustainable management structures and conservancies established and co-operation emplaced including livestock stocking rates, forest product harvesting quotas and harvesting permits and enforcement structures as well as field based monitoring.	2.5.1 Creation and formalisation of Conservancies and other appropriate co-operative structures for implementing the landscape management plans. 2.5.2 Support to Conservancies and other appropriate co-operative structures for implementation of the landscape conservation management plans including support for meetings, co-ordination, monitoring programmes and priority co-operative projects.	20,000 130,000	PMU PMU

Outputs	Indicative Activities at National and Landscape Level	Budget	Responsibility
Component 3: Strengthening PA functioning through improved Conservation management and Operational support for existing and new PAs including both formal and informal PAs. 2,460,000			
3.1 Project Technical Advisor hired and systematic training and Capacity development for key personnel and stakeholders in the different forms of PAs, to enhance PA management and landscape based management including technical capacity building on PA management, planning, administration, marketing, customer care, conflict resolution, reporting, monitoring, policing and enforcement in PAs, ecotourism development and management, CBNRM practices and management, monitoring and enforcement and sustainable financing management.	3.1.1 Specialist training for selected personnel from SNTC, BGP, Private PAs, SNL communities, NGOs and conservancies on species identification, ecological monitoring and field guiding.	95,000	PMU
	3.1.2 Dedicated training programmes for women on CBNRM, field guiding, eco-tourism, PA management and GIS use for biodiversity conservation.	35,000	PMU
	3.1.3 Specialist training provided to selected personnel, management and planning staff from SNTC, BGP, Private PAs, NGOs and SNL communities on GIS use, game management, fire management, veld management, communications and integrated conservation planning.	35,000	PMU
	3.1.4 Training of personnel from SNTC, BGP, Private PAs, NGOs and SNL communities on customer service, ecotourism management, marketing and branding, advertising, financial management and entrepreneurship.	35,000	PMU
	3.1.5 Training of personnel from SNTC, BGP, Private PAs and SNL communities as well as selected training for police personnel and magistrates on Swazi conservation laws, law enforcement, anti-poaching, scene of crime investigation and evidence preparation.	35,000	PMU
3.2 Establishment and implementation of a mobile alien invasive species harvesting, milling and removal business, with other alien invasive species control projects utilising cost-effective and efficient practices across the different forms of PAs in order to improve biodiversity conservation and habitat integrity.	3.2.1 A programme will be developed to establish and implement a sustainable mobile alien invasive species harvesting, milling and removal business, based on proposals submitted including the purchase of the necessary machinery and equipment.	35,000	PMU
	3.2.2 Programmes will be developed for on-the-ground control of alien invasive species in SNTC PAs.	120,000	SNTC
	3.2.3 Programmes will be developed for on-the-ground control of alien invasive species in BGP PAs.	120,000	BGP
	3.2.4 Programmes will be developed for on-the-ground control of alien invasive species in private PAs.	120,000	PMU
	3.2.5 Programmes will be developed for on-the-ground control of alien invasive species	120,000	PMU

Outputs	Indicative Activities at National and Landscape Level	Budget	Responsibility
	in SNL community PAs.		
3.3 Strengthening of PA wildlife management through reintroduction of native species and for conservation equipment and infrastructure including fencing, bomas, equipment for game ranching, game product development and marketing, and other sustainable resource use initiatives across the different forms of PAs in order to improve the success of conservation initiatives.	3.3.1 Programmes will be developed for native species reintroductions, on-the-ground conservation infrastructure and equipment, game product development and marketing in SNTC PAs. 3.3.2 Programmes will be developed for native species reintroductions, on-the-ground conservation infrastructure and equipment, game product development and marketing in BGP PAs. 3.3.3 Programmes will be developed for native species reintroductions, on-the-ground conservation infrastructure and equipment, game product development and marketing in Private PAs. 3.3.4 Programmes will be developed for native species reintroductions, on-the-ground conservation infrastructure and equipment, game product development and marketing in Community PAs.	150,000 150,000 150,000 150,000	SNTC BGP PMU PMU
3.4 Strengthening of PA eco-tourism through eco-tourism equipment and infrastructure (including camps and trails), product development, branding and marketing across the different forms of PAs in order to improve PA revenue generation and sustainability.	3.4.1 Programmes will be developed for improved eco-tourism infrastructure, product development, branding and marketing in SNTC PAs. 3.4.2 Programmes will be developed for improved eco-tourism infrastructure, product development, branding and marketing in BGP PAs. 3.4.3 Programmes will be developed for improved eco-tourism infrastructure, product development, branding and marketing in private PAs. 3.4.4 Programmes will be developed for improved eco-tourism infrastructure, product development, branding and marketing in SNL community PAs. 3.4.5 Programmes will be developed for improved eco-tourism infrastructure, product development, branding and marketing in informal PAs.	130,000 125,000 125,000 130,000 100,000	SNTC BGP PMU PMU PMU
3.5 Employment of individuals from rural communities to co-ordinate and develop community based conservation initiatives and to monitor biodiversity in community PAs; matching grants for	3.5.1 Employment of community representatives within selected communities to co-ordinate and develop community conservation programs. 3.5.2 Programmes will be developed for entrepreneurs resident in rural communities to establish conservation friendly businesses on SNL.	200,000 100,000	PMU PMU

Outputs	Indicative Activities at National and Landscape Level	Budget	Responsibility
entrepreneurs resident in rural communities to establish conservation friendly businesses; and grants for residents of rural communities (as individuals, companies or CBOs) to establish conservation initiatives within their PAs or landscapes.	3.5.3 Programmes will be developed for residents of rural communities (as individuals, companies or CBOs) to establish conservation initiatives within their PAs or landscapes.	200,000	PMU
Project Management: Effective project administration, M&E and coordination has ensured timely and efficient implementation of project activities. 270,000			
Effective project administration, M&E, and coordination have enabled timely and efficient implementation of project activities.	Purchase project vehicle and establish a project office Hire and employ a NPM and finance officer for efficient management and coordination of project components	60,000 210,000	PMU PMU

Co-financing

Sources of Co-financing	Name of Co-financier (source)	Type of Cofinancing	Cofinancing Amount ($)
Government Agency	Swaziland Environment Authority	Grant and In-Kind	2,200,000
Government Agency	Swaziland National Trust Commission	Grant and In-Kind	11,400,000
Development Agency	UNDP Swaziland	Cash Grant	200,000
Private Sector	Big Game Parks	Grant and in-kind	9,800,000
Total Co-financing			**23,600,000**

SECTION IV: ADDITIONAL INFORMATION

PART I: Other agreements

Co-financing Letters

See separate file.

PART II: Terms of References for key project staff

NATIONAL PROJECT MANAGER

Background

National Project Manager (NPM), will be a locally recruited national selected based on an open competitive process. He/She will be responsible for the overall management of the Project, including the mobilisation of all project inputs, supervision over project staff, consultants and sub-contractors. He/She will be hired full-time on a 3 year contract with the option of renewal by agreement with the PSC for an anticipated rate of USD 3,000 to 4,000 per month depending on qualifications and experience. The NPM will report to the Chairman of Project Board (SNTC CEO) in close consultation with the assigned UNDP Programme Manager for all of the Project's substantive and administrative issues. From the strategic point of view of the Project, the NPM will report on a periodic basis to the Project Board (PB). Generally, the NPM will support the Chairman of Project Board who will be responsible for meeting government obligations under the Project, under the national execution modality (NEX). He/She will perform a liaison role with the government, UNDP and other UN agencies, NGOs and project partners, and maintain close collaboration with other donor agencies providing co-financing. He/She will work closely with the SNTC and BGP Project Managers and Community Coordinators.

Duties and Responsibilities

- Supervise and coordinate the production of project outputs, as per the project document in a timely and quality fashion;
- Mobilise all project inputs in accordance with UNDP procedures for nationally executed projects;
- Supervise and coordinate the work of all project staff, consultants and sub-contractors ensuring timing and quality of outputs;
- Coordinate the recruitment and selection of project personnel, consultants and sub-contracts;
- Prepare and revise project work and financial plans, as required by PB and UNDP;
- Liaise with UNDP, PB, relevant government agencies, and all project partners, including donor organisations and NGOs for effective coordination of all project activities;
- Facilitate administrative backstopping to subcontractors and training activities supported by the Project;
- Oversee and ensure timely submission of the Inception Report, Combined Project Implementation Review/Annual Project Report (PIR/APR), Technical reports, quarterly financial reports, and other reports as may be required by UNDP, GEF and other oversight agencies;
- Disseminate project reports and respond to queries from concerned stakeholders;
- Report progress of project to the PB, and ensure the fulfilment of PB directives.
- Document the exchange and sharing of experiences and lessons learned with relevant community based integrated conservation and development projects nationally and internationally;
- Ensures the timely and effective implementation of all components of the Project;
- Coordinate and assist scientific institutions with the initiation and implementation of all field studies and monitoring components of the Project

- Carry regular, announced and unannounced inspections of all sites and the activities of the project site management units.

Qualifications

- Advanced university degree (preferably MSc or PhD) in a subject related to natural resource management or environmental sciences;
- At least 10 years of experience in natural resource management (preferably in the context of PA planning and management);
- At least 5 years of demonstrable project/programme management experience;
- Working experience with ministries, national or provincial institutions concerned with natural resource management and environmental protection is a plus, but not a requirement;
- Ability to effectively coordinate a large, multi-stakeholder project;
- Ability to administer budgets, train and work effectively with counterpart staff at all levels and with all groups involved in the project;
- Strong drafting, presentation and reporting skills;
- Strong computer skills, in particular mastery of all applications of the MS Office package and internet search;
- Strong knowledge about the political and socio-economic context related to the CFS Master Plan, protected area system, biodiversity conservation at national and state levels;
- Excellent command of English.

PROJECT TECHNICAL ADVISOR

Background

The Project Technical Advisor (TA) will be locally recruited national selected based on an open competitive process. He/She will be employed by the Project on a part-time basis, for an average of approximately 3 days per month, at an anticipated rate of USD 250 to 350 per day depending on qualifications and experience. He/She will work closely with the NPM, SNTC PM and BGP PM and report to the PSC Chairman (NPM) and will be responsible for providing oversight and technical advice in all project activities as well as providing quality control ensuring that Project objectives are met.

Duties and Responsibilities

- Provide technical and strategic assistance to the BGP CEO, SNTC CEO, NPM, SNTC PM, BGP PM and other counterparts in areas of project management and planning, in particular the development of annual work plans, monitoring progress, providing quality assurance for outputs, and ensuring that annual, mid-term and end-of-project targets will be met;
- Bring technical experiences to project planning and implementation to ensure that full use is made of global and national lessons learned, and that best practices are used to achieve the project goal of realising sustainable PA management within the landscape context, securing biodiversity and ecosystem services;
- Provide technical advice to the Project Manager in preparing Terms of Reference for consultants and sub-contractors, and provide assistance in the selection process;
- Provide technical advice to the SNTC and BGP PMs and community co-ordinators for target landscape level activities;

- Provide technical support to the Project Manager in coordinating the work of all consultants and sub-contractors, ensuring timely and quality delivery of expected outputs, effective synergy among the various sub-contracted activities, and integration of project outputs into Government work;
- Provide technical guidance for management of site activities, monitoring, and impact assessment, as well as technical support in the areas of: *inter alia*, biodiversity conservation, strategic planning, landscape planning and associated institutional capacity development, PA integration and mainstreaming, as well as conservation finance.
- Assist and advise the SNTC and BGP and relevant private and community PAs in key strategic and policy issues related to biodiversity, protected areas, institutional strengthening processes, and appropriate monitoring and evaluation systems and knowledge management systems;
- Guide the PSC Chairman and Project Manager with technical input in preparation of the inception report, Combined Project Implementation Review / Annual Project Report, and technical reports for submission to UNDP, the GEF, other donors and the Government, as required;
- Advise the PSC Chairman and Project Manager in mobilizing staff and consultants in the conduct of a mid-term project review, and in undertaking revisions in the implementation programme and strategy, based on evaluation results;
- Provide capacity building support to the BGP, SNTC and relevant private and community PA staff and BGP PA managers;
- Advise the PSC Chairman and Project Manager in liaison work with project partners, donor organizations, NGOs and other groups to ensure effective coordination of project activities, and coordination with local, national and international complementary projects and programmes;
- Advise the Project Manager in documenting lessons learned through implementation of the project and assist in making recommendations to the PSC for more effective implementation and coordination of project activities;
- Produce policy briefing papers and technical reports to support decision-making processes, advocacy and knowledge management;
- Perform other tasks as may be requested by the PSC Chairman.

Qualifications
- To be determined

SNTC PROJECT MANAGER

Background
The SNTC Project Manager (SNTC PM) will be locally recruited national selected based on an open competitive process. He/She will be employed by the Project on a full-time basis, on a 3 year contract with the option of renewal by agreement with the PSC for an anticipated rate of USD 2,000 to 3,000 per month depending on qualifications and experience. He/She will work closely with and report to the National Project Manager (NPM) and SNTC Director of Parks and will be guided by the Project

TA. The SNTC PM will be responsible for providing oversight and technical support and advice in all project activities that relate to the SNTC as well as providing quality control.

The SNTC PM will also work closely with the Community Coordinators for the Lubombo and Malolotja landscapes in terms of provision of technical advice and support, ensuring that objectives are met.

Duties and Responsibilities

- Provide technical and strategic assistance to the SNTC CEO, Project Manager and other counterparts in areas of project management and planning, in particular the development of annual work plans, monitoring progress, providing quality assurance for outputs, and ensuring that annual, mid-term and end-of-project targets will be met;
- Bring technical experiences to project planning and implementation to ensure that full use is made of global and national lessons learned, and that best practices are used to achieve the project goal of realising sustainable PA management within the landscape context, securing biodiversity and ecosystem services;
- Provide technical support to the Project Manager in preparing Terms of Reference for consultants and sub-contractors, and provide assistance in the selection process;
- Provide technical support to the Community co-ordinators for target landscape level activities;
- Provide technical support to the Project Manager in coordinating the work of all consultants and sub-contractors, ensuring timely and quality delivery of expected outputs, effective synergy among the various sub-contracted activities, and integration of project outputs into Government work;
- Provide technical support for management of site activities, monitoring, and impact assessment, as well as technical support in the areas of: *inter alia*, biodiversity conservation, strategic planning, landscape planning and associated institutional capacity development, PA integration and mainstreaming, as well as conservation finance.
- Assist and advise the SNTC and relevant government departments in key strategic and policy issues related to biodiversity, protected areas, institutional strengthening processes, and appropriate monitoring and evaluation systems and knowledge management systems;
- Assist the PB Chairman and Project Manager with technical input in preparation of the inception report, Combined Project Implementation Review / Annual Project Report, and technical reports for submission to UNDP, the GEF, other donors and the Government, as required;
- Assist the PB Chairman and Project Manager in mobilizing staff and consultants in the conduct of a mid-term project review, and in undertaking revisions in the implementation programme and strategy, based on evaluation results;
- Provide capacity building support to the SNTC and relevant government department staff and SNTC PA managers;
- Assist the PSC Chairman and Project Manager in liaison work with project partners, donor organizations, NGOs and other groups to ensure effective coordination of project activities, and coordination with local, national and international complementary projects and programmes;

- Support the Project Manager in documenting lessons learned through implementation of the project and assist in making recommendations to the PB for more effective implementation and coordination of project activities;
- Produce policy briefing papers and technical reports to support decision-making processes, advocacy and knowledge management;
- Perform other tasks as may be requested by the PSC Chairman and Project Manager.

