KASESE MUNICIPAL COUNCIL
Where Nature Meets

URBAN FORESTRY MANAGEMENT PLAN

FOR KASESE MUNICIPLAITY (UGANDA).

(2022 – 2032)

EXPERTISE FRANCE

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CHAPTER ONE: INTRODUCTION & BACKGROUND

1.1 Introduction

Urban forest management, tree planting and open space management intervention in Kasese municipality is a joint partnership between Kasese Municipality and Expertise France under the Covenant of Mayors in Sub-Saharan Africa (CoM SSA) initiative to make cities in Sub Saharan Africa resilient in the fight against climate change and ensuring access to clean energy. Under CoM SSA, local authorities make a voluntary political commitment to implement climate and energy actions in their communities and agree on a long-term vision to tackle 3 pillars, namely access to sustainable energy, climate mitigation and climate adaptation. Cognisant of this, Kasese municipality has developed a Forestry Management plan with support from Expertise France to ensure Sustainable utilisation of Forest resources. The Forestry Management Plan was developed through a consultative process that involved all key stakeholders and resource users to generate ideas on the existing and desired situation. Geospatial analysis was also a critical tool in examining the extent and trend of forest utilisation and degradation over time. This Forest Management Action Plan therefore describes the profile of Kasese Municipality, current state of forestry resources, the legal and institutional frameworks, existing challenges, set of actions, and implementation strategy.

1.2 Location and size of the Municipality

Kasese is a town north of Lake George in the Western Region of Uganda. It originally grew around the copper mine at Kilembe, while attention later turned to cobalt mining. It is the chief town of Kasese District, and it hosts the district headquarters. Kasese is also the largest town in the Rwenzururu region. Kasese Municipality covers a total area of approximately 3,500.22 Sq. km. The city is near the Rwenzori Mountains and Queen Elizabeth National Park. Kasese is locate approximately 370 kilometres, by road, west of Kampala, Uganda's capital and largest city. This is about 60 kilometres by road, north-east of Mpondwe, the border town at the international border between Uganda and the Democratic Republic of the Congo (DRC). The Municipality lies between latitudes 0°11'12.0"N, 30°05'17.0"E (Latitude:0.186667; Longitude:30.088050).

The Municipality comprises of 03 divisions including Nyamwamba Division, Central Division, and Bulembia Division.Kasese Municipality has a total population of 188,879 according to the 2014 UBOS population census report with an annual population growth rate of 5.3%, mostly attributed to immigration (UBOS,2014). There are more with more females (5.2.2%) compared to males (47.8).

