Project Idea Note
(Final Draft PIN)

Project for Forest Conservation and Sustainable Management of Forest Resources (SADC – JICA project)

Department of Forestry
Ministry of Tourism and Environmental Affairs
ESWATINI

Project Title: "Towards effective forest conservation and sustainable forest management (SFM) for sustainable livelihoods in the four ecological zones of Eswatini".

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Acknowledgements

Glossary of Terms

Afforestation
Establishment of forest through planting and/or deliberate seeding on land that, until then, was under a different land use, implies a transformation of land use form non-forest to forest.

Agroforestry
Agroforestry is the collective term for land-use systems and technologies in which woody perennials (e.g. trees, shrubs, palms or bamboos) and agricultural crops or animals are used deliberately on the same parcel of land in some form of spatial and temporal arrangement.

Deforestation
The conversion of forest to other land use independently whether human-induced or not.

Donga and Donga stabilization
A usually dry, eroded watercourse running only in times of heavy rain. Donga stabilization entail techniques to stop a donga from deepening, lengthening, and widening, i.e. diversion, retention, structures or vegetative growth.

Forest
A forest refers to land spanning more than 0.5 hectares with trees higher than 5 metres and a canopy cover of more than 10 percent, or trees able to reach these thresholds *in situ*. It does not include land that is predominantly under agricultural or urban land use.

Forest ecosystem
A forest ecosystem is the basic ecologic unit in a particular forest that exists as "home" for a community of both native and introduced classified organisms. A forest ecosystem is named for the primary tree species that form the canopy. It is defined by all the collective living inhabitants of that forest ecosystem that co-exist together in symbiosis to create a unique ecology.

Forest inventory
Forest inventory is the systematic collection of data on the forestry resources within a given area. It allows assessment of the current status and lays the ground for analysis and planning, constituting the basis for sustainable forest management.

Other wooded land
Land not classified as "Forest", spanning more than 0.5 hectares; with trees higher than 5 meters and a canopy cover of 5-10 percent, or trees able to reach these thresholds *in situ*; or with a combined cover of shrubs, bushes and trees above 10 percent. It does not include land that is predominantly under agricultural or urban land use.

Other land (land)
All land that is not classified as "Forest" or "Other wooded land".

Plantation
Planted Forest that is intensively managed and meet all the following criteria at planting and stand maturity: one or two species, even age class, and regular spacing.

Reforestation
Re-establishment of forest through planting and/or deliberate seeding on land classified as forest.

Sustainable Forest Management (SFM)
The most widely, intergovernmentally agreed definition of Sustainable Forest Management (SFM) states that: "Sustainable forest management as a dynamic and evolving concept aims to maintain and enhance the economic, social and environmental value of all types of forests, for the benefit of present and future generations."

1.0 Background

According to the National Forest Policy of 2002, the last national forest inventory of 1999 (21 years ago) indicates that Eswatini has 45% coverage of forests and woodlands, of which natural forests cover 2.2%, natural woodlands 22.0%, natural bushlands 13.4%, wattle forests 1.4% and plantation forests 6.4%. Forestry is not the only land use of these forests and woodlands. Other land utilisation includes extraction of a variety of forest products, grazing, agro-forestry, nature protection and tourism. A new national forest inventory is overdue.

1.1 Forestry sector challenges

African forestry and as such forestry in Southern Africa including Eswatini is faced with the numerous challenges that may be classified into the following six (6) main categories and long list as outlined in Table 1 below:

Table 1: Main Categories and Longlist of specific issues[1]

Category one: Socio-Economic Factors	- Emergence of 'black markets' or market distortions for wood products - Chronic poverty and unsustainable livelihoods - Inadequate integration of rural people's grazing and forestry activities - Lack of clear incentives for participating in SFM activities - Dynamics of Land Use, Land Use Change and Forestry - Gender mainstreaming - Poor or slow uptake of contemporary Agroforestry systems/technologies - Unsustainable livelihoods - Climate change hazards and impacts - Forest fires - Alarming deforestation and forest degradation - External Market Forces (Demand for forest products) - Uncontrolled Population dynamics - Country circumstances, Resource Mobilization/Means of Implementation - Lack of understanding the critical role of forests and forestry in climate change adaptation and mitigation - Lack of understanding the potential role of forests and forestry in Sustainable Development Goals - Lack of Collaboration and Partnerships - Quality of Tree germplasm
Category two: Legal Issues	- Uncertainties surrounding forest and tree tenure - Forest Certification - Lack of corporate governance; leading to increased