Qualifications

- University education with expertise in the area of PA management and conservation planning and management;
- At least 10 years of professional experience in conservation planning and management and eco-tourism and proven ability to work with multiple stakeholders;
- Demonstrable experience in the implementation of multilateral donor funded or government funded international development projects, with strong skills in monitoring and evaluation;
- Demonstrable experience in project organization and ability to serve as effective negotiator with excellent oral presentation skills;
- Good knowledge of international best practice in PA landscape planning and management, and conservation in general and experience with TFCA implementation is desirable;
- Previous experience with GEF projects is an advantage;
- Skill and experience with GIS use is an advantage;
- Ability to effectively network, project manage and coordinate a multidisciplinary team of experts and consultants;
- Be an effective negotiator;
- Excellent written communication skills including the ability to prepare clear technical and management reports;
- Excellent command of English.

BGP PROJECT MANAGER

Background

The BGP Project Manager (BGP PM) will be locally recruited national selected based on an open competitive process. He/She will be employed by the Project on a full-time basis, on a 3 year contract with the option of renewal by agreement with the PSC for an anticipated rate of USD 2,000 to 3,000 per month depending on qualifications and experience. He/She will work closely with and report to the National Project Manager (NPM) and BGP Conservation Manager and will be guided by the Project TA. The BGP PM will be responsible for providing oversight and technical support and advice in all project activities that relate to BGP as well as providing quality control.

The BGP PM will also work closely with the Community Coordinators for the Mkhaya and Ngwempisi landscapes in terms of provision of technical advice and support, ensuring that objectives are met.

Duties and Responsibilities

- Provide technical and strategic assistance to the BGP CEO, Project Manager and other counterparts in areas of project management and planning, in particular the development of annual work plans, monitoring progress, providing quality assurance for outputs, and ensuring that annual, mid-term and end-of-project targets will be met;
- Bring technical experiences to project planning and implementation to ensure that full use is made of global and national lessons learned, and that best practices are used to achieve the project goal of realising sustainable PA management within the landscape context, securing biodiversity and ecosystem services;
- Provide technical support to the Project Manager in preparing Terms of Reference for consultants and sub-contractors, and provide assistance in the selection process;
- Provide technical support to the Community co-ordinators for target landscape level activities;
- Provide technical support to the Project Manager in coordinating the work of all consultants and sub-contractors, ensuring timely and quality delivery of expected outputs, effective synergy among the various sub-contracted activities, and integration of project outputs into Government work;
- Provide technical support for management of site activities, monitoring, and impact assessment, as well as technical support in the areas of: *inter alia*, biodiversity conservation, strategic planning, landscape planning and associated institutional capacity development, PA integration and mainstreaming, as well as conservation finance.
- Assist and advise the BGP and relevant private PAs in key strategic and policy issues related to biodiversity, protected areas, institutional strengthening processes, and appropriate monitoring and evaluation systems and knowledge management systems;
- Assist the PB Chairman and Project Manager with technical input in preparation of the inception report, Combined Project Implementation Review / Annual Project Report, and technical reports for submission to UNDP, the GEF, other donors and the Government, as required;
- Assist the PB Chairman and Project Manager in mobilizing staff and consultants in the conduct of a mid-term project review, and in undertaking revisions in the implementation programme and strategy, based on evaluation results;
- Provide capacity building support to the BGP and relevant private PA staff and BGP PA managers;
- Assist the PB Chairman and Project Manager in liaison work with project partners, donor organizations, NGOs and other groups to ensure effective coordination of project activities, and coordination with local, national and international complementary projects and programmes;
- Support the Project Manager in documenting lessons learned through implementation of the project and assist in making recommendations to the PB for more effective implementation and coordination of project activities;
- Produce policy briefing papers and technical reports to support decision-making processes, advocacy and knowledge management;
- Perform other tasks as may be requested by the PB Chairman and Project Manager.

Qualifications

- University education with expertise in the area of environmental education, finance as well as PA management and conservation planning and management;
- At least 10 years of professional experience in conservation planning and management and proven ability to work with multiple stakeholders;
- Demonstrable experience in the implementation of multilateral donor funded or government funded international development projects, with strong skills in monitoring and evaluation;
- Demonstrable experience in project organization and ability to serve as effective negotiator with excellent oral presentation skills;
- Good knowledge of international best practice in PA landscape planning and management, and conservation in general, is desirable;
- Previous experience with GEF projects is an advantage;
- Skill and experience with GIS use is an advantage;
- Ability to effectively coordinate a large, multidisciplinary team of experts and consultants;
- Be an effective negotiator;
- Excellent written communication skills including the ability to prepare clear technical and management reports;
- Excellent command of English.

PART III: Stakeholder Involvement Plan

Stakeholder Overview

252. The key stakeholders involved in the project include nationally mandated conservation organisations, civil society organisations, private companies, landowners and rural communities on SNL.

Table 20: Key Stakeholders and their roles in the project

STAKEHOLDER	RELEVANT ROLES
Ministry of Tourism and Environmental Affairs	Leadership and facilitating coordination for the implementation of the project. Providing co-finance. Support to the development and growth of the PAs under the mandate of the SNTC Act and Flora Protection Act.
Swaziland National Trust Commission	Coordination for implementation of the project. Executing and implementing the project. Providing co-finance. Day to day operational execution of the project. Technical consulting and capacity building. Marketing and infrastructure development. Support to development and growth of the PAs under the mandate of the SNTC Act.
Big Game Parks	Coordination for implementation of the project. Executing and implementing the project. Providing co-finance. Day to day operational execution of the project. Technical consulting and capacity building. Marketing and infrastructure development. Support to development and growth of the PAs under the mandate of the Game Act.
Swaziland Environment Authority	Executing and implementing the project activities. Technical consulting and capacity building.
Swaziland Tourism Authority	Technical consulting and capacity building. Support to eco-tourism development and marketing of the different forms of PAs. Providing co-finance.
Ministry of Agriculture	Providing co-finance. Executing and implementing the project. Technical consulting and capacity building.
University of Swaziland	Biodiversity surveys and ecological research. Technical consulting and capacity building. Executing and implementing the project. Formal training and education.
Lubombo Conservancy	Support to development and growth of the different forms of PAs. Technical consulting and capacity building. Executing and implementing the project. Providing co-finance.
Swaziland Game Ranchers Association	Support to development and growth of the different forms of PAs. Technical consulting and capacity building. Executing and implementing the project.

STAKEHOLDER	RELEVANT ROLES
	Co-ordination and co-operation.
All Out Africa Foundation	Biodiversity surveys, ecological research and monitoring. Technical consulting and capacity building. Executing and implementing the project. Field training and education.
Rural Communities	Support to development and growth of the different forms of PAs. Executing and implementing the project. Technical consulting and capacity building.
Private PAs	Support to development and growth of the different forms of PAs. Executing and implementing the project. Technical consulting and capacity building. Providing co-finance.

Stakeholder Involvement Plan

253. The project will provide the following opportunities for long-term participation of all stakeholders:

254. Decision-making – through the landscape mechanisms and stakeholder groups. The establishment of these structures will follow a participatory and transparent process involving the confirmation of all stakeholders; conducting one-to-one consultations with all stakeholders; development of Terms of Reference and ground-rules; inception meeting to agree on the constitution, ToR and ground-rules for the mechanism and its active land use planning, ecological monitoring and community development units.

255. Capacity building – at systemic, institutional and individual level – is one of the key strategic interventions of the project and will target all stakeholders that have the potential to be involved in brokering, implementing and/or monitoring management agreements related to activities in and around the reserves.

256. Communication - will include the participatory development of an integrated communication strategy.

257. The communication strategy will be based on the following key principles:

- providing information to all stakeholders;
- promoting dialogue between all stakeholders; and
- promoting access to information.

258. The project will be launched by a well-publicized multi-stakeholder inception workshop. This workshop will provide an opportunity to provide all stakeholders with updated information on the project as well as a basis for further consultation during the project's implementation, and will refine and confirm the work plan.

259. Based on the extensive list of stakeholders (mostly consulted) a more specific stakeholder involvement strategy and plan can be developed at that inception stage.

GOAL AND OBJECTIVES FOR STAKEHOLDER INVOLVEMENT

260. The social sustainability of activities and outputs is addressed through the execution of a stakeholder capacity analysis and the elaboration of a detailed collaborative management involvement strategy and plan which identifies stakeholders' interests, desired levels of involvement, capacities for participation (at different levels) and potential conflicts and,

responsive mitigation measures.

PRINCIPLES OF STAKEHOLDER PARTICIPATION

261. Based on the stakeholder analysis carried out during the PPG phase it is clear that different levels of capacity development activities will be required at the landscape level and the level of the individual PAs. The four landscapes with which the project will work are quite different in nature, composition of members and technical needs on the ground. It is therefore recommended at the generic proposal for capacity development activities will be refined and regularly updated at the level of each landscape.

262. Capacity needs fall overall into four main categories:

- Awareness raising and knowledge development about a landscape approach:
- Knowledge and skills for coordinating PAs within landscapes
- Technical knowledge and skills
- Financial support and investments

263. The stakeholder participation plan that is further developed at inception will also be based on the principles outlined below.

Table 21: Stakeholder Participation Principles

Principle	Stakeholder participation will:
Value Adding	be an essential means of adding value to the project
Inclusivity	include all relevant stakeholders
Accessibility and Access	be accessible and promote access to the process
Transparency	be based on transparency and fair access to information; main provisions of the project's plans and results will be published in local mass-media
Fairness	ensure that all stakeholders are treated in a fair and unbiased way
Accountability	be based on a commitment to accountability by all stakeholders
Constructive	seek to manage conflict and promote the public interest
Redressing	seek to redress inequity and injustice
Capacitating	seek to develop the capacity of all stakeholders
Needs Based	be based on the needs of all stakeholders
Flexible	be flexibly designed and implemented
Rational and Coordinated	be rationally planned and coordinated, and not be ad hoc
Excellence	be subject to on-going reflection and improvement

Long-term Stakeholder Participation

Project design reflects strong and effective two-way dialogue between relevant stakeholders at all stages. The full project will continue in this vein, and includes significant investment in a Knowledge Management system, for coordinating the collection, storage, analysis and dissemination of a wide range of information related to biodiversity conservation, and particularly focused on the management of protected areas. In order to ensure the absolute best use is made of this resource, the project will endeavour to ensure that appropriate and sustainable lines of communication are established between SNTC, BGP, private PAs, rural communities and other stakeholders.

Project Annexes

Annex 1: Environment and Social Screening Programme

ANNEX A.1: ENVIRONMENTAL AND SOCIAL SCREENING PROCEDURE CHECKLIST

QUESTION 1:

Has a combined environmental and social assessment/review that covers the proposed project already been completed by implementing partners or donor(s)?

Select answer below and follow instructions:

X **NO** → Continue to Question 2 (do not fill out Table 1.1)

☐ **YES** → No further environmental and social review is required if the existing documentation meets UNDP's quality assurance standards, and environmental and social management recommendations are integrated into the project. Therefore, you should undertake the following steps to complete the screening process:

1. Use Table 1.1 below to assess existing documentation. (It is recommended that this assessment be undertaken jointly by the Project Developer and other relevant Focal Points in the office or Bureau).
2. Ensure that the Project Document incorporates the recommendations made in the implementing partner's environmental and social review.
3. Summarise the relevant information contained in the implementing partner's environmental and social review in Annex A.2 of this Screening Template, selecting Category 1.
4. Submit Annex A to the PAC, along with other relevant documentation.

Note: Further guidance on the use of national systems for environmental and social assessment can be found in Annex B.

TABLE 1.1: CHECKLIST FOR APPRAISING QUALITY ASSURANCE OF EXISTING ENVIRONMENTAL AND SOCIAL ASSESSMENT	Yes/No
1. Does the assessment/review meet its terms of reference, both procedurally and substantively?	
2. Does the assessment/review provide a satisfactory assessment of the proposed project?	
3. Does the assessment/review contain the information required for decision-	

making?
4. Does the assessment/review describe specific environmental and social management measures (e.g. mitigation, monitoring, advocacy, and capacity development measures)?
5. Does the assessment/review identify capacity needs of the institutions responsible for implementing environmental and social management issues?
6. Was the assessment/review developed through a consultative process with strong stakeholder engagement, including the view of men and women?
7. Does the assessment/review assess the adequacy of the cost of and financing arrangements for environmental and social management issues?
Table 1.1 (continued) For any "no" answers, describe below how the issue has been or will be resolved (e.g. amendments made or supplemental review conducted).

QUESTION 2:

Do <u>all</u> outputs and activities described in the Project Document fall within the following categories?

- ☐ Procurement (in which case UNDP's <u>Procurement Ethics</u> and <u>Environmental Procurement Guide</u> need to be complied with)
- ☐ Report preparation
- ☐ Training
- ☐ Event/workshop/meeting/conference (refer to <u>Green Meeting Guide</u>)
- ☐ Communication and dissemination of results

Select answer below and follow instructions:

- X **NO** → Continue to Question 3
- ☐ **YES** → No further environmental and social review required. Complete Annex A.2, selecting Category1, and submit the completed template (Annex A) to the PAC.

QUESTION 3:

Does the proposed project include activities and outputs that support *upstream* planning processes that potentially pose environmental and social impacts or are vulnerable to

environmental and social change (refer to Table 3.1 for examples)?(Note that *upstream* planning processes can occur at global, regional, national, local and sectoral levels)

Select the appropriate answer and follow instructions:

☐ **NO** → Continue to Question 4.