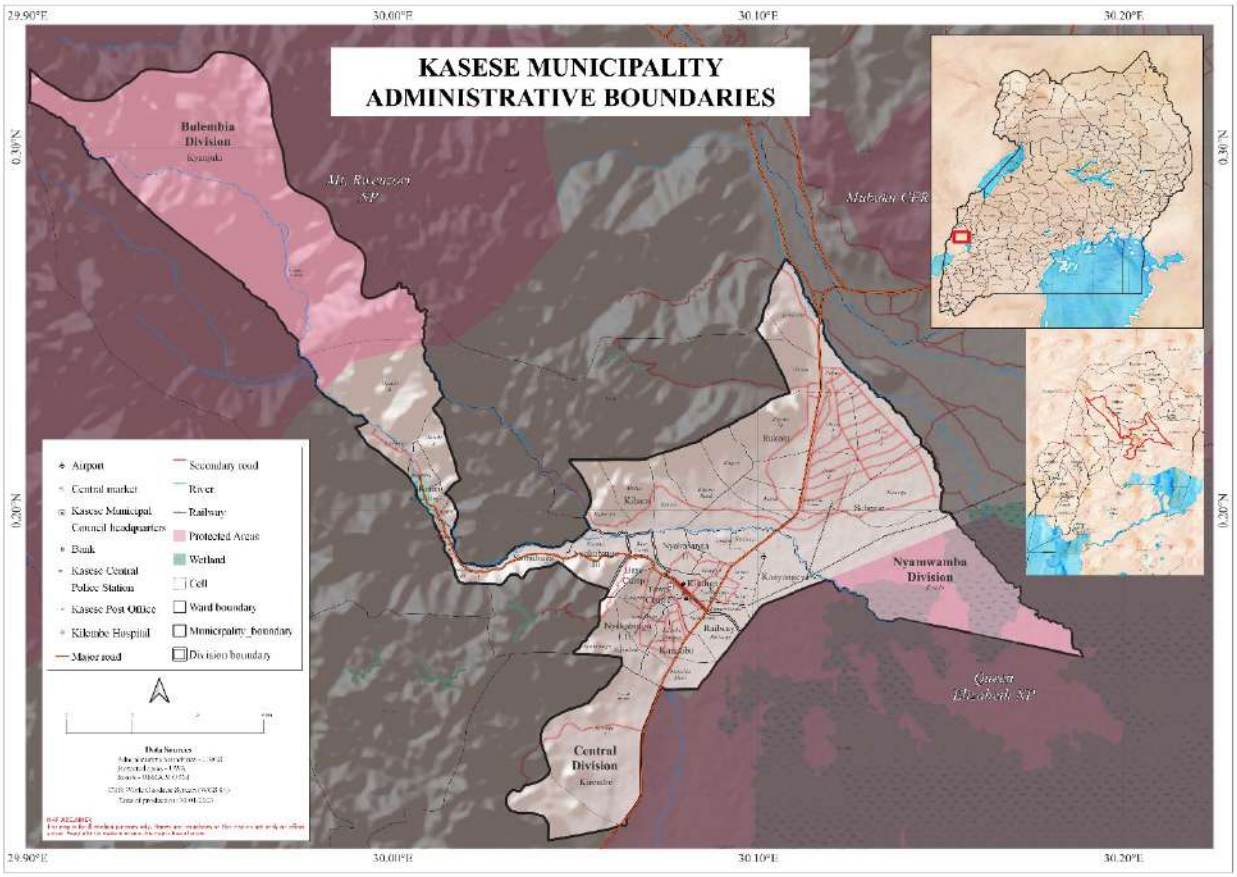


Figure 1: Geographical Location of Kasese Municipality

1.3 Geology and Soils

Kasese Municipality is covered by Cainozoic rocks, where rift valley sediments are evident. These rocks that are underlain mainly of pyroclastic and ultramafic xenoliths, are deposited on the extensive Pleistocene lacustrine and fluvial Kaiso beds and in some places directly on Precambrian rocks[1]. The Municipality is mainly of the western rift valley geology comprising of inter bedded sands and clays. The area is generally thinly covered with loamy topsoil, sand and then clay. These soils almost represent the final stage in tropical weathering. They are deep with little differentiations into clearly defined horizons and possess a fine granular structure often molded largely with weakly coherent porous clods.

The soils are generally rich in plant nutrients and contain fairly high reserve of minerals on alluvial deposits. Productivity is medium to high and supports tree growing.

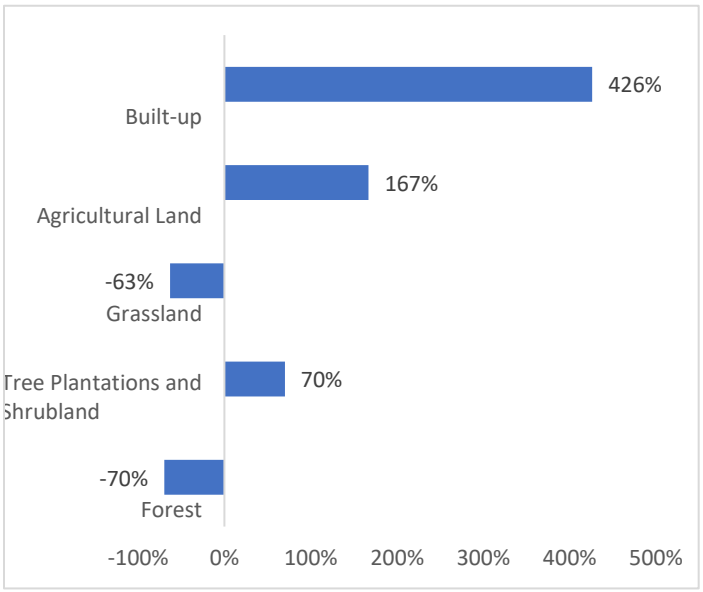
The geomorphology of Kasese Municipality gives an impression that there is a line running diagonally southwest to northeast which roughly divides the Municipality into two parts. The western half is mountainous terrain while the eastern half comprises the plains lying roughly between 900m and 1600m above sea level. On the slopes are remnants of lowland surface.