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[1] Extracted from various reports locally, nationally, regionally and internationally about Eswatini's forestry sector.

	incidences of illegality, and corruption and lack of transparency
	▪ Inadequate, flawed, inconsistent, ineffective forest and forest-related policies and legislation
	▪ Exclusion of or disregard of customary of customary law in policy statements and legal provisions
	▪ Good Forest Governance, Sustainable Forest Management (SFM) and Forest Law Enforcement Governance and Trade
	▪ Recognition of rights of local communities/indigenous people
Category three: Political issues	▪ National priorities (Agriculture, Manufacturing, infrastructure, etc. normally favoured ahead of forestry)
	▪ Lack of political will, which often leads to poor implementation (or none at all) of principles, criteria, indicators and standards for SFM
	▪ Approaches for the mainstreaming of international and regional instruments into national forest policy and legislation and national forestry programmes
	▪ Linking FLEGT, SFM and REDD+
	▪ Regulation of SFM
Category four: Capacity	▪ Capacities of Public Forest Administration (Physical, Human and Financial)
	▪ Knowledge Management and Information sharing
	▪ Shortage of evidence-based policies and policy driven research due to lack of science/policy interface
Category five: Stakeholder Participation	▪ Lack of local and national dialogues on pertinent forestry issues results in poor knowledge of policies and legislation amongst stakeholders
	▪ Lack of Stakeholder Analysis and poor articulation of stakeholder roles and responsibilities
Category six: Forest Management Data	▪ Lake of Up-to-date forest data, including national forest inventories (lack of statistics and up-to-date information about the extent and value of forest resources), and lack of information on the extent and type of illegitimate operations
	▪ Poor or lack of monitoring and reporting

1.2 Rational of project formulation

Based on the challenges listed above, this Project Idea Note (PIN) focusses on a top priority of issues for the advancement of economic growth, social progress and environment protection. Key priority issues identified for Eswatini at this time include the following:

i. There is alarming unsustainable harvesting/utilization of forest products, mainly in indigenous/natural forests and woodlands that need urgent attention. Notably, domestication and commercialization of natural products through small-scale forest enterprises is lacking. There is a need to train and build capacity of local communities

in alternative sustainable livelihoods project to ease pressure on forests.

ii. The comprehensive national forest inventory has not been conducted since 1990, while there was a rapid national inventory in 1999. This implies lack of up-to-date forest data for planning and management, for example the deforestation rates are unknown. Further, despite the role of trees and forests in climate change mitigation national forest carbon accounting has not yet been introduced.

iii. Existing government nurseries need urgent strengthening and there is a need to facilitate the establishment of community nurseries for social, economic and environmental benefits. Although Agroforestry is synonymous with sustainable ecosystem management and has a great potential to restore ecosystem functions and guarantee ecosystem goods and services, it has not been explored in the country. The country is faced with alarming degradation of lands, yet trees have a potential role in ecosystem restoration and donga stabilization thus the need for the application of forest-related donga stabilization in the rehabilitation of degraded lands is an imperative.

1.3 Potential beneficiaries

The potential beneficiaries of the proposed project will mainly be households and local communities in the four (4) ecological zones of the country. The approach will emphasize communities and households thus culminating in the enhancement of economic, financial, ecological, environmental, cultural and social benefits at national level.