X **YES** →Conduct the following steps to complete the screening process:

1. Adjust the project design as needed to incorporate UNDP support to the country(ies), to ensure that environmental and social issues are appropriately considered during the upstream planning process. Refer to Section 7 of this Guidance for elaboration of environmental and social mainstreaming services, tools, guidance and approaches that may be used.

2. Summarise environmental and social mainstreaming support in Annex A.2, Section C of the Screening Template and select "Category 2".

3. If the proposed project ONLY includes upstream planning processes then screening is complete, and you should submit the completed Environmental and Social Screening Template (Annex A) to the PAC. If downstream implementation activities are also included in the project then continue to Question 4.

TABLE 3. 1	**EXAMPLES OF UPSTREAM PLANNING PROCESSES WITH POTENTIAL DOWNSTREAM ENVIRONMENTAL AND SOCIAL IMPACTS**	**Check appropriate box(es) below**
1.	**Support for the elaboration or revision of global- level strategies, policies, plans, and programmes.** ***For example, capacity development and support related to international negotiations and agreements. Other examples might include a global water governance project or a global MDG project.***	
2.	**Support for the elaboration or revision of regional-level strategies, policies and plans, and programmes.** ***For example, capacity development and support related to transboundary programmes and planning (river basin management, migration, international waters, energy development and access, climate change adaptation etc.).***	**X**
3.	**Support for the elaboration or revision of national-level strategies, policies, plans and programmes.** ***For example, capacity development and support related to national development policies, plans, strategies and budgets, MDG-based plans and strategies (e.g. PRS/PRSPs, NAMAs), sector plans.***	**X**
4.	**Support for the elaboration or revision of sub-national/local-level strategies, polices, plans and programmes.**	**X**

For example, capacity development and support for district and local level development plans and regulatory frameworks, urban plans, land use development plans, sector plans, provincial development plans, provision of services, investment funds, technical guidelines andmethods, stakeholder engagement.

QUESTION 4:

Does the proposed project include the implementation of *downstream* activities that potentially pose environmental and social impacts or are vulnerable to environmental and social change?

To answer this question, you should first complete Table 4.1 by selecting appropriate answers. If you answer "No" or "Not Applicable" to all questions in Table 4.1 then the answer to Question 4 is "NO." If you answer "Yes" to any questions in Table 4.1 (even one "Yes" can indicated a significant issue that needs to be addressed through further review and management) then the answer to Question 4 is "YES":

☐ **NO** → No further environmental and social review and management required for downstream activities. Complete Annex A.2 by selecting "Category 1", and submit the Environmental and Social Screening Template to the PAC.

X **YES**→ Conduct the following steps to complete the screening process:

1. Consult Section 8of this Guidance, to determine the extent of further environmental and social review and management that might be required for the project.

2. Revise the Project Document to incorporate environmental and social management measures. Where further environmental and social review and management activity cannot be undertaken prior to the PAC, a plan for undertaking such review and management activity within an acceptable period of time, post-PAC approval (e.g. as the first phase of the project) should be outlined in Annex A.2.

3. Select "Category 3" in Annex A.2, and submit the completed Environmental and Social Screening Template (Annex A) and relevant documentation to the PAC.

TABLE 4.1: ADDITIONAL SCREENING QUESTIONS TO DETERMINE THE NEED AND POSSIBLE EXTENT OF FURTHER ENVIRONMENTAL AND SOCIAL REVIEW AND MANAGEMENT		
1.	**Biodiversity and Natural Resources**	**Answer (Yes/No/Not Applicable)**
1.1	Would the proposed project result in the conversion or degradation of **modified habitat**, **natural habitat** or **critical habitat**?	**No**
1.2	Are any development activities proposed within a legally protected area	**No**

	(e.g. natural reserve, national park) for the protection or conservation of biodiversity?	
1.3	Would the proposed project pose a risk of introducing invasive alien species?	**No**
1.4	Does the project involve natural forest harvesting or plantation development without an independent forest certification system for sustainable forest management (*e.g.* **PEFC**, *the* **Forest Stewardship Council** *certification systems, or processes established or accepted by the relevant National Environmental Authority*)?	**N/A**
1.5	Does the project involve the production and harvesting of fish populations or other aquatic species without an accepted system of independent certification to ensure sustainability (*e.g. the* **Marine Stewardship Council certification** *system or certifications, standards, or processes established or accepted by the relevant National Environmental Authority*)?	**N/A**
1.6	Does the project involve significant extraction, diversion or containment of surface or ground water? *For example, construction of dams, reservoirs, river basin developments, groundwater extraction.*	**No**
1.7	Does the project pose a risk of degrading soils?	**No**
2.	**Pollution**	**Answer (Yes/No/Not Applicable)**
2.1	Would the proposed project result in the release of pollutants to the environment due to routine or non-routine circumstances with the potential for adverse local, regional, and **trans-boundary impacts**?	**No**
2.2	Would the proposed project result in the generation of waste that cannot be recovered, reused, or disposed of in an **environmentally and socially sound manner**?	**No**
2.3	Will the propose project involve the manufacture, trade, release, and/or use of chemicals and **hazardous materials** subject to international action bans or phase-outs? *For example, DDT, PCBs and other chemicals listed in international conventions such as the* **Stockholm Convention on Persistent Organic Pollutants**, *or the Montreal Protocol.*	**No**
2.4	Is there a potential for the release, in the environment, of **hazardous materials** resulting from their production, transportation, handling, storage and use for project activities?	**No**
2.5	Will the proposed project involve the application of pesticides that have a known negative effect on the environment or human health?	**No**

3. Climate Change	Answer (Yes/No/Not Applicable)
3.1 Will the proposed project result in significant[18]greenhouse gas emissions? *Annex E provides additional guidance for answering this question.*	**No**
3.2 Is the proposed project likely to directly or indirectly increase environmental and social **vulnerability to climate change** now or in the future (also known as maladaptive practices)? You can refer to the additional guidance in Annex C to help you answer this question. *For example, a project that would involve indirectly removing mangroves from coastal zones or encouraging land use plans that would suggest building houses on floodplains could increase the surrounding population's vulnerability to climate change, specifically flooding.*	**No**
4. Social Equity and Equality	**Answer (Yes/No/Not Applicable)**
4.1 Would the proposed project have environmental and social impacts that could affect indigenous people or other vulnerable groups?	**No**
4.2 Is the project likely to significantly impact gender equality and women's empowerment[19]?	**Yes**
4.3 Is the proposed project likely to directly or indirectly increase social inequalities now or in the future?	**No**
4.4 Will the proposed project have variable impacts on women and men, different ethnic groups, social classes?	**No**
4.5 Have there been challenges in engaging women and other certain key groups of stakeholders in the project design process?	**No**
4.6 Will the project have specific human rights implications for vulnerable groups?	**No**
5. Demographics	**Answer (Yes/No/Not Applicable)**
5.1 Is the project likely to result in a substantial influx of people into the affected community (ies)?	**No**
5.2 Would the proposed project result in substantial voluntary or involuntary resettlement of populations? *For example, projects with environmental and social benefits (e.g.*	**No**

[18] Significant corresponds to CO_2 emissions greater than 100,000 tons per year (from both direct and indirect sources). Annex E provides additional guidance on calculating potential amounts of CO_2 emissions.

[19] Women are often more vulnerable than men to environmental degradation and resource scarcity. They typically have weaker and insecure rights to the resources they manage (especially land), and spend longer hours on collection of water, firewood, etc. (OECD, 2006). Women are also more often excluded from other social, economic, and political development processes.

	protected areas, climate change adaptation) that impact human settlements, and certain disadvantaged groups within these settlements in particular.	
5.3	Would the proposed project lead to significant population density increase which could affect the environmental and social sustainability of the project? *For example, a project aiming at financing tourism infrastructure in a specific area (e.g. coastal zone, mountain) could lead to significant population density increase which could have serious environmental and social impacts (e.g. destruction of the area's ecology, noise pollution, waste management problems, greater work burden on women).*	**No**
6.	**Culture**	**Answer (Yes/No/Not Applicable)**
6.1	Is the project likely to significantly affect the cultural traditions of affected communities, including gender-based roles?	**No**
6.2	Will the proposed project result in physical interventions (during construction or implementation) that would affect areas that have known physical or cultural significance to indigenous groups and other communities with settled recognised cultural claims?	**No**
6.3	Would the proposed project produce a physical "splintering" of a community? *For example, through the construction of a road, power line, or dam that divides a community.*	**No**
7.	**Health and Safety**	**Answer (Yes/No/Not Applicable)**
7.1	Would the proposed project be susceptible to or lead to increased vulnerability to earthquakes, subsidence, landslides, erosion, flooding or extreme climatic conditions? *For example, development projects located within a floodplain or landslide prone area.*	**No**
7.2	Will the project result in increased health risks as a result of a change in living and working conditions? In particular, will it have the potential to lead to an increase in HIV/AIDS infection?	**No**
7.3	Will the proposed project require additional health services including testing?	**No**
8.	**Socio-Economics**	**Answer (Yes/No/Not Applicable)**
8.1	Is the proposed project likely to have impacts that could affect women's and men's ability to use, develop and protect natural resources and other natural capital assets?	**Yes**

	For example, activities that could lead to natural resources degradation or depletion in communities who depend on these resources for their development, livelihoods, and well-being?	
8.2	Is the proposed project likely to significantly affect land tenure arrangements and/or traditional cultural ownership patterns?	**Yes**
8.3	Is the proposed project likely to negatively affect the income levels or employment opportunities of vulnerable groups?	**No**
9.	**Cumulative and/or Secondary Impacts**	**Answer (Yes/No/Not Applicable)**
9.1	Is the proposed project location subject to currently approved land use plans (e.g. roads, settlements) which could affect the environmental and social sustainability of the project? *For example, future plans for urban growth, industrial development, transportation infrastructure, etc.*	**Yes**
9.2	Would the proposed project result in secondary or consequential development which could lead to environmental and social effects, or would it have potential to generate **cumulative impacts** with other known existing or planned activities in the area? *For example, a new road through forested land will generate direct environmental and social impacts through the cutting of forest and earthworks associated with construction and potential relocation of inhabitants. These are direct impacts. In addition, however, the new road would likely also bring new commercial and domestic development (houses, shops, businesses). In turn, these will generate indirect impacts. (Sometimes these are termed "secondary" or "consequential" impacts). Or if there are similar developments planned in the same forested area then cumulative impacts need to be considered.*	**No**

ANNEX A.2: ENVIRONMENTAL AND SOCIAL SCREENING SUMMARY

(To be filled in after Annex A.1 has been completed)

Name of Proposed Project: ***Enhancing Wildlife Conservation in the Productive Southern Kenya Rangelands through a landscape approach***

A. Environmental and Social Screening Outcome

Select from the following:

☐ Category 1. No further action is needed.

☐ Category 2. Further review and management is needed. There are possible environmental and social benefits, impacts, and/or risks associated with the project (or specific project component), but these are predominantly indirect or very long-term and so extremely difficult or impossible to directly identify and assess.

X Category 3. Further review and management is needed, and it is possible to identify these with a reasonable degree of certainty. If Category 3, select one or more of the following sub-categories:

X Category 3a: Impacts and risks are limited in scale and can be identified with a reasonable degree of certainty and can often be handled through application of standard best practice, but require some minimal or targeted further review and assessment to identify and evaluate whether there is a need for a full environmental and social assessment (in which case the project would move to Category 3b).

☐ Category 3b: Impacts and risks may well be significant, and so full environmental and social assessment is required. In these cases, a scoping exercise will need to be conducted to identify the level and approach of assessment that is most appropriate.

B. Environmental and Social Issues (for projects requiring further environmental and social review and management)

In this section, you should list the key potential environmental and social issues raised by this project. This might include both environmental and social opportunities that could be seized on to strengthen the project, as well as risks that need to be managed. You should use the answers you provided in Table 4.1 as the basis for this summary, as well as any further review and management that is conducted.

4.2 Is the project likely to significantly impact gender equality and women's empowerment?

Yes, the Project will impact gender equality and women's empowerment, in a positive manner. The establishment of the different forms of Protected Areas and capacity building for activities such as value-addition of products, accounting and PA management will significantly increase both the knowledge and skills of the women and the revenue generated by various economic activities. This will encourage women's empowerment and encourage gender equality. There will be many project activities involving stakeholder participation, including at management level and equal representation of each gender in these activities will be strongly encouraged.

8.1 Is the proposed project likely to have impacts that could affect women's and men's ability to use, develop and protect natural resources and other natural capital assets? ***For***

example, activities that could lead to natural resources degradation or depletion in communities who depend on these resources for their development, livelihoods, and well-being?

Implementation of the project is likely to have impacts that could affect local peoples' ability to use and develop natural resources and may restrict peoples' access to natural resources. The project intends to expand the PA network in Swaziland through establishment of new PAs which would limit access to various critical habitats and the resources contained in these habitats.

8.2 Is the proposed project likely to significantly affect land tenure arrangements and/or traditional cultural ownership patterns?

Yes, the proposed project is likely to significantly affect land tenure arrangements, in most cases the affect will be for the benefit of the community. The project would support the expansion of the PA network through the establishment of new PAs in priority areas for conservation; this would affect land tenure and community ownership patterns especially in Swazi National Land.

9.1 Is the proposed project location subject to currently approved land use plans (e.g. roads, settlements) which could affect the environmental and social sustainability of the project?

Yes, the proposed project location is subject to currently approved land use plans. Some of the project's target sites are subject to a variety of land use plans such as large scale commercial agriculture and cattle ranching, with other areas utilised for mining, human settlement and small-scale agriculture.

C. Next Steps (for projects requiring further environmental and social review and management):
In this section, you should summarise actions that will be taken to deal with the above-listed issues. If your project has Category 2 or 3 components, then appropriate next steps will likely involve further environmental and social review and management, and the outcomes of this work should also be summarised here. Relevant guidance should be obtained from Section 7 for Category 2 and Section 8 for Category 3.

ACTIONS & INTERVENTIONS

4.2 Significant impacts to gender equality and women's empowerment:

This impact will encourage gender equality and women's empowerment, however, lack of support from men and male community leaders could derail women's empowerment by discouraging women from participating in the project capacity building activities. The project will expend efforts in carrying out, wherever possible, gender analysis for the design of project interventions and shall take steps to ensure that perceptions of both women and men are taken into consideration as well as fair and equitable access to and distribution of project benefits. The project emphasises the role of women in conservation and development and will target women's groups for the development of alternative income generation activities, capacity building and to increase women's participation in PA management. The empowerment of women will be through the utilisation of women's self-help groups to provide training, access to resources and forums for women's participation. In other cases, some Project activities would be conducted exclusively for women to encourage their participation in

cases where women are reluctant to participate due to the presence of men. In all these actions, monitoring mechanisms will be utilised to monitor women's participation and the effectiveness of these interventions in enhancing women's empowerment. The project will facilitate the development of interventions targeting women's groups to encourage their participation in management positions, income generation and in capacity building exercises.