[1] *EIMCO Environmental Consultants (2007). Environmental Impact Statement for the Proposed Waste Composting Plant and Landfill for Kasese Town Council*

Erosion is evident in the upstream and midstream sections of the municipality while the downstream communities experience severe flooding during periods of heavy rains.

The topography of the municipality and the land uses practices are major triggers to Erosion. Results of the geospatial analysis revealed significant temporal variations in landuse. For instance, between 2002 to 2022, forest cover reduced by 70% (from 5579.73ha by 2002 to 1,690.25ha by 2022) and grassland reduced by 63% that is from 5944.77ha to 2192.87ha in the same period. This is mainly attributed to population pressure that led to increase in the built-up area by 9% and agricultural land by 15%. The degradation of soil has greatly affected soil productivity leading to low agricultural productivity.

Figure 1: Temporal variations in Land use (2002 – 2022)



1.4 Climate profile

The climate in Kasese Municipality is warm and overcast. Over the course of the year, the temperature typically varies from 66°F to 88°F and is rarely below 63°F or above 93°F. The selection below profiles the various climatic elements.

1.4.1 Cloud Cover

Cloud cover in Kasese Municipality experiences significant seasonal variation over the course of the year. The clearer part of the year in the Municipality begins around June to September with August being the clearest month during which on average the sky is 45% of the time clear. The cloudier part of the year begins around September to June with the peak cloudiest month being April, during which on average the sky is 84% of the time overcast or mostly cloudy.

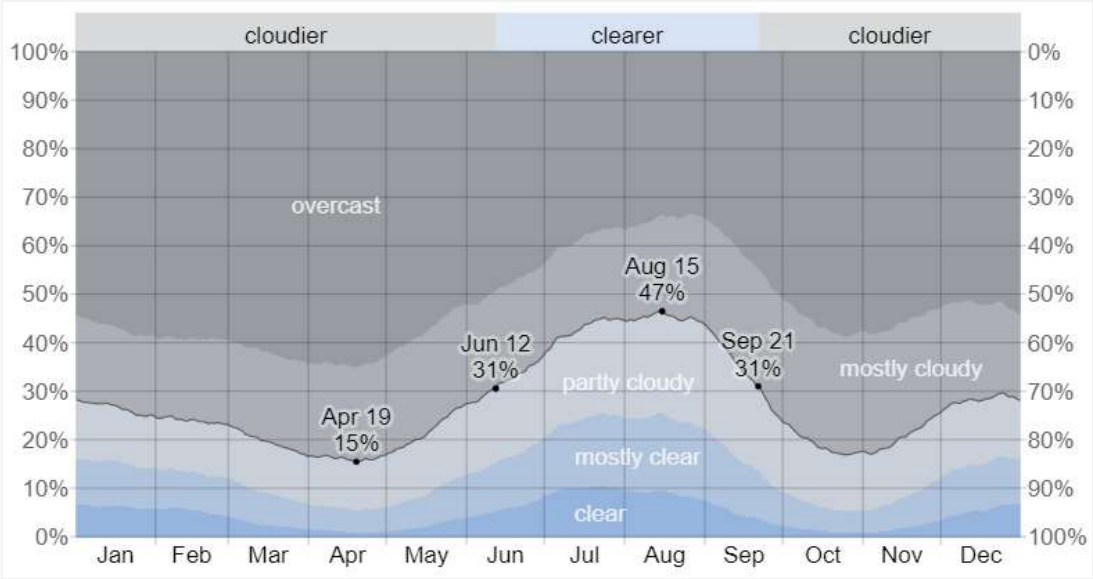


Figure 2: Cloud cover categorization of Kasese Municipality

1.4.2 Rainfall

The municipality experiences a bimodal rainfall pattern. The first rains are short but fall with high intensity and occur during March – May season, and the longer rains occur during the August – November season with low intensity. Annual rainfall ranges from 800mm to 1600mm, and is greatly influenced by altitude.

In terms of daily precipitation, the chance of wet days in Kasese varies very significantly throughout the year. The wetter season has greater than 50% chances of a given day being a wet day. The month with the most wet days in Kasese is November, with an average of 22.0 days with at least 0.04 inches of precipitation. The month with the fewest wet days in Kasese is July, with an average of 8.2 days with at least 0.04 inches of precipitation, and peak probability of 78%. Figure 3 below shows the percentage of days in which various types of precipitation are observed, excluding trace quantities.