1.4 Geographic scope

The project will cover selected areas in the four (4) ecological zones of the country as follows:

Highveld: Ezikhotheni, Madulini
Middleveld: Ekukhanyeni (KaNtunja), Nkwene
Lowveld: Siphofaneni, Malindza, Mdumezulu, Bulunga
Lubombo: Tikhuba, Maphungwane
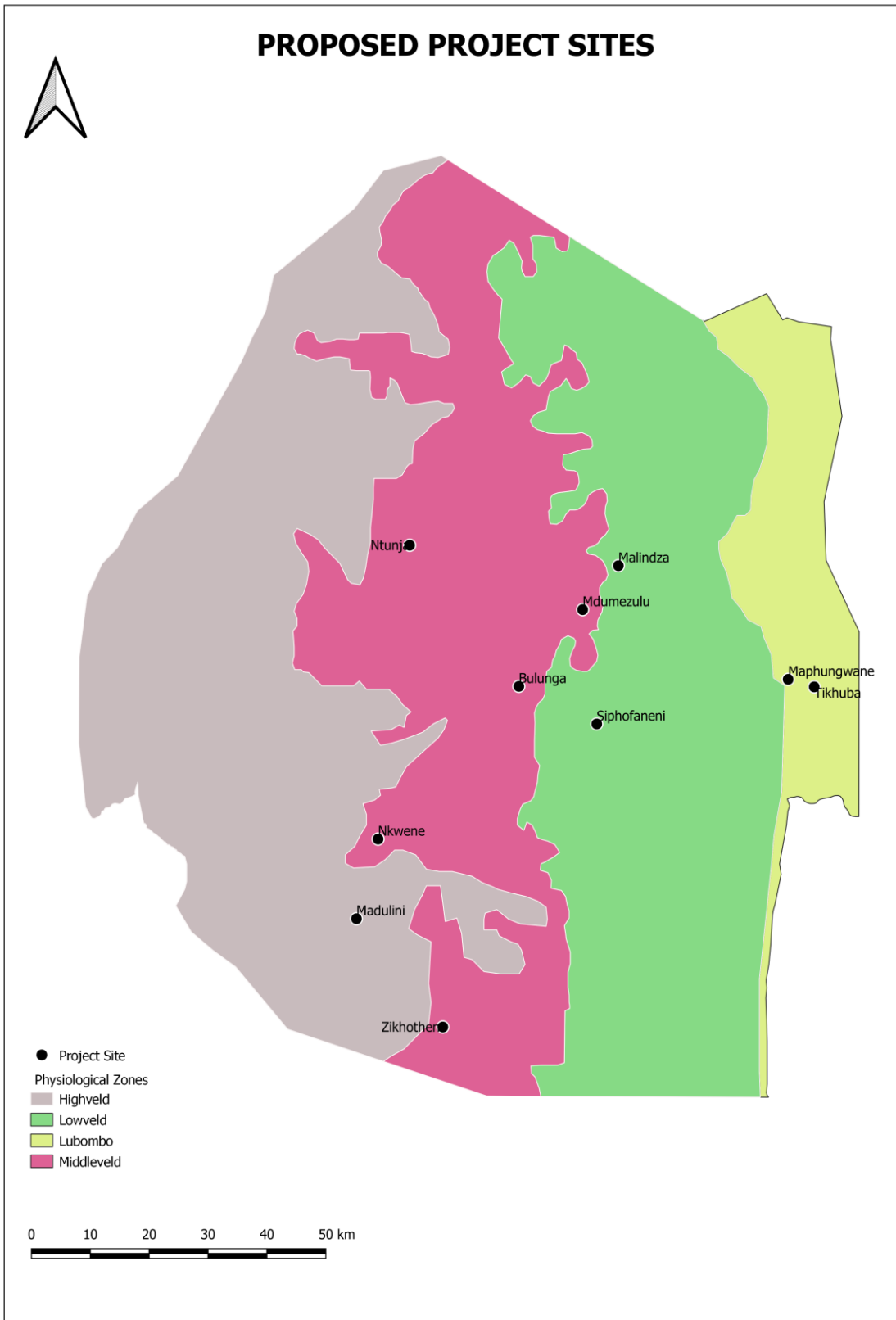
Refer to Figure 1.