8.1 Impacts on women's and men's ability to use, develop and protect natural resources and other natural capital assets:

The Project's strategy is to encourage sustainable use of natural resources through the development of sustainable landscape management plans; and capacity will be developed (within both genders) for their implementation, thereby increasing women's and men's ability to use, develop and protect natural resources and capital assets. To compensate for the restriction of resource use in certain key areas for connectivity, use of natural resources in other areas (the majority of areas) will be enhanced in terms of income generation and sustainability, thereby increasing benefits. Alternative income generation activities have been developed under the project interventions to compensate for these restrictions. The development of eco-tourism product and infrastructure (including camps and trails), branding and marketing across the different forms of PAs will improve PA revenue generation and sustainability. In addition, employment of individuals from rural communities to co-ordinate and develop community based conservation initiatives and to monitor biodiversity in community PAs; matching grants for entrepreneurs resident in rural communities to establish conservation friendly businesses; and grants for residents of rural communities (as individuals, companies or CBOs) to establish conservation initiatives within their PAs or landscapes. Capacity will be developed specifically for community-level PA management, thereby increasing both women's and men's ability to protect and manage natural resources. In all these actions, both women's and men's ability and roles in society will be carefully looked at to ensure neither group will be adversely affected by the project support overall. In order to monitor the effectiveness of these actions, monitoring mechanisms will be utilised to track women's participation and inclusion in management, the inclusion of different ethnic groups in the capacity building exercises and management of conservancies as well as the flow of benefits to lower income classes and women. This can be through monitoring the distribution of jobs and flow of benefits among men, women, ethnic groups and socioeconomic classes.

In addition, the project's attention to increasing the role of local communities and women in conservation will increase direct tourism benefits from the different forms of PAs while reducing the burden placed by wildlife conservation. Benefits from an increased PA estate and more effective management are intended to improve the viability of the tourism industry and the project will lead to increased benefits from tourism for local communities, through increased participation. Women are identified as active natural resource users and will be targeted as key beneficiaries.

8.2 Significant effect on land tenure arrangements and/or traditional cultural ownership patterns:

The project will increase the area under PA through the expansion and establishment of different forms of PAs under different management systems, and will include critical biodiversity and ecologically important areas as part of better managed ecosystems. The project will take particular measures to avoid any adverse effects on local communities resulting from changes in resource ownership patterns (through increasing income generation potential from natural resources elsewhere and from alternative income generation activities); it will not support the resettlement of local

communities. The establishment of Protected Areas such as conservancies and CCAs on Swazi National Land will be through collaborative agreements with local communities to ensure they are not adversely affected by these new zones. PAs established on Private Land will also be through engagement with stakeholders.

9.1 Proposed project location subject to currently approved land use plans:

The project will develop land use plans that will ensure that the environmental and social sustainability of the Project will not be affected. The Project's management plans will build on current management plans to ensure compliance, but it will also ensure that all planned activities are adapted as necessary for maximum sustainability. The project will also develop management plans from lessons learnt and recommendations that will enhance the sustainability of the project's interventions.

D. Sign Off

Project Manager	**Date**
PAC	**Date**
Programme Manager	**Date**

Annex 2: Tracking Tools

See separate file.

Annex 3: SNTC and BGP Memorandum of Understanding

See separate file.

Annex 4: Swaziland's Protected Area Estate

The IUCN defines a Protected Area as "A clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values" (Dudley 2008). This is the definition we will use for this report.

2.1 National Protected Areas

National PA is defined as a PA which is managed as an integral unit and has a significant portion of its area gazetted as a PA under Swazi legislation. These National PAs are for all intents and purposes treated as fully gazetted (e.g. the Project Identification Form (PIF) identifies these as gazetted PAs) nevertheless gazetting those non-gazetted portions of the National PAs deemed important is a formality which should ideally be completed.

Swaziland's existing National PA estate is comprised of relatively small areas covering only 3.9% of the country. Although the existing PAs are relatively well positioned to cover the variation in biodiversity, there are a number of growing threats to these reserves and the remaining natural areas within the landscapes of the country. There is therefore a need to expand the PA estate, while strengthening the management of existing PAs. This will in turn require the participation of a broad range of stakeholders, including government departments, private companies and landholders, local communities and the tourism industry, to establish new PAs on the appropriate lands. A landscape approach is needed, to strategically manage and conserve the biodiversity of these PAs within the context of the broader environment to reduce threats to biodiversity loss, maintain ecosystem services and improve connectivity as is for example operationalised by the Lubombo Conservancy.

Swaziland's first existing National PA, Mlilwane Wildlife Sanctuary, was proclaimed under the Game Act of 1953 followed by Hlane Game Reserve in 1967. In 1972, the Swaziland National Trust Commission (SNTC) was formed specifically to conserve areas and features representative of Swaziland's natural and cultural heritage. In addition, custodianship of wildlife falls under the King's Office which placed the management of the Game Act and CITES under the responsibility of the Big Game Parks. This provides the major responsible parties for the management of PAs in Swaziland as BGP and SNTC. As part of the establishment of SNTC, an initial assessment of protection worthy areas in Swaziland was carried out in 1972. The report was a first step towards developing a plan for creating "a pattern of [National] parks representative of all of the four main regions of Swaziland and covering as many as possible of the various ecosystems of each of them"[20]. The assessment involved approximately 4 months of aerial and field based investigation and identified 6 protection-worthy areas including Mlilwane and Hlane. Following this report, one of the proposed areas was proclaimed, Malolotja Nature Reserve, in 1977.

A second survey of national protection worthy areas was commissioned by SNTC in 1978[21]. The survey identified 31 protection-worthy areas, including Mlilwane, Hlane and Malolotja, which would have resulted in protection of 9.47% of the Kingdom. Of this, 58% was proposed as National Parks, 13% as Nature Reserves, 24% as National Landscapes and 5% as National Wetlands. Only two of the 31 areas proposed were proclaimed, Mbabane Nature Reserve in 1978 and Mlawula Nature Reserve, in 1980. A sixth reserve, Mkhaya Game Reserve, was proclaimed in 1985 although it was not

[20] Grimwood, I. (1973) The Establishment of National Parks: Report to the Government of Swaziland. FAO, Rome.
[21] Reilly, T.E. (1979) A Survey of Protection Worthy Areas of Swaziland. Swaziland National Trust Commission, Lobamba, Swaziland.

identified in either of the surveys. In 1994 Mantenga Nature Reserve, adjacent to Mlilwane Wildlife Sanctuary, was proclaimed under the SNTC act. In reference to the definition of a PA given above, Mbabane Nature Reserve is not considered by this report to be a PA even though it was legally gazetted under the SNTC act, it has apparently since been deproclaimed and certainly is not currently managed for the protection of biodiversity and there is no active enforcement of biodiversity legislation.

Following Swaziland's ratification of the Convention on Biological Diversity in 1994, it developed a national Biodiversity Strategy and Action Plan (BSAP) which highlighted an urgent need for increased protection of representative examples of biodiversity. Despite a few concerted national efforts to prioritise areas for protection since, no further PAs have been proclaimed and in the past two decades few of these National PAs have increased significantly in size.

The six National PAs which fit our definition include Malolotja, Mlawula and Mantenga managed by the Swaziland National Trust Commission (SNTC) and Mlilwane, Hlane and Mkhaya managed by Big Game Parks (BGP). Mlilwane and Mantenga adjoin each other as do Hlane and Mlawula. By far the largest of these areas is the Hlane-Mlawula complex comprising 37,888 ha followed by Malolotja (16,292 ha) and Mkhaya (10,050 ha) and lastly the Mlilwane-Mantenga complex (5,300 ha). Together these areas comprise 69,530 ha i.e. 3.9% of the country.

Available information on the National PAs was gathered during the baseline analysis through interviews and sourcing of available data from various sources. The most up-to-date available map of these areas was developed in 2002, this was used as a baseline and significant additions to Mlilwane and Mkhaya were mapped here to update the boundaries of these areas.

2.2 Gazetted Areas

Information was gathered from the SNTC and BGP to determine which areas had been gazetted as PAs under the SNTC act or Game act. According to the Forestry Section no areas have yet been gazetted as PAs under the Flora Protection act, although there has been declaration of a botanical garden. Based on this information gazetted PAs were mapped using cadastral boundaries and historical maps and this was overlaid on the map of National PAs. Significant portions of Swaziland's National PAs are not gazetted and one of the purposes of this project is to rectify this. Therefore for the purposes of this report the gazetted portions of Swaziland's National PAs are considered as a separate category of PA in the analysis. In total only 76% of the National PA area is gazetted. In most cases this is merely a formality which has not been fulfilled yet, however, it has implications for the long-term integrity of these PAs and in some cases (e.g. the recently re-opened iron ore mine in Malolotja) the gazetting of these areas may be intentionally avoided by the government in order to keep options open for future resource extraction.

Table: Size and Status of Swaziland's National PAs

NAME	Management	Perimeter(km)	Total Area(Ha)	Gazetted Area(Ha)
Hlane Royal National Park	BGP	91.4	21,735.8	13,525.8
Mkhaya Game Reserve	BGP	50.2	10,050.2	5,815.5
Mlilwane Wildlife Sanctuary	BGP	58.6	4,582.8	3,862.0
Malalotja National Park	SNTC	75.6	16,292.4	11,255.0
Mlawula Nature Reserve	SNTC	83.6	16,152.3	14,943.4
Mantenga Nature Reserve	SNTC	11.9	716.7	716.7
Total			**69,530.3**	**50,118.4**

2.3 Informal Protected Areas

There are a number of Informal PAs in Swaziland which qualify as PAs under the definition provided above in that they are conserved through "other effective means" but which are not gazetted under the SNTC, Game or Flora Protection acts. There are a wide range of informal PAs in Swaziland and for the purposes of this assessment; only those with wildlife management as a predominant land-use and practice active enforcement of biodiversity legislation qualified as informal PAs. Additional criteria include: fencing or other infrastructure to contain wildlife & control resource access; active habitat and/or invasive species management; eco-tourism operations; and investment in native species re-establishment.

In addition to these areas not being formally dedicated as PAs for the long-term, their management standards vary significantly. Some are managed to high nature conservation standards comparable with National PAs, many are managed as game ranches often in combination with cattle, and some are not afforded levels of protection as high as would be expected within a National PA. Information on informal PAs is limited despite the significant increase in the number of informal PAs in the last decade, this result in inaccuracies in determining the area covered. Each of the informal PAs studied except IYSIS, Mbuluzi, Phophonyane and Sibetsamoya had to be mapped from scratch or remapped. This is also a function of significant changes to the boundaries of Informal PAs in the southern sugar belt owing to increased irrigation capacity and associated expansion of sugar cane agriculture. While these changes in boundaries indicate variance from the "long-term conservation" of some of these areas, it is encouraging that in most cases where Informal PA land has been converted to sugar cane agriculture, a similar new area has been added such that the total Informal PA area does not decline although this is not a certainty going forward and adoption of this as a policy would be prudent.

The largest of these Informal PAs is IYSIS at just over 20,000 ha, with the Big Bend Conservancy, Royal Jozini Big 6, Mhlosinga and Mbuluzi ranging from just over 13,000 ha to just over 2,300 ha respectively. The other Informal PAs are all under 1,500 ha in size with the smallest, Phophonyane being 140 ha. The oldest of these informal PAs is Mbuluzi established in 1980, followed by Phophonyane established in 1986 while the youngest, Dombeya, is still undergoing establishment in August 2013.

Table: Informal PAs in Swaziland

NAME	Management	Perimeter (km)	Area (ha)
IYSIS	Private company	71.5	20,016
Royal Jozini Big 6	Private company	50.3	12,662
Big Bend Conservancy	Private company	48.4	13,225
Mhlosinga	Private company	28.1	3,742
Mbuluzi	Private company	32.3	2,357
Libhetse	Private company	23.3	1,576
Emantini	Private company	18.1	1,381
Nisela	Private company	14.4	1,147
Panata	Private company	9.1	491
Dombeya	Private company	8.0	349
Nkonyeni	Private company	8.2	327
Rosecraft	Private company	8.8	246

NAME	Management	Perimeter (km)	Area (ha)
Sibetsamoya	Private company	6.6	209
Phophonyane	Private individual	7.3	140
Total			**46,977**

There are a number of areas in Swaziland which do not qualify as either National PAs or Informal PAs but which are worthy of consideration here as potential new PAs. These include Protection Worthy Areas as identified in previous surveys, Community Eco-tourism Areas and potential linkage and buffer areas.

2.4 Community Eco-tourism Areas

Community Eco-tourism Areas are areas that have been identified as Protection Worthy[22] which are Swazi Nation Land (i.e. land held in trust for the Swazi Nation by the King which is under communal access controlled by chiefs) and where there has been a significant investment in creating eco-tourism operations based on strategic planning.

The Community Eco-tourism Areas are all relatively rugged landscapes not very suitable for agricultural production or settlement and as such contain habitats that are relatively intact; however, none of these areas experience persistent active enforcement of biodiversity laws and as such cannot be considered PAs. Nevertheless, the investment in developing eco-tourism operations has largely been made by donors (the European Union being responsible for most) following the protection worth area survey with the hope that in the future these areas may develop into PAs.

The largest of these Community Eco-tourism Areas is Ngwempisi Gorge at just under 11,500 ha and the smallest is Mahamba at just over 2,100 ha. Only Shewula and Ngwempisi Gorge are connected to PAs and these are the only two community eco-tourism areas which fall within the top priority Protection Worthy Areas (see next section). It should be noted though that there are current efforts underway under the Lubombo Conservancy to establish an additional community conservation area in Mhlumeni. Shewula is the only community eco-tourism area connected to a National PA. Ngwempisi Gorge has had the greatest single investment in tourism facilities including three separate hiking lodges connected via a network of hiking trails while Mambane has the smallest investment in tourism facilities which includes a coffee shop that is yet to become operational. The Shewula Mountain Camp is the most successful community tourism operation. With the exception of Shewula all of the other tourism investments are unsustainable in that they do not generate enough revenue to pay the staff and maintain the facilities, let alone contribute towards other activities such as conservation. Even in the case of Shewula which has been operating for almost 14 years there is no excess revenue to dedicate towards conservation activities. Based on the experience of the Shewula Community Eco-tourism project and observing its development over the past 14 years, consistent support and guidance of Mbuluzi Game Reserve and Mlawula Nature Reserve staff (and other supporters) especially during the first few years of its establishment, as well as strong support of the chief were critical to the project's success.