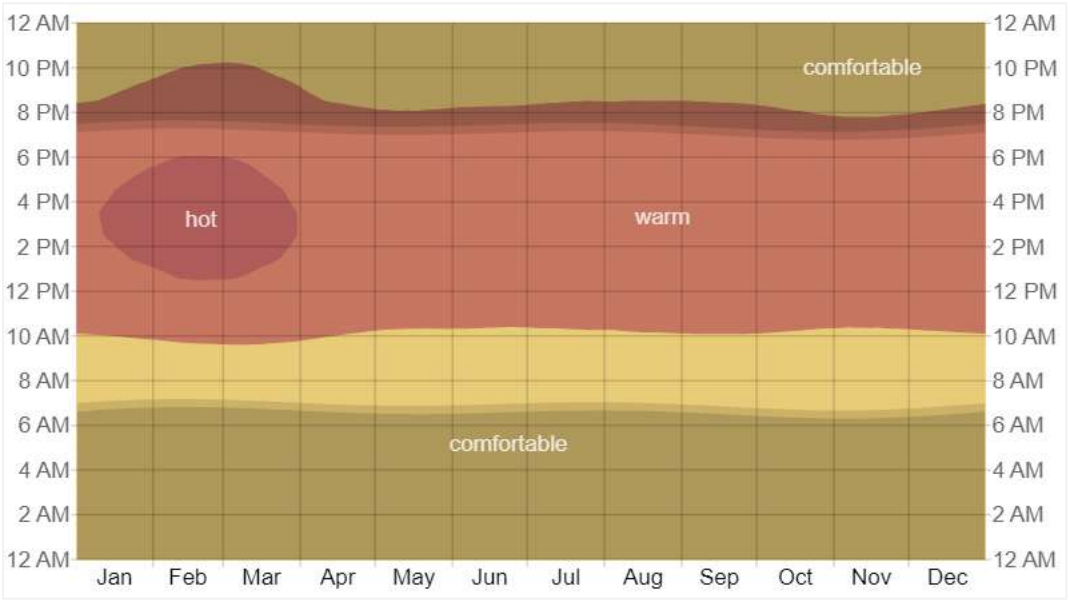
Figure 3: Daily Chance of Precipitation in Kasese Municipality

Source: weatherspark.com

1.4.2 Temperature

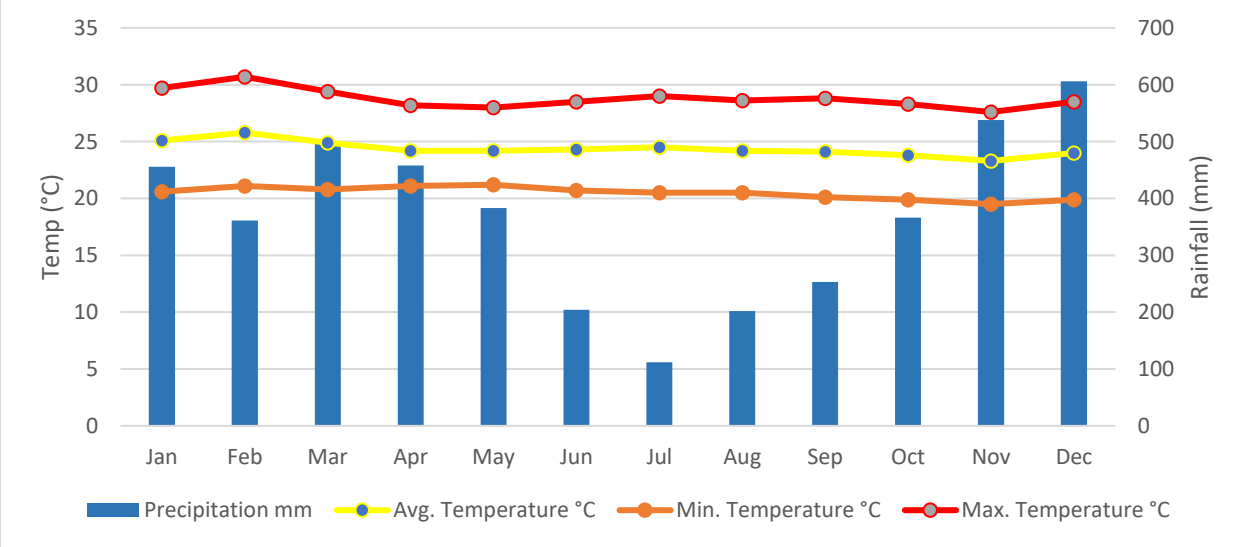
The Municipality experiences wide spatial temperature variations due to altitude. Temperatures can be extreme from very high in the plains to below very low. From 1991 to 1995 annual average temperature was 23.9^0C, with minimum and maximum averages 0f 17.70C and 30.20C respectively (Kasese District Environment Profile, 1997). Recent records have shown that from 1999 – 2001, the annual average maximum temperature was 29.80C and average minimum temperature was 17.50C (UBOS, 2002). The vast increase in temperatures has been due to a combination of factors; that is, reclamation of swamps and wetlands in the lower slopes of the Rwenzori's, cultivation of riverbanks, immense tree felling and continued bush burning. Despite these recent changes and the spatial temperature variation, there is no significant temporal variation throughout the year. The figure below shows a compact characterization of the entire year of hourly average temperatures. The horizontal axis is the month of the year, the vertical axis is the hour of the day, and the color is the average temperature for that hour and day.