Figure 1: Map showing proposed project sites under the four ecological zones of Eswatini

1.5 Policy framework

The policy and legislative framework that informs sustainable forest management in the country is derive from four spheres:

Sphere One: Global/International instruments (Conventions, etc.) that the country signed and ratified such as the UN Convention on Biological Diversity, the UN Convention to Combat Desertification the UN Framework Convention on Climate Change, etc.

Sphere Two: Regional instruments (COMESA, SADC, AU/NEPAD) that the country ratified.

Sphere Three: National policies and legislation, and programmes that are in existence and related to forestry and forests including the National Forest Policy, the National Forestry Programme, the National Biodiversity Strategy and Action Plan, the National Action Programme for the UN CCD, the National Climate Change Policy/Strategy, etc.

Sphere Four: Local-level forest management guidelines and local-level protocols for forest enterprise development, most of which are not document but are passed on from generation to generation.

1.6 Socio-economic features

Eswatini Socio-economic development is largely determined by advances in the agriculture and manufacturing sectors. Driven by major exports such as sugarcane, wood and textile products, accounting for 82.8 percent of the overall export earnings in 2018. Major factors affecting Eswatini's socio-economic development include regional economic weakness, international trade tensions and the lingering impact of the global financial crisis. Necessary reforms in the socio-economic sector demands a move away from dependency on SACU receipts. A growth imperative for the economy will be driven by; ICT and Education, Energy and Mining, Tourism, and Manufacturing and Agro processing[2].

2.0 Objectives

2.1 Broad objective

The overall objective of the project is to enhance sustainable forest management through: curbing unsustainable harvesting/utilization of forest resources, introducing small-scale forest enterprises; conducting a national forest inventory, assessing the rate of deforestation and forest carbon accounting; strengthening of government nurseries, facilitating the establishment of community nurseries for social, economic and environmental benefits, introduction of practical agroforestry techniques in communities for social, economic and environmental benefits and applying donga stabilization techniques[3] in the communities to rehabilitate degraded lands.

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[2] Eswatini 2019 Budget Speech.

[3] Donga stabilization techniques refer to practical options of preventing any gully/donga formation and also curing existing ones, i.e. practical ways for fighting soil erosion and restoring the land to productive use, including revegetation and forest ecosystem restoration.

2.2 Narrow objectives

2.2.1 Component 1: To conduct Forest resource assessment

<u>Outcome One:</u> Forest inventory in selected indigenous forests/woodlands conducted and forest planning improved

<u>Outcome Two:</u> Deforestation rates assessed, documented and reforestation and afforestation projects initiated to improve forest management

<u>Outcome Three:</u> Forest carbon accounting in indigenous forests/woodlands undertaken and forest-related mitigation initiated to address climate change

2.2.2 Component 2: To promote sustainable utilization of indigenous forests/woodlands

<u>Outcome Four:</u> Overexploitation of indigenous forests/woodlands (Unsustainable use) controlled to enhance forest health and vitality

<u>Outcome Five:</u> Small-scale Forest enterprise development (Non-timber forest products enterprises): market-led approach introduced to support sustainable livelihoods in rural and urban communities

2.2.3 Component 3: To improve Nurseries and introduce Agroforestry and apply donga stabilization and land reclamation techniques

<u>Outcome Six:</u> Government nurseries strengthened with multi-purpose tree/plant species

<u>Outcome Seven:</u> Community nurseries established for social, economic and environmental benefits in rural and urban communities

<u>Outcome Eight:</u> Agroforestry systems and technologies introduced in local communities (rural and urban) for social, economic and environmental benefits

<u>Outcome Nine:</u> Applying donga stabilization techniques in rural and urban communities to rehabilitate degraded lands

3.0 Implementing agencies

The Public Forest Administration of Eswatini: The Forestry Department under the Ministry of Tourism and Environmental Affairs (MTEA).

3.1 Activities of the project

3.1.1 Component 1: Forest resource assessment

Activity 1.1: To conduct forest resource assessments or forest inventories in selected sites as reflected in geographical scope.
Activity 1.2: To undertake an assessment of deforestation rates in selected sites as per geographical scope.
Activity 1.3: To conduct forest carbon accounting in selected natural forests and woodlands.