[22] Roques 2002

Table: Status and Area of Community Ecotourism Areas

NAME	Area (ha)	Perimeter (km)	Connected to Informal PA?	Connected to National PA?
Ngwempisi Gorge	11,487	63.6	Yes	No
Mambane	9,291	58.2	No	No
Shewula	3,215	38.3	Yes	Yes
Sibebe	2,856	25.5	No	No
Mahamba	2,104	21.6	No	No
Total	28,954			

2.5 Trans-Frontier Conservation Areas

A number of the above National and Informal PAs and Community Eco-tourism areas are bordered by the National boundary and have corresponding PAs across the border in neighbouring South Africa or Mozambique. These form Trans-Frontier Conservation Areas (TFCAs) and the importance of these for conservation and trans-national collaboration has been increasingly recognised and supported. There have been international agreements signed by the respective countries to facilitate co-operation for conservation and tourism development within these areas. There are four core TFCAs involving Swaziland: **Malolotja**-Songimvelo; **Lubombo Conservancy**-Goba; Ndumu-Tembe-Futhi-**Mambane**; and **Jozini**-Pongola. There are a number of migratory species which need protecting and for such species multi-country collaboration is needed in the development of conservation management plans. Swaziland has recently ratified the Convention on Migratory Species and as such areas serving as important refuges and corridors for migratory species deserve attention, and this is also important on the context of the TFCAs.

2.6 Protection-Worthy Areas

A rapid field based assessment of Swaziland's Protection Worthy Areas (PWAs) was carried out during 2001 whereby 44 areas worthy of considering as Protection Worthy were visited and assessed. These areas were identified based on 1) areas previously identified as protection worthy[23][24][25]; and 2) areas with virtually no human settlement considered to have potentially high biodiversity value by local biodiversity experts. Using these criteria, 44 potential PWAs were identified.

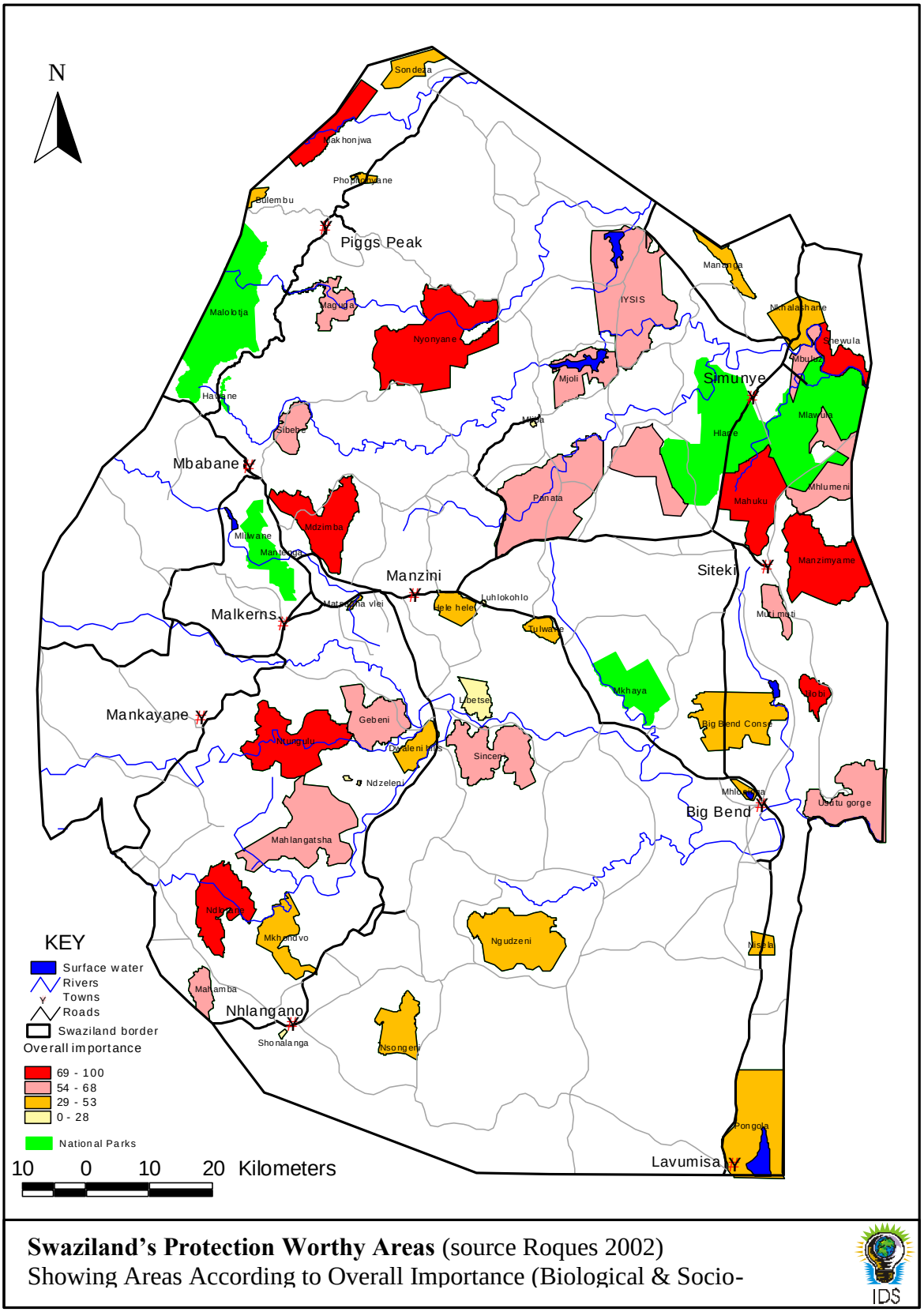
Each of the 44 areas was visited at least once and these areas were then mapped and through a rapid assessment method developed by WWF (Ervin 2000), for rapidly assessing protected areas and their management effectiveness these areas were scored in terms of their assets (both biodiversity and socio-economic) and threats. The assets for Biodiversity Importance (Bio Import) involved scoring both Biodiversity Representation and the likelihood of biodiversity persistence. The assets for Socio-Economic Importance included scoring Tourism potential, Resource use potential and Cultural and archaeological importance. Bringing these together, areas were scored according to their overall importance. The following threats were considered: alien animals, alien plants, resource utilisation, poaching, settlement, land conversion, isolation, pollution and erosion. Each threat was assessed

[23] Deall, G.B, Dobson, L., Masson, P.H., Mlangeni, N.J., Murdoch, G., Roques, K.G. & Shirley, H.O.A. (2000) Assessment of the protection value of remaining indigenous forests and woodlands in Swaziland. Forestry Policy and Legislation Project, Ministry of Agriculture/DANCED, Mbabane, Swaziland.
[24] Grimwood 1973
[25] Reilly 1979

according to the imminence, range, impact and permanence of the threat and this information was used to score the overall degree of threat to each area.

The PWA report identified nine areas of high overall priority based on high overall importance and high overall degree of threat. These are, in descending order of priority: Mdzimba, Ngwempisi (Ntungulu), Nyonyane, Ndlotane, Mahuku, Jilobi, Shewula, Manzimnyame and Makhonjwa.

A large number of gaps in the information available were identified including very limited information on threatened and endemic species which hampered the ability to properly assess the biodiversity assets. There was also limited information on the socio-economic potential of the areas. Therefore, as a follow up, a detailed survey of the high priority PWAs was carried out involving relatively brief field based surveys to gather relevant information on the biodiversity, social and tourism value of the areas and to recommend priorities for their conservation management, tourism development and legal proclamation.



Swaziland's Protection Worthy Areas (source Roques 2002)
Showing Areas According to Overall Importance (Biological & Socio-

IDS

Annex 5: Protected Areas Funding in Swaziland

There are two major sources of funding for the management of PAs: governmental budgets and self-generated funds. There is at present no annual breakdown for current sources of funding for all PAs, nor is there a unit that is dedicated to keep track of this important information.

The vast majority of funding to manage the SNTC and Forestry PAs is from governmental sources, assigned through specific budgets for each of the agencies in charge of PA management. As a result of the minimal financial resources allocated by the government, the budget barely allows for the maintenance of immediate management functions and key staff, though both agencies are looking at ways in which to increase self-generated revenues. The second source of resources for SNTC and Forestry with important potential for growth is self-generated revenues, although the current amount generated is still very low. The funding source for most private PAs is self-generated funds. Among the variety of mechanisms in place it is worth mentioning the entrance fees, different user fees and use charges. All of the key land management entities have some experience with these mechanisms.

It is clear that the current composition of mechanisms and sources is insufficient and inadequate, since it is not, as far as can be determined, meeting the financial needs of the system, nor is it taking full advantage of available funding and market-based opportunities.

3.1 Key Problems and Opportunities

Based on the site visits and associated meetings, a set of key problems related to PA financing in Swaziland were identified, and a set of potential solutions and opportunities were recommended, as detailed in Annex 6.1. The problems are grouped partly based key issues to explore, as follows:

- Diversity of income
- Visitor entrance fees
- Service Concessions
- Government management and contributions
- Partnerships for co-financing
- Business administration
- Legal issues

3.2 Requirements for Financial Sustainability

Equitable Distribution of Funds in a Mixed Ownership Protected Area System

For a mixed-ownership PAS to function and succeed over time, it is critical that the required **resource management standards and expectations** be acknowledged, determined and accepted by all stakeholders. A first step in this direction was taken with the FNA. Additional follow-up is needed in order to complete this first step. A second critical aspect is the establishment of the baseline **expectation in regard to financial planning and accounting**. This refers not only to Government oversight over the PA units identified as important on a national level from a resource management perspective, but also to making explicit the responsibilities that private entities have, and consent to, when accepting public funding.

Government oversight over PA units identified as important on a national level requires the development of a professional and specialised financial planning and accounting system for all the units included. The existence of such oversight will be enable to increase financial synergies, improve

cost efficiencies and ensure transparency in use of public funds. Included among their oversight responsibilities are a consistent, cost accounting standard among all PAs; a consistent set of requirements and standards for PA resource management; a consistent PA financial reporting format that will allow for comparisons; and verification/auditing of PA financial and natural resource management programs and achievements.

The second facet is making explicit the responsibilities that private entities have, and consent to, when accepting public funding. The receipt of public funding by private entities is extremely problematic, and raises multiple questions that affect public management and accountability. In the case of financial sustainability of a national PAS, where some of the resources are located on private land, but are identified of critical national importance, the State has an interest in ensuring that they are managed appropriately for the long-term. In this context, the following tenets are recommended for adoption, to be elaborated on by the oversight unit in line with existing Government regulations:

For Private PAs:

- Annual accounting for use of funds and in accordance with the set rules set.
- Annual requests for funds must be submitted in advance, and in accordance with the set rules.
- The cost standards can be surpassed (i.e., a more efficient use of funds may be employed).
- Oversight on private PAs applies to expenditures and management achievements of natural resource management and law enforcement programs only. Private PAs cannot receive funds for visitor services and infrastructure, or any of the other programmatic activities.
- National funds applied to marketing of the PAS, may be applied to private PAs in limited contexts when part of a national marketing campaign that benefits all PAs in the system.

Many of the financial issues that apply to private PAs also apply to CCAs, however, as communal property they should be greater leeway in the use of public funding to encourage their development, in line with the economic development and biodiversity protection goals of the NDS. In this context, the following tenets are recommended for adoption, to be elaborated on by the oversight agency in line with existing Government regulations:

For CCAs:

- Annual accounting for use of funds and in accordance with the set rules.
- Annual requests for funds must be submitted in advance, and in accordance with the set rules
- The cost standards can be surpassed (i.e., a more efficient use of funds may be employed).

Unless a CCA requests otherwise, oversight applies to all levels of programmatic expenditures and is subject to the development both long- and short-term plans. Review of appropriateness of the oversight level should occur every five years.

3.3 Financial Requirements for Implementation

The Table below presents some of the most promising mechanisms available to finance PA conservation in Swaziland. Financing mechanisms were assessed using a rapid feasibility assessment, considering issues such as the legal and political feasibility, the complexity of implementing the mechanism, as well as, the potential financial return. Some of the listed mechanisms are either being presently implemented in Swaziland, but need to improve, or have been implemented by different PAS in the region; international funding sources are not included in this assessment.

Table: Feasible Financial Mechanisms

	Feasibility				
	Legal	**Political**	**Complexity**	**Return**	**Total**
Public					
Government subvention to SNTC and Forestry Department	3	2	2	3	10
Taxes on hotels and aviation	2	1	2	3	8
Tax breaks or subsidies for private conservation effort/investment	2	1	2	2	7
Charges or penalties related to natural resource use	2	1	2	2	7
Direct public investment for PA infrastructure	3	1	1	3	8
Self-Generated Sources					
Tourism fees (visitors, hotels, tour operators)	3	3	1	3	10
Carbon credits / REDD	2	3	3	2	10
Tourism service concessions	3	3	2	3	11
Watershed protection incentives	1	1	3	1	6
Publicity (contracts for access, etc.)	2	3	2	2	9
Bio-prospecting agreements	1	2	3	2	8
Tradable development rights (biodiversity offsets and easements)	2	1	3	3	9
Utilisation of invasive species	3	2	2	2	9
Private					
Dedicated fund-raising campaigns / special events	3	3	2	2	10

Note: 1=Low, 3=High

The above noted mechanisms were considered because of the feasibility of implementation and success. A number of critical success factors are taken into account such as the complexity and technical capacity that needs to be in place, the cost of implementation in comparison with the potential revenues that will be generated, and the political support that will be demanded in order to ensure an enabling institutional and legal environment to realise these opportunities. Another important consideration made is the time that each mechanism will take before generating an adequate level of funding to meet the planned expectations. It is considered important to prioritise mechanisms according to their potential to generate returns in the short and medium term, which means they should become viable between the first and third year of implementation.

Of the 14 selected mechanisms, eight gave a total score higher than 8 points. Scores higher than 8 points suggest a greater potential for successful implementation in the short- and medium-term. This allows for prioritising mechanisms that combine both high feasibility of implementation and high impact in terms of revenue generation. However, in planning for future funding, one of the eight high scoring mechanisms (tradable development rights—biodiversity offsets and easements) is omitted,

and one score of 8 (taxes on hotels and aviation) has been included as a reflection of political and legal governance.

For a comprehensive assessment of viability of these mechanisms, and an indication of when and how their implementation could impact financial viability of each PA, the FNA needs to be completed, and the Basic and Ideal Management Scenarios budgets, based on factual financial data, developed for all the units that are included in the national PAS.

3.4 Preliminary Assessment of Landscape Based Financing Sources

Sustainable financing or long-term financial sustainability refers to securing adequate financing to cover the true costs of managing an economically and ecologically viable landscape with respect to agreed objectives regarding biodiversity and habitat conservation, as well as, sustainable use of natural resources. It requires a combination of national and sub-national public investments, payment mechanisms for goods and services, and the coordination of donor grants and cooperation, as well as, the enabling conditions that allow the financing to be effectively and efficiently delivered.

There are three primary source categories: Government, Market, and Donor. Each source of financing (i.e., the origin of the financial resources used to underwrite the investment and pay those who carry out landscape management) has a range of possible sub-sources to generate actual financing. As noted earlier, this assessment focuses on only those sources most relevant and feasible for current and potential future financing for Swaziland.

Government Sources of Finance

Government (domestic) budgets can be made to represent a significant amount of financial support for all aspects of landscape management, including direct budget allocations for conservation forests and PAs, tax earmarks and fee revenues to manage production forests and other industries. This money is channelled from the national budget, generated by taxes or other non-tax revenue, to local government structures and the land managing entities.

Specifically, government administered fiscal instruments include taxes and subsidies on natural resource extraction, removal of environmentally damaging product subsidies, introduction of new product taxes and user charges, and modifications of other taxes and charges. Properly designed, these create economic incentives for more efficient resource use and pollution abatement, by driving up the cost of environmentally harmful activities or increasing the returns to sustainable approaches (e.g., environmental taxes and charges); mobilise funds for environmental protection and natural resource management (e.g., via environmental charges and fiscal transfers); and ensure a more equitable distribution of benefits and costs from the management of environmental resources (e.g. improved access to environmental public goods via public investments and pricing reforms).[26] Unfortunately, fluctuations in international markets, poor economic conditions, and other factors can cause government revenues and budget allocations to vary year by year, resulting in insufficient and uncertain funding for conservation and sustainable development. Earmarking revenues collected through various fiscal instruments specifically for defined and justifiable sustainable landscape management needs can allow governments to stabilise and even increase their allocations.

Swaziland's PAS has been traditionally funded from the government treasury and given low priority, as it was seen to have little to contribute to the national development process. Recurrent budgets are

[26] Emerton, *et. al.,* 2006

commonly just enough to keep only basic management structures in place, and capital budgets were insufficient to prevent depreciation and decay of PA infrastructure. However, valuation studies in other African countries have shown that the PAS underpin a large part of the national tourism industry and, as such, generates significant economic value in terms of income and employment.[27] These studies have also shown that enhanced investment in the PAS will be economically efficient, resulting in positive economic returns in terms of income.

Licensing & Royalty Fees — Licensing and royalty fees are typically classified as government non-tax revenue, either on a one-time or on an annual basis. The fee magnitude is dependent on government policy, but they are typically attached to a quantifiable number (e.g., amount of natural resources extracted). Concessions are contractual agreements, usually extended over long periods of time, between a government and a non-governmental party. The concession allows the non-governmental party to engage in an activity within the area of question, such as: logging or mining, and generates revenue to the government in the form of a concession payment(s). One of the more specific concession types that may be feasible is Trophy Hunting Concessions. In some PAs, it may be possible to develop hunting concessions. While the potential off-take from the PAs is assumed to be 1 to 2% of all game populations in the PAs,[28] the proposed level of hunting should not interfere with wildlife viewing tourism or biodiversity conservation goals. A comprehensive review of this potential funding source for all PAs should be undertaken in conjunction with BGP.

To address some of the fee and licensing issues related to game management, it is recommended that a Game Product Trust Fund be established. The Game Product Trust Fund should be a revolving fund, for use of the funds collected through the sale of wildlife products (including trophy hunting, game product sales, live game auctions, live game export levies, hunting concessions, hunting license fees), for re-investment in conservation efforts (in all types of PAs), with an emphasis on community development projects and conservancies. A strict set of rules for use and disbursement of funds should be determined and adhered to. The fund should be able to provide grants to emerging public wildlife organisations and PAs, and consideration should also be given to using these funds for bettering PA related law enforcement. An independent board that will include representatives of all the land management entities should approve and verify all fund requisitions.

Licensing and royalty fees, on the other hand, reflect fees for non-extractive use. For example, PA Image Copyrights. Often pictures or footage is taken in natural areas like PAs for commercial purposes like advertising. In some countries charging, image copyrights by a PA authority, such as SNTC, is based on internal regulations defining the terms for taking picture and turning footage for commercial purposes within the PA boundaries. In many cases these internal regulations are not supported by clear national legislation though a consistent national directive is helpful. Under such cases, picture and footage can be taken free of charge provided it is for personal use only. On the other hand, if the purpose is commercial, written authorisation is required. If the authorisation is granted, specific fees are charged. Assistance of PA personnel is included in these fees and nothing is to be paid separately to the individual employees providing assistance. In case of non-compliance, the PA can reserve the right to sequestrate all visual material and charge fines based on existing copyright laws. In Italy, for example, the fees are: Filmmaking footage 500 to 5,000 Euro; Television footage 200 to 2,000 Euro; and picture taking from 50 to 1,000 Euros.

[27] Turpie, *et al.* 2009
[28] Based on reported hunting concessions in other Southern African countries.

Taxes & Fees — There is often a precedent and legal framework that makes tourism entrance fees a viable financing mechanism to establish and collect funds. The tourism industry, and associated revenues, is dependent upon a number of factors, primarily: the ease of accessing the destination in question and visitor willingness to pay. Among the fees in this category are: (i) Transportation and Hotel Taxes. Some countries, such as Costa Rica, Nepal, Galápagos, Belize, and the Turks and Caicos, have established hotel and airport passenger taxes specifically dedicated to raising revenue for conservation. Swaziland has an existing airport tax, and consideration should be given to using that tax, in full or in part, for conservation revenue. Another consideration can be a hotel tax. For example, assignment of one night per room per year, at an average price of 100 USD, from all accommodation services that will be dedicated to conservation. (ii) Document and Financial Transaction Fees. Given the current size of the financial services industry compared to the tourism one in Swaziland, consideration should be given to the establishment of a financial transaction fee of 1 or 2% that would be dedicated to conservation. Another option is consideration for the establishment of a document stamp fee dedicated to conservation, equalling 1 or 2% of the transaction value. In the USA, the State of Florida uses a 2% document stamp tax to repay a long-term bond that is dedicated to acquisition of lands and defraying the cost of public land management.

Fines — Fines for resource related transgressions are in place in Swaziland. It appears, however, that there is a need to adjust the legally determined fine levels (currently perceived by the conservation community as too low) to increase their function as a deterrent, as well as work with the judicial system and various enforcement agencies to ensure that the fines are collected and applied. In addition, it would be beneficial for the country to develop a mechanism that ensures that the collected fines are directed back into conservation related activities.

Subsidies & Tax Breaks for Private Conservation Investments — The use of incentives or tax breaks to encourage private conservation investments, within existing PAs or to establish new PAs, is a well-known financial tool in many countries, though its formulation depends in the country's legal and tax collection structure. When using such a tool it is important to ensure that the funds are used not only for land set-asides, but also for management.

Market Sources of Finance

At the centre of all conservation activities lies the intrinsic value of the country's biodiversity as a valuable economic and ecological asset. The many goods and services produced across the landscape include raw materials, environmental services (e.g., watershed protection and carbon sequestration), tourism opportunities, traditional natural resource use, and extraction industries. Charging for these services allows for multiple benefits: it acknowledges the value that ecosystems provide and it raises new funds for the landscape.

Tourism Payments, Fees & Taxes — There is often a precedent and legal framework that makes tourism entrance fees a viable financing mechanism to establish and collect funds. The tourism industry, and associated revenues, is dependent upon a number of factors, primarily: the ease of accessing the destination in question and visitor willingness to pay. Among the fees in this category are: (i) Protected Area Entrance Fees. Most PAs in Swaziland already collect this fee, though a casual review indicates that in some cases the fees may be too low. (ii) Recreation License Fees and Special Access Payments. Many PAs charge additional fees for PA-related activities: daily use fees; vehicle, boat, and plane fees; camping fees; and special service fees, such as game drives. Incomes from these sources supplement the basic PA entry revenue and help cover the true costs of supporting PA visitors. This income capitalises on highly attractive features (e.g., scenery, charismatic species).

Royalties from Private-Public Sector Partnerships and Service Concessions — Many of the PAs have the capacity for increased numbers of accommodations, across a whole range from bottom- to top-end establishments, including back-country and luxury bush-camps. The development of this type of tourism infrastructure can yield significant benefits, however, development for the generation of income should not compromise the conservation objectives of the PAs. It is important that the balance between the revenue generation and conservation objectives of the PAs be maintained. Factors that need to be taken into consideration include roads, water supply and electricity, the potential levels of congestion on the road networks within the PAs, and the impact these networks may have on biodiversity. As revenue generation is not a simple function of the number of visitors, strategy more compatible with conservation objectives is to concentrate on providing quality services, rather than quantity.

When public-private partnerships are developed for accommodations, the private operators are responsible for the construction and maintenance of the facilities. A typical lease period for this type of arrangement is 15 to 45 years, with assets being handed back to the PA at the end of the period and in top condition. The expected royalty amounts to about 5 – 15% of annual turnover. Often a guaranteed minimum payment to the PA is included in the contract. Moreover, in order to cover the additional cost of the service concession management and to ensure the high level of visitor experience in PAs, it is strongly recommended that the tourism concession fees be reinvested in PA management, operations and training.

Payments for Ecosystem Services (PES) — No payments are received for ecosystem services generated by the PAS. This is currently a major area of activity and research around the world, as governments and conservation agencies seek more innovative ways of financing conservation. Analysis of successful cases where such payments do occur and do make a difference to conservation efforts are, however, limited to a few basic services, primarily water supply and carbon sequestration.

One such example is the REDD financing mechanism that directly links financial incentives for conservation with carbon stored in forests and natural woodlands. REDD was introduced in the Bali Roadmap in 2007[29] and accepted by the UNFCCC participating states at the Copenhagen Summit as a potentially critical mechanism in global climate change mitigation through its incentive-based market approach. The general principle is that countries can receive credits for decreasing emissions by preventing forest degradation and loss. In other words, States are preventing forest carbon emissions by agreeing to not conduct logging and agriculture activities within the PAs. The emission reductions can then be translated into Verified Emissions Reduction credits and sold to parties in domestic or overseas markets. The profits from these sales are then channelled back into conservation and protection efforts, or to benefit the communities living on the areas in question. Generally speaking, both production forests and PAs are viable sites for REDD projects.

Most REDD research and information is based on Asian countries. While there is general agreement that the overall potential in Africa is comparatively low, existing research indicates a potential range of between 3–50 USD per hectare per annum. The actual amounts paid are extremely variable and project dependant. The Makira project in Madagascar, for example, generates 27 metric ton of carbon for each forested hectare. Based on this, a 1,000 hectare forested area may generate 81,000 USD annually (at 3 USD/carbon credit). A different approach is the Sofala community in Mozambique, where each household in the community is guaranteed an income of 40 USD per annum for 7 years

[29] As part of the Bali Road Map, the nations pledged "policy approaches and positive incentives" on issues relating to reducing emissions from deforestation and forest degradation (REDD) in developing countries, and enhancement of forest carbon stock in developing countries (REDD+).

for based on household performance (payments to farmers are front-end loaded each year by 30%). As part of this carbon & REDD project the farmers can choose agro-forestry (for soil improvement, fuel wood and fodder for livestock) or indigenous fruit trees in order to improve yields and reduce forest clearing pressure.

Carbon credit[30] projects have a difficult set-up process, which sometimes limits their applicability, though the potential revenue is substantial. For this revenue to eventuate as a viable revenue mechanism, much work needs to occur on institutional capacities and policies, verification of REDD potential in Swaziland, ensuring the transparency of financial flows and permits by the authorities, clarification of regulations on revenue distribution requirements between the project developers, the State and local communities.

A sub-segment of PES is **revenue generation from invasive alien species (IAS)**. Tessema (2012) coined the phrase "eradication by utilisation" to describe the economic use of IAS as a means of harnessing their economic potentials for meeting basic human needs, and at the same time control their spread and possibly eradicate them. In the context of PAs, this can be a viable means for increasing the relatively short-term financial opportunities available to PA managers, while at the same time addressing a key natural resource management objective: the removal of IAS.

In Swaziland, where by some estimates 20% of the land is covered by IAS, they pose a dire and immediate threat to biodiversity. The threat IASs pose is exacerbated by the dependence of the population on non-timber forest products for both household services and income. Within PAs, addressing IAS for biodiversity and management should be considered of utmost priority. Promoting the utilisation of any IAS remains a controversial approach due to the potential to contributing to their spread, especially when effective integrated management strategies are not implemented. For utilisation to work it must be integrated with management strategy. In addition to the urgent natural resource management aspects of an IAS utilisation program, other key elements of any such program include education and training, development of secondary industries, especially in the communities surrounding PAs, and community and enterprise development training. Additional information about this option can be found in the Income Generation assessment.

Tradable Development Rights (Biodiversity Offsets & Mitigation Banking) — Many consider this option a sub-segment of PES. In environmental contexts, mitigation generally refers to efforts to reduce or offset the negative environmental consequences of activities that are permitted despite their negative impact. Biodiversity offsets are measurable conservation outcomes resulting from actions designed to compensate for significant residual adverse biodiversity impacts arising from project development and persisting after appropriate prevention and mitigation measures have been implemented. The goal of biodiversity offsets is to achieve "no net loss" or preferably a net gain, of on-the-ground biodiversity with respect to species composition, habitat structure and ecosystem services, including livelihood aspects. The compensation payments on biodiversity offsets vary widely in amount, and may be voluntary or required by law. There is a need to strengthen both existing technical and regulatory capacity, as well as, ensuring that the legal and policy framework is in place prior to using this revenue option.

Cause Related Marketing / Corporate Social Responsibility / Special Event Marketing — In cause-related marketing a company links with, and donates to a non-profit organisation, as part of a program to promote the company's products or services by associating the company with the activities

[30] A carbon credit represents one tonne of carbon dioxide equivalent removed, avoided or sequestered. The current market price for a carbon credit is around 3 USD per credit.

of the non-profit organisation. Marketing involves, for example, the sale of adoption rights for PA attributes. Numerous wildlife adoption schemes act as revenue generating mechanisms for conservation-oriented NGOs in this manner. Whether such a scheme specific to one country (as opposed to a species) could work is still to be tested, but would be a case of clever marketing. A scheme of this sort could also include interesting and unusual small animal and plant species that are endemic to the country. Adopt a Park campaigns are another option for collaboration and fund raising.