3.1.2 Component 2: Sustainable utilization of indigenous forests/woodlands

Activity 2.1: To determine the extent of unsustainable harvesting and/or utilization of forest resources in selected areas across the four ecological zones of the country as stipulated under geographical scope.
Action 2.2: To adopt, modify and conduct community training and capacity building on the protocol for establishment of community-based small-scale forest enterprises as published by Dlamini (2013)[4].

3.1.3 Component 3: Nurseries, agroforestry and donga stabilization and land reclamation

Activity 3.1: To strengthen government nurseries through introduction of multi-purpose tree/plant species in all nurseries.
Activity 3.2: To facilitate the establishment of community nurseries for social, economic and environmental benefits.
Activity 3.3: To train stakeholders including farmers and others in contemporary agroforestry systems/technologies for social, economic and environmental benefits.
Activity 3.4: To train stakeholders in theories and applications in contemporary donga stabilization techniques to rehabilitate degraded lands.

4.0 Period of the project

The Project period is proposed for 5 years from 2020 – 2025.

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[4] Dlamini, C.S. (2013). A protocol for community-based forest enterprises: the case of non-timber forest products. *Journal of Horticulture and Forestry* Vol. 5(1), pp. 1-12, January 2013. Available online at: http://www.academicjournals.org/JHF.

5.0 Approximate budget

Table 2: Project Budget breakdown

Item	Budget (E-0)	Potential Sources of funding	Approach
Component 1: Forest resource assessment	50,000,000	GEF, SIDA, GiZ, African Development Bank, World Bank	Drafting and submitting solicited and unsolicited funding concepts and proposals
Component 2: Sustainable utilization of indigenous forests/woodlands	50,000,000	GEF, SIDA, GiZ, GCF, African Climate Change Fund	Drafting and submitting solicited and unsolicited funding concepts and proposals
Component 3: Nurseries, agroforestry and donga stabilization	50,000,000	GEF, SIDA, GiZ, Ford Foundation: Sustainable Development and Conservation	Drafting and submitting solicited and unsolicited funding concepts and proposals
Total	**150,000,000***		

Emalangeni (at the rate of US$1 = E14.80) = US$ 10.135 million

6.0 Benefits

The Triple Bottom Line
Social progress: enhancement of and/or improvements in social capital
Environmental protection: enhancement of and/or improvements in natural capital
Economic growth/development: enhancement of and/or improvement in financial capital

7.0 Monitoring and evaluation

Table 3: Monitoring and Evaluation Plan

The Goal of the of the Project: The overall objective of the project is to enhance sustainable forest management						
Component 1: To conduct forest resource assessment						
Outcomes	**Indicator**	**Indicator Definition**	**Data Source**	**Data Collection Methodology**	**Frequency**	**Who is responsible?**
-Improved forest management -Reduced deforestation and forest degradation -Enhanced forest carbon stocks	-% improvement in forest management -% decrease in deforestation -% increase in forest carbon stocks	-Quantity and types of improved forests and woodlands -Decrease in deforestation -Increase in forest carbon stock	Project reports Quarterly Reports Working Papers Policy briefs Factsheets	Review of reports Sites visits Meetings	Quarterly Biannually Annually	Department of Forestry Collaborating partners
Outputs	**Indicator**	**Indicator Definition**	**Data Source**	**Data Collection Methodology**	**Frequency**	**Who is responsible?**
-Forest inventory reports -Deforestation assessments reports -Forest carbon accounting reports	-Number of forest inventory reports -Number of deforestation assessment reports from various sites -Number of forest carbon accounting reports	-Quantity of forest inventory reports -Quantity of deforestation assessment reports -Quantity of forest carbon accounting reports	Project reports Quarterly Reports	Review of reports Sites visits Meetings	Quarterly Biannually Annually	Department of Forestry Collaborating partners
Component 2:To promote sustainable utilization of indigenous forests/woodlands						
Outcomes	**Indicator**	**Indicator Definition**	**Data Source**	**Data Collection Methodology**	**Frequency**	**Who is responsible?**