In recent years, as many public companies become more sensitive to their environmental footprint, they want to convey and promote a positive corporate image to the public and a link with conservation can help them do this. Other motivations for private sector involvement include access to capital, as more and more investors require sound environmental performance and pension funds favour leaders in this sector. Among the options for this type of collaboration are: (i) Providing funding to PAs, either as a donation to increase visibility in relation to conservation activities or means of mitigating the environmental impacts of activities; (ii) Providing professionally qualified experts in fields such as finance, infrastructure development and maintenance, tourism and concession management; (ii) Salary round-ups: In this mechanism, users allow utilities to round up (or in the case of salary payments to round down) the cents in their bills and donate the cents to a designated charity. Collection and transfer costs are low because the payment systems are both highly standardised and internet-based. Even if each donation is just cents, the totals can be huge.[31]

Special events and campaigns linked to activities that rely on natural resources, such as bike rides, can also be leveraged to generate funds for PAs — either as part of a voluntary donation campaign or as part of the ticket price. Coordination with event organisers for such activities is required in advance, and it is useful when there is a central authority that is aware of all such activities well in advance to assist in generating funding as well as collaborating on potential marketing activities.

Bioprospecting — Bioprospecting is the systematic search for new sources of chemical compounds, genes, proteins, microorganisms, and other products with potential economic value. Pharmaceutical companies enter bio-prospecting agreements with countries in order to engage in these pursuits. In return, the companies get exclusive rights to screen the biodiversity for pharmaceutical compounds. In the event that the search leads to the development of a major drug, the agreements stipulates the benefit sharing (e.g., profits) to the host country. The host country, at its discretion, can utilise the money for biodiversity conservation or other activities. Concession fees and a share of expected royalties for any commercially valuable discoveries are often paid in advance, with a proportion of the payment typically allocated to in situ conservation efforts in PAs. The rules and procedures governing bioprospecting are, of necessity, quite complex and require a very clear legislative and regulatory environment, as well as, continuous enforcement, and as a result, this option is considered viable in the immediate future for Swaziland.

[31] Koch-Weser and Jacobs, 2007

Annex 6: Rural Income Generation in Swaziland

4.1 Livelihoods Context in Swaziland

Swaziland is basically an agrarian society, with agriculture at the core of its economy. The areas in and around Swaziland's PAs are compatible with the sustainable livelihoods approach mostly because the aim is sustainable conservation of biological biodiversity by increasing livelihood status of local people and managing natural resources in a sustainable way. One way of reducing biotic pressure on a PA can be achieved diversifying the livelihood activities and strategies of people thereby increasing their asset status.

Swaziland's agricultural growth is highly unstable with significant year-to-year variations. Improving agricultural performance is critical to the improvement of livelihoods and reduction of rural poverty in Swaziland. The agricultural sector in Swaziland has been plagued with numerous constraints and problems for a long time. These include: (i) Low productivity—average yields of maize (the most widely cultivated crop) are 20-25% below the 1997 yields; (ii) Poorly developed rural road infrastructure limiting access to markets; (iii) Drought and inadequate public investments to expand and maintain surface irrigation systems; (iv) Small and fragmented farms, together with a moribund formal credit system and widespread communal land tenancy acting as disincentive for private investment in land; (v) A lack of transparency in product marketing, specifically the linkage between price, quality and farmers' decisions; and (vi) Inadequate public research and extension services crippled by the lack of strategic focus, funding shortages and the inability to effectively utilise the available resources.

These constraints, in turn reflect on the main problems faced by rural communities: (i) Low income (although there is no specific data on average earnings in rural areas, it is visibly evident that the current income can hardly support basic needs); (ii) Lack of Capital and Credit Sources (farmers face difficulties in obtaining capital for their livelihood activities); (iii) Unemployment (employment opportunities are very rare in the community because of the absence of firm programs and projects providing non-farm employment); and (iv) Low price of produce (farmers have no control of the price of their produce).

The above-mentioned problems are interrelated and interconnected. These problems cannot be solved in isolation and single-handedly by one sector of society, and should be addressed in a coordinated and cooperative manner.

In addition, to the key issues that relate to judicious use and management of the resource base on which rural people depend for their livelihoods, rural governance has a vital role. In Swaziland this means accounting for a dual political system that combines the modern, fairly democratic Tinkhundla[32] system with the traditional Chiefdom system. In the Chiefdom system, the Chief and Indvuna's[33] functions are inherited, while in the Tinkhundla system, representatives are elected. To be successful, a development strategy must be supported by both authorities.

4.2 Recommendations for Potential Livelihood Interventions

With increasing population and falling productivity of farmlands, generating alternative sources of income is essential. It is important to promote activities that balance the need for conserving

[32] Board of elected Bucophos, headed by the Indvuna Yenkhundla (political body)

[33] Works below and on behalf of the chief. Under the chief are three to five Tindvuna

biodiversity and meet the requirements of local communities, on the one hand, and promote technologies and skills that can provide additional income on the other. Uneven development and inadequate service provision are a significant cause of poverty in Swaziland's rural areas. They are not issues that can be easily redressed through institutional strengthening initiatives. While it is acknowledged that interventions in these areas are important, this report stresses the need to address the inequitable distribution of development benefits through supporting existing production and marketing systems, wherever possible, as a single intervention cannot raise the living standards of communities. An additional lens for review of these interventions is the need to increase protection of biodiversity.

Figure 5: Linkage among livelihood elements and implementation methods

The first set of intervention recommendations is based on addressing the two interrelated pillars of rural livelihoods: small-scale income-generating activities and subsistence agriculture. Without addressing these, any additional interventions will not be useful. The emphasis is on building upon pre-existing systems and capacities, which greatly increases the likelihood that the proposed interventions will be self-sustaining. Collectively, the proposed interventions would stimulate the informal economy and provide long-term benefits to rural people. Similarly, support to subsistence agriculture would add diversity to pre-existing production systems, while simultaneously improving the long-term viability of the resource base, particularly in areas where land is already under pressure.

The second set of recommended interventions is tied to the development of tourism related enterprises. There is no doubt that there is a large scope of activities and enterprises that could be developed by individuals and communities in the areas reviewed, and around PAs in general. For the most part, there are three constraining factors:

There is absence of a functional national development plan that links all the PAs in terms of their internal development needs and external connections to the surrounding communities. This plan would link the tourist and recreational potential of the various PAs and the activities within them into a cohesive whole. Such a link would allow both communities and individuals to develop tourism related ventures. It would also allow individual PAs to leverage that information into an assessment of development and tourism needs, as well as the need for and ability to utilise individual or community based enterprises to the PAs benefit. Development of such a plan, focused on the visitor related aspects of PAs, is to be considered of utmost priority.

Site-specific determination of which activities are both feasible and viable in each community. The long-term financial security for communities depends on the ability to comprehensively implement

any such tourism and development plan in an appropriate manner. Such as an assessment is beyond the scope of this report, though it should be considered of utmost priority.

The current skill and capacity level of individuals and communities. The recommendations at this point are capacity building interventions for community-managed micro-enterprises, introduction and production of high-value niche products and services, capacity and awareness raising and access to resources, technologies, and markets.

A crucial element in the success of both types of interventions is the development of consistent technical support and the development of proven access to working credit. The lack of access is a critical constraint, and an approach to resolve this issue should be included. Use of a partnership approach is recommended, as there are local partners, such as SWIFT, with experience in providing business development training and links to micro-lenders.

4.3 Improving the Productivity of Current Farming Systems

This is the most vital issue faced by the rural communities in Swaziland. Interventions for improving the productivity of the subsistence systems are much needed, and there is considerable potential to increase subsistence food production. The most efficient way to increase production of the staple food crops is adoption of improved cultivation methods. Any increase in productivity results in an improved return on their labour inputs, which is the main criterion that villagers use when deciding whether to adopt new systems. Among the possibilities are agro-forestry, improvements to soil fertility, and the introduction of other off-season cash crops

Agro-forestry, an integrated approach of using the interactive benefits from combining trees and shrubs with crops and/or livestock, is a relatively low-cost solution that can raise productivity of smallholdings by up to 60%. This would not only increase a households' food availability, it can potentially free some food supplies for sale outside the household. It has the additional benefit of providing corridors for the movement of animals.

A second option is **improving soil fertility**. Among the easiest to implement are utilisation of soil-restoring **green manure.** For example, research from India shows that areas previously covered with Siam weed (*Chromoleana odorata*) and lantana (*Lantana camera*) are 10% more fertile than adjacent areas. Siam weed has also been used successfully an enricher for organic and farm based manure. Urgent applied research in the Swazi physical environment is needed to verify application.

4.4 Promotion of Appropriate Technologies

Diversification beyond the immediate subsistence level of crop production is a requirement for any real progress to be made on income generation. The interventions noted below are based on existing programs that have minimum negative effects on the environment, as well as, comparable new ones. Successful establishment of these could create the basis for both income generation and the initial process of development of some of the skills set needed to create and manage tourism related enterprises.

Beekeeping, indigenous poultry farming and edible oil programs are relatively easy to expand and improve (from current program levels) and most communities would strongly support these activities. For this to occur, however, additional information and training needs to be provided to communities and community outreach officers, and a follow-up assessment, that includes an understanding of why and where these projects succeed or fail developed. Indigenous poultry and edible oil programs are

especially recommended as the MoA takes upon itself the collection of the products, an issue that presents a large barrier to increased adoption of beekeeping. In addition, the poultry can provide an additional source of meat and eggs for the family. Consideration should also be given to the expansion of edible oil programs beyond the current reliance on sunflower oil.

Simultaneously with the expansion of these programs, development of a more systemic collection process—one that relies on the **development of a cadre of local collectors**—should be considered for development of an additional income option, and for removal of a key barrier to more widespread adoption. The collection network should be based, for example, on local collectors using cargo bicycles (with or without flatbed or closed cart trailers), allowing them to collect from multiple locations that then bring the products to a central collection point for motorised distribution.

Commercial worm farming is one of the rural enterprises that can be developed at both a smallholder scale and a larger commercial enterprise. The use of earthworms in waste management by utilising and breaking down organic wastes has received increasing attention over the last 20 years, where research programs and commercial projects have been developed in many countries on all continents, led by the growing realisation that organic matter in the waste stream can be used as a resource rather than going to landfills; that diversion, remediation and recycling of organic matter from the waste stream can create a marketable product for sale; and by the increasing recognition of vermiculture, as a viable alternative to composting[34].

Among the benefits of vermiculture are: reduced need for fertilisers, pesticides and herbicides; soil nitrates remain in the plant root zone preventing nitrogen leaching into ground water; water quality is enhanced as pollutants are degraded; the water holding capacity of soil is increased; reduced erosion of topsoil; and increased crop quality. Vermiculture products include worm livestock and cocoons (for sale), live bait for fishing, vermimeal, compost and fertilisers (vermicompost, vermicast and vermiliquid). Each product requires a different level of input. Vermicompost works well as a soil additive, increasing water-holding capacity, improving soil structure and adding natural fertiliser elements. It can be sold in bulk for agricultural applications or bagged for horticultural uses. There is an added benefit to worm farming and that is the ability to use Bugweed (*Solanum mauritianum)*, an IAS, as worm feed. There is anecdotal evidence[35] that Bugweed strengthens the pH of vermiliquid fertiliser trifold.

The current **dairy development** situation is considered dire by the MoA, but they have not been able to develop an effective income generation program so far. The introduction of cows is technically feasible and could generate both short- and long-term income. However, there are several main obstacles: (i) cows are considered an important asset. The introduction of dairy cows could distort local social equilibrium by providing a very significant economic advantage to those owners; (ii) the MoA has not yet found the way to maintain and support the level of commitment required by the dairy owners with the related technical consistency. Despite this, development of an effective dairy program should be prioritised. A related second tier development is **milk processing** which can only be developed if milk-cows are introduced. Milk processing, however, is a long-term activity and should only be considered when there is sufficient capital in existence, as it that takes at least 2 to 3 years before any return on investment materialises.

[34] Vermicompost is seven times richer than compost and requires a seventh of the quantity (Munroe, Manual of On-Farm Vermicomposting and Vermiculture).
[35] Worms4Africa

Fresh food and firewood are significant sources of cash income for many rural villagers. The significance of rural markets varies greatly between communities, and is most developed where there are marked differences in the ecology, resource base and livelihood strategies within one area, and the relative importance of domestically marketed food and other items also varies greatly. There is, however, room to consider and develop semi-rural markets. The development of competitive **farm gate markets** is an important step in promoting increased production. Establishing retail networks for rural farm products is another option. Interventions should support and enhance the marketing of fresh produce, both between and within communities. The role of marketing organisations in selling farm products should be reviewed, as at present, farmers are always at the mercy of the dealers or middlemen. It is suggested that farmers themselves should be taught to market their own produce. In doing so, farmers could get competitive farm gate prices for their produce. A number of activities additional capacity building initiatives that would increase the overall volume and value of locally marketed produce are also needed. With the exception of some minor *ad hoc* initiatives, support to fresh produce marketing has never been a focus of donor or government development programs. Such support would represent a major innovation in the delivery of development assistance to rural people. Development of these will also benefit from the development of a rural collectors network.

Apart from the food markets, **local retail markets** should also be developed. Organising both rural and urban-educated unemployed and local CSOs to form marketing associations on a profit basis could help to link producers to markets for both food products and non-perishable products. Such organisations can develop market linkages and pass on the necessary information to producers and purchase in bulk from them. The potential to develop linkages with the government, institutions, estates, hotels, and restaurants should be explored.

NTFPs are another option for improving livelihoods and enhancing conservation. Certain species, such as jacaranda, provide scope for local-level processing and value addition for **handicrafts and furniture production**, and as a rule require only a small amount of capital to start operations. Such industries can be the occupation of the people after the planting/cropping seasons are finished. The Small Enterprises Development Company (SEDCO), a Ministry of Commerce, Industry and Trade venture, is in the process of developing **natural fibre programs** in conjunction with the Global Natural Fibre Forum. Both handicraft and fibre production programs should focus on the use of Siam weed, lantana and black wattle, as these plant species are IAS, but are also considered extremely viable for handicrafts, furniture and cardboard production. The use of a well-promoted and supported **fair trade type certification standard** that would support and encourage use of IAS, such as jacaranda, for the handicraft market and local furniture would reflect in sellers' ability to gain higher prices for their products.