-Sustainable harvesting thresholds established -Enhanced capacity for community-based forest enterprises	-Number of harvesting thresholds and diversity of forest types -Number and types of community-based forest enterprises	-Quantity of thresholds for various forest types and species -Quantity of community-based forest enterprises	Project reports Quarterly Reports	Review of reports Sites visits Meetings	Quarterly Biannually Annually	Department of Forestry Collaborating partners
Outputs	**Indicator**	**Indicator Definition**	**Data Source**	**Data Collection Methodology**	**Frequency**	**Who is responsible?**
-User surveys -Resource surveys -Training and capacity building in community-based forest enterprise development	-Number of user surveys in various communities -Number of resource surveys in various forests/woodlands -Number of community trainings in community-based enterprise development	-Quantity of user surveys -Quantity of resource surveys -Quantity and types of trainings in community-based enterprise development	Project reports Quarterly Reports	Review of reports Sites visits Meetings	Quarterly Biannually Annually	Department of Forestry Collaborating partners
Component 3: To improve nurseries and introduce agroforestry and apply donga stabilization and land reclamation techniques						
Outcomes	**Indicator**	**Indicator Definition**	**Data Source**	**Data Collection Methodology**	**Frequency**	**Who is responsible?**
-Improved government nurseries with multipurpose species -Community nurseries with multipurpose species -Enhanced social, economic	-Number of improved nurseries and species diversity -Number of community	-Quantity of improved government nurseries with multipurpose species	Project reports Quarterly Reports Working papers Policy briefs Factsheets	Review of reports Sites visits Meetings	Quarterly Biannually Annually	Department of Forestry Collaborating partners

and environmental benefits from agroforestry -Reduced land degradation -Enhanced land reclamation	nurseries and species diversity -% increase in social, economic and environmental benefits from agroforestry -% decrease in land degradation -% increase in land reclaimed	-Quantity of community nurseries and species diversity -Increment in social, economic and environmental benefits -Decrease in land degradation -Quantity of dongas stabilized				
Outputs	**Indicator**	**Indicator Definition**	**Data Source**	**Data Collection Methodology**	**Frequency**	**Who is responsible?**
-Checklist for government nurseries -Programme for improvement of Government nurseries -Checklist for Community nurseries -Programme for establishment of Community nurseries -Training and capacity building in agroforestry systems/technologies -Trainings in theories and application in donga stabilization and land reclamation	-Number of checklists for government nurseries -Number of programmes for improvement of government nurseries -Number of checklists for community nurseries -Number of programmes promoting community nurseries -Number and types of trainings	-Quantity of availability of checklists for government nurseries -Quantity of programmes for improvement of government nurseries -Quantity of available checklists for various communities -Quantity of programmes promoting community nurseries	Project reports Quarterly Reports	Review of reports Sites visits Meetings	Quarterly Biannually Annually	Department of Forestry Collaborating partners

	on agroforestry -Number and types of trainings on donga stabilization and land reclamation	-Quantity and types of trainings on agroforestry -Quantity of trainings on donga stabilization and land reclamation				