To support the development of a constant raw material source, ensure sufficient supply of NTFPs to households, as well as to improve the ability to manage natural resources within PAs, the **development of community woodlots** is recommended.

At a different scale, a more systemic approach to skills development such as **carpentry and furniture making** should be considered. Wattle furniture is highly prized due to its durability and grain colours, and is available in abundance. The establishment of **native plant nurseries** should be developed, and consideration should be given to the development of both **marula and kiaat plantations** as these tree species are not only endangered but also highly prized for cultural and market reasons, and there is a need to start planning for long-term maintenance of both species outside of PAs while ensuring continued use of them as a NTFP resource. Forestry has some limited experience with nurseries for these trees, and there is an immediate need to develop and expand on

their existing program and knowledge. Consideration should be given to the development of value added NTFP programs, such as the establishment and marketing of **jam and fruit preservatives,** and the development of value added honey products (similar to marula oil use) in partnership with Bulembu Ministries, or a private entity.

Consideration should be given to the development of **community-based Payment for Ecosystem Services (PES) programs**. There are several options for developing community based PES, including both carbon and REDD projects, with the income providing for schools, utilities, and other community needs. These programs have both an upfront cost and are time consuming to set up, however they can provide much needed income. For example, in the Sofala community in Mozambique, each household is guaranteed an income of 40 USD per annum for 7 years for based on household performance (payments to farmers are front-end loaded each year by 30%). As part of this carbon & REDD project the farmers can choose agro-forestry (for soil improvement, fuel wood and fodder for livestock) or indigenous fruit trees with the purpose of improving yields and reducing forest clearing pressure. The project also has riparian stabilisation planting and habitat restoration components.

Introduction of other household fuel solutions such as fuel-efficient stoves and improved charcoal processing should be encouraged. Such technologies could assist households by reducing their need to collect firewood and free the household's time and allow them the opportunity to develop alternative incomes. Among the technologies to be considered are **fuel-efficient stoves, solar water filters** for households who do not have access to potable water, **solar charged lanterns** and **solar water heaters**. The Ministry of Natural Resources and Energy has a program to encourage the use of such stoves, and provide them to interested households, but there is a need to expand the program and train communities not only to produce such stoves on their own, but also encourage the use of other energy efficient household technology.

A related IGA is the production and sale of **briquettes**, made by compacting biomass waste, including invasive alien species (IAS), that can serve as both a household and institutional fuel. Briquettes are a better fuel than firewood. At present, a program to train in the production and use of briquettes is not available in Swaziland.

Lastly, consideration should be given to the systemic distribution of **solar-based electricity**, so that remote communities can acquire access to technology. This would allow households to develop the skills to create non-farm small enterprises, such as data entry, that could provide additional sources of income.

4.5 Commercial Use of Invasive Alien Species

IAS are characterised by rapid growth rates, extensive dispersal capabilities, large and rapid reproductive output, and broad environmental tolerance.[36] It is estimated that as many as 50% of invasive species in general can be classified as ecologically harmful, based on their actual impacts[37].

Biological invasions are considered as a key threat to biodiversity[38] due to the extensive damage on the habitats they invade, which include impact on indigenous species diversity, soil nutrient composition, altering forest fire cycles, loss of productivity of invading ecosystems and the threat to

[36] Geesing *et al.*, 2000
[37] Richardson *et al*. 2000
[38] Mooney and Hobbs, 2000

endangered or threatened plant species around the world. Invasive species may also cause changes in environmental services, such as flood control and water supply, water assimilation, nutrient recycling, conservation and regeneration of soils.[39]

Tessema (2012) coined the phrase "eradication by utilisation" to describe the economic use of IAS as a means of harnessing their economic potentials for meeting basic human needs, and at the same time control their spread and possibly eradicate them. As unpopular as this concept seems, in the context of PAs and biodiversity protection, it can be a viable means for increasing the relatively short-term financial opportunities available to PA managers, while at the same time addressing a key natural resource management objective: the removal of IAS. Promoting the utilisation of any IAS remains a controversial approach due to the potential to contributing to their spread, especially when effective integrated management strategies are not implemented. For utilisation to work it must be integrated with a coherent and comprehensive PA management strategy.

In Swaziland, where by some estimates 20% of the land is covered by IAS, they pose a dire and immediate threat to biodiversity. The threat IASs pose is exacerbated by the dependence of the population on NTFPs for both household services and income as noted earlier. Within PAs, addressing IAS for biodiversity and management should be considered of utmost priority. Of comparable importance is the development of education and awareness community outreach programs on the topic. All stakeholders involved in the development of IGAs should highlight IAS utilisation as part of their programs where possible. These types of programs, in addition to their income generation potential, will allow communities to actively participate in resource management activities both within and around PAs.

Selected utilisation options for IAS in Swaziland

Siam weed *(Chromolaena odorata):* biogas production; improving soil fertility and reducing the fallow period of farm lands; mulch for increased maize yield; livestock feed; leaf meal for poultry; insect and rodent repellent for temporal storage of maize; plant fertiliser, compost and mulch; remediation of heavy metals in soils; treatment for oily wastewater; charcoal and briquettes;

Lantana *(Lantana camara):* fuel wood and biogas (when dry); charcoal and briquettes; construction material for bee hives; as vermicompost can increase field yield; botanical insecticide to protect crops; improve soil productivity; source of low cost enzyme for detergents alkaline protease; flower can be used a natural silk dye; biofuel and bioethanol; paper pulp (high fibre values)

Black wattle *(Acacia mearnsii):* fuel wood and biogas (when dry); charcoal and briquettes; construction material; paper pulp (high fibre values); biomass; commercial tannins and wattle extract; tannin-based wood adhesives; useful for cooper work; axe- and pick-handles; useful for agro-forestry; posts for fencing; can be used as livestock fodder in certain conditions; edible gum and seed; bark tea

Key Program Components for Commercial Use of Invasive Alien Species

In addition to the natural resource management aspects of an IAS utilisation program, other elements include education and training, secondary industries and community development.

Education and Training. An education and training campaign to generate awareness of the issues related to IAS is needed. Education is one of the keys to the long-term success. Levels of awareness

[39] Pimentel *et al*., 2005

among landowners, nursery wholesalers and retailers and the general public around the threats and impacts posed by IAS need to be enhanced. Responsible land management will stem only from an understanding of the severity of the impacts of invading alien plants. Training focuses on skills needed to make the program successful, for example, through induction basic training skills, such as health and safety, first aid and firefighting skills; and contractor development training programs.

The training program should also include a large component of life-skills, such as personal finance management, literacy and numeric skills etc. At management level, the training and development programs should encourage staff to start academic programs in the related technical fields.

Secondary Industries. The development of viable secondary industries, such as the production of charcoal from invader wood and furniture production, is a critical component a IAS program, and has been shown to offer significant potential for job creation and to generate the funding necessary to ensure that the programs is able to sustain itself over a 15-year period.[40]

Community Development. Community and enterprise development training should also be considered an essential aspect of any IAS program. In South Africa, for example, the Working for Water program increased women and youth employment by 54% and 26% respectively. 884 contractors emerged from the program, 14% as collectives and 85% as individual entrepreneurs. Of the individual entrepreneurs, the majority were previously unemployed, 33% were women and 10% were youth.

4.6 Tourism Related Enterprises

One of the fundamental reasons to consider tourism within the context of PAs is the linkage with communities that are either adjacent to, or within, a PA. An inherent part of tourism development is the creation and maintenance of economic opportunities, enhancement of the quality of life and protection of a cultural, historic and natural heritage[41]. The fact that PAs attract visitors that support local economies is undoubted. In PAs, local communities can provide many of the needed goods and services to visitors, and can, if integrated with the management of those natural areas, protect the natural resources of PAs[42]. Tourism in PAs can play an important role for the enhancement of the local prosperity because it can generate supplementary income and expand job opportunities besides being a tool for the conservation of the natural environment. Both tourism and eco-tourism related enterprises have immense potential in all the areas reviewed.

The one critical aspect of tourism related enterprises that must be considered is that though they have the potential to be a high revenue generator for communities and households, this income requires high level of inputs in terms of training and service provision, as well as being highly variable. For tourism to succeed as a community IGA, it must be tied to a series of activities, options and activities within the PAs themselves that place the activity in context, and the ability to deliver a high quality experience that is based on highly trained and skilled managers and service providers. This requires a systemic and site-specific review of the possibilities both within and around PAs to ensure that the best tourism option is selected, and should be preceded by intensive training that will allow communities to make such decisions to their benefit. In the immediate short and medium term, as many communities and household struggle with food security and provision of basic services, such income cannot be considered as a replacement for other IGAs.

[40] Dingela and van Staden, 2000
[41] Eagles and McCool, 2002
[42] Moisey, 2002

Tourism related enterprises are closely linked with tourism and agricultural dynamics in the area. Tourism-related job creation often occurs on an *ad hoc*, or 'as needed' basis. Jobs in tourism are often seasonal in nature and can take skilled labour away from other sectors (e.g. agriculture). Unplanned development of tourist-related facilities and infrastructure can adversely affect the natural resource base that local populations depend on for their livelihoods. Tourism facilities can also exacerbate existing resource problems.

The Need to Develop Suitable Ecotourism Products for a Range of Market Segments

Currently, there is limited ecotourism in Swaziland. It is, however, clear that nature and culture are the main assets that Swaziland has to offer and the principal reasons that the general leisure visitor, the adventure tourist, as well as, the special interest enthusiast come. Therefore, there is a need to develop and adapt products based on Swaziland's exceptional nature and culture that do not damage the environment and that provide local communities with opportunities to generate income from different market segments. The following activities could be developed:

- As noted in the Financial Sustainability Report, there is a need to develop a coherent strategy that will allow the development of a robust tourism sector in Swaziland. Some of the options that should be considered in this context and an integral part of the PA and tourism national plan are:
- The development of 'themed' circuits, such as birding, off-road biking and agro-tourism. In addition, cultural sites, and special biodiversity 'destination' sites and circuits should be considered. Each circuit has the potential to generate revenue both within PAs and in the communities that surround them, however, each requires a different set of capacities in order to be fully eventuated. Effective packaging of these tourism activities as an integral part of the PA experience will make it possible to attract tourists for longer periods to Swaziland.
- Establishing good quality eco-lodges in areas of natural beauty or of cultural interest aimed at high-end tourists would attract domestic and international visitors[43], and this would serve two purposes. First, while professional management would be needed to run the operation, at least during the first few years, the eco-lodges would directly train and employ local people and purchase products and services from the local community, such as guiding services, cultural performances, and food supplies. The emphasis would be on training local staff at the lodge and sending those with potential for additional training. Ultimately, the local community would have enough experience and would be able to manage the lodges themselves. Second, establishing the lodges would encourage the development of ecotourism in the surrounding areas. Marketing the lodges would also market the areas that they are located at.
- Villages located near main centres that already provide some tourism services must be encouraged to adapt their product to capture the general sight-seeing market by organising and offering regular day excursions. This will create regular income for the local communities rather than only relying on income from packages that require overnight stays.
- A homestay product needs to be developed. For this to occur, it is important that a financing system be established to assist interested villagers in funding the required improvements.
- Areas appropriate for adventure sports, such as mountaineering and rock climbing, should be developed with appropriate facilities, like rescues services and training walls, and be properly marketed.

[43] A stricter differentiation of current accommodations and offerings is also required.

- With its great variety of species, Swaziland can attract visitors interested in botany, birds and other wildlife. Most areas where these can be seen have been identified; however, in many cases, facilities need to be developed
- If possible, volunteer tourism should be developed. This would provide local communities with income as well as assistance.

Requirements for the Effective Development of Ecotourism

To develop a vibrant and successful ecotourism product that will bring improvement to the livelihood of communities, without damaging or compromising the environment, a number of concerns need to be addressed:

Building awareness about the nature of ecotourism and its impact on the economy and society of Swaziland: It is imperative that the term is clearly defined and that guidelines are drafted to direct and control tourism activities that take place in nature and involve local communities. This should be set out in a policy document that is formulated with the participation and in consultation with all stakeholders. The policy and the impact of developing ecotourism on the economy and rural society would need to be widely publicised so that all citizens are informed about what ecotourism means, and about their responsibility towards preserving and promoting Swaziland's ecotourism assets.

Developing ecotourism products suitable for a range of market segments to maximise earning opportunities and developing and improving tourism infrastructure: Appropriate infrastructure to assist tourists must be developed throughout Swaziland to provide them with interpretation and information, directions, as well as, comfort. Some of these improvements include: (i) Establishing interpretation centres at central tourism sites would provide comprehensive background information, and enhance the tourism experience. These centres could also serve as comfort service areas with clean public conveniences, small scale catering facilities, and retail outlets for books and souvenirs, and most importantly for the sale of handicrafts made by the local communities living near the attraction. Guides for the site would be booked at the centre, and other local tourism services such as accommodation, restaurants and entertainment available in the area could be publicised. At the main urban district nodes, orientation centres should be established. (ii) There is a need to expand and upgrade the museums and interpretive centres at areas of interest. These may be separate facilities, extensions of the interpretation centres or specific buildings like traditional model houses. (iii) Selected heritage villages must be improved to make them more 'tourist friendly.' The requirements here include signage, facilities to showcase local handicrafts, space to perform cultural performances, improvement of village walkways, etc.

Promoting the ecotourism product and creating market linkages: Marketing is one the main weaknesses of Swaziland's tourism management. Marketing of both tourism and ecotourism is a vital skill. When expanding to community related activities, it requires a well-thought out and well-financed marketing strategy, with year-on-year budgets that are respected, and that most importantly, implemented through annual operational plans. This strategy must reflect the needs of both the public and private operators.

Waste management and environmental clean-up in tourism areas: Waste management must be established to protect the environment and the assets that are the motive for tourism.

A **capacity building program** is vital if ecotourism is to be developed successfully. Training programmes must be established for the Ministry of Tourism and Environmental Affairs, MoA,

Forestry, SNTC and other land management entity employees to expose them to the realities of ecotourism development and operations. To ensure that local communities are able to operate their own ecotourism enterprises at a future date, candidates showing strong potential and desire to forge a career in the tourism sector should be identified and sent for training at hospitality and tourism education institutions. A revival of the hospitality school at Bulembu with a focus on managing nature based and ecotourism enterprises is recommended. Communities that want to offer ecotourism services should be sent on exposure visits to successful initiatives to learn from their experiences. In addition, short courses on ecotourism activities and operations could be organised for the private sector operating at the community level.