8.0 Risk assessment
Table 4: Detailed Risk Analysis Matrix

Component 1: Forest resource assessment	Issues			
	Funding, Equipment, Expertise, Methodological shortcomings			
Sub-components	**Risk Name**	**Risk Description**	**Impact of Risk**	**Mitigation Measures**
-Forest inventory in selected indigenous forests/woodlands	Lack of trained personnel/Expertise	Forest inventory is a highly specialized field/skill yet crucial tool for forest management	The fewer experts in forest management the more difficult to conduct accurate periodical forest inventories	Resource mobilization
	Lack of funding	Forest inventory is often a costly exercise	Lack of forest inventories imply poor forest management	Fundraising
-Deforestation	Lack of trained personnel/Expertise	High rates of deforestation yet very few experts to conduct research	Deforestation rates are often wrongly estimated as reflected in FAO and World Bank forest resource assessment reports	Resource mobilization
	Lack of funding	Research requires substantial funding to generate good quality data	Lack of funding results in inaccurate data and poor forest management	
-Forest carbon accounting in indigenous forests/woodlands	Lack of trained personnel/Expertise	Few experts understand the dynamics of high rate of deforestation and forest degradation	Lack of understanding of forest carbon accounting is counterproductive to forest related climate change mitigation	Training and capacity building Resource mobilization
	Lack of funding	Research funding is critical to ascertain the amount of forest carbon stocks	Lack of funding for forest carbon accounting pose a serious threat to programming for climate change mitigation	
Component 2: Sustainable utilization of	**Issues**			
	Forest tenure, Tree tenure, Land tenure, Sustainable livelihoods, Markets, Standing stock/Resource availability			

indigenous forests/woodlands				
Sub-components	**Risk Name**	**Risk Description**	**Impact of Risk**	**Mitigation Measures**
-Overexploitation of indigenous forests/woodlands (Unsustainable use)	Chronic poverty and unsustainable livelihoods	High incidence of poverty	High reliance on natural forests and woodlands as safety nets	Alternative livelihoods
-Small-scale Forest enterprise development (Non-timber forest products enterprises): market-led approach	Sustainability of supply of raw material/forest resources Unreliable markets	High rate of depletion of natural forests and woodlands Value chains and supply chains complexities	Dwindling raw material Return on investment not guaranteed	Good forest governance, SFM, FLEGT Market research
Component 3: Nurseries, agroforestry and donga stabilization and land reclamation	**Issues**			
	Expertise, Availability of water, Availability of multipurpose germplasm, Growth medium, Equipment and tools, Adoption/Disadoption			
Sub-components	**Risk Name**	**Risk Description**	**Impact of Risk**	**Mitigation Measures**
-Strengthening of government nurseries	Funding Expertise Availability of multipurpose species	Nursery establishment and management requires substantial funding Good nursery men are few Deforestation and forest degradation and loss of forest biodiversity	Lack of budget allocation for nurseries in public forest administration results in poor quality nurseries Unskilled nursery men Loss of forests and woodlands led to loss of multipurpose species	Fundraising Training Species conservation strategies
-Facilitating the establishment of community nurseries for social, economic and environmental benefits	Funding Expertise	Nursery establishment and management requires substantial funding Good nursery men are few	Lack of funding results in poor quality nurseries lacking appropriate infrastructure and equipment Unskilled nursery men cannot establish good nurseries with appropriate species composition	Fundraising Training

	Willingness/Commitment from communities	Success of community nursery programmes depend on cooperation from the local communities	Community commitment almost guarantee success in nurseries	Community mobilization and awareness raising
-Introduction of practical agroforestry techniques in communities for social, economic and environmental benefits	Funding	Agroforestry technologies requires an initial high budgets	Lack of funding is a big challenge for agroforestry	Fundraising
	Adoption	There is generally low adoption of agroforestry in Southern Africa and in Eswatini	Low adoption of agroforestry derives local communities and households the direct use benefits, indirect use benefits and intermediate services supplied by agroforestry	Demos
	Disadoption	The rates of disadoption of agroforestry is high	Disadoption means loss of ecosystem functions and associated ecosystem goods and services	Promotion of agroforestry/Incentivizing agroforestry
-Applying donga stabilization techniques in the communities to rehabilitate degraded lands	Funding	Land degradation is rampant yet land reclamation is very costly	Funding shortages to curb land degradation results in continuous loss of soils, forests and trees thus loss of ecosystem services	Fundraising
	Expertise	Donga stabilization and land reclamation is a specialized field with very few local experts	Lack of experts in donga stabilization and land reclamation has made it impossible	Training
	Willingness/Commitment from communities	Community commitment and participation in reducing land degradation and land reclamation is cardinal	Lack of community cooperation and participation in donga stabilization and land reclamation leads to project failure	Community mobilization and awareness raising