Figure 4: The average hourly temperature, color coded into bands



Source: Weatherspark.com (*Kasese Climate, Weather By Month, Average Temperature (Uganda) - Weather Spark*)

Figure 5: Average monthly climatology (1991 -2020) for Kasese Municipality



Source: https://climateknowledgeportal.worldbank.org/country/uganda/climate-data-historical

CHAPTER TWO: LEGAL AND REGULATORY FRAMEWORK

2.1 National Development planning framework

In 2007, Government of Uganda adopted the Comprehensive National Development Planning Framework (CNDPF) which outlines the principles and guidelines to be followed in developing national and decentralized long and medium-term development plans in the context or perspective of a shared National Vision. The main purpose of the CNDPF is to provide a holistic framework for a coherent system of National Development planning where short-term interventions and activities are guided by long term development aspirations and objectives contained in various sets of cascading development plans (Kasese District Forest Development Plan (2019).

The Municipality Forestry Management Plan is a statutory requirement for implementation of forest activities in Local Governments (LGs). It provides forest activities for integration into other Municipality Development Programs for implementation by relevant sectors. It also operationalizes the National Forest Plan 2011/12-2011/22. Section 8 of the National Forest and Tree Planting Regulations, 2016 commits Local Governments to develop Forest Development Plans. Schedule 2 of these regulations indicates a step by step procedure of how these Forestry Management Plans should be developed. Development of the Municipality Forest Development Plan involved various stakeholders from Local Government Authorities, public and private sector actors, NGOs and local communities. Once approved, the Forestry Management Plan will be the basis for making various decisions concerning forest development in the municipality.

2.2 Relevant international instruments

The process of developing the Kasese Municipality Forestry Management plan acknowledge the special consideration of forests and forest activities at an international level due to the existing global climatic and environmental upheaval. The global forest governance regime has evolved over time. The global regime for forest governance can be traced from the time of the United Nations Conference on the Human Environment, which took place in Stockholm,1972. Since 1972, the global environmental governance regime has evolved considerably changing the applicable rules and institutions. The international legal framework under which this plan has been prepared includes:

2.2.1 Convention on International Trade in Endangered Species (CITES), 1973.

Its aim is to ensure that international trade in specimens of wild animals and plants does not threaten their survival.

2.2.2 Ramsar Convention, 1971.

It specifically considers forests as important in the preservation of our wetlands, which act as natural reservoirs and are extremely rich in terms of both biodiversity and the ecological services that they provide. For example, within the realms of agriculture, sanitation, and energy. Uganda boasts of a number of wetlands that have been listed as Wetlands of International Importance under the Ramsar Convention. All these sites are recognized for providing a vital habitat for threatened plants and animals.

2.2.3 United Nations Educational, Scientific and Cultural Organization (UNESCO) convention, 1972.

Article 2 on natural heritage includes the natural features consisting of physical and biological formations or groupsof such formations, which are of outstanding universal value from theaesthetic or scientific point of view; natural sites or precisely delineated natural areas of outstanding universal value from the point of view ofscience, and conservation or natural beauty; and forests are key among thenatural areas. Article 4 mandates each party to this Convention to ensure the identification, protection, conservation, presentation and transmission tofuture generations of the cultural and natural heritage

2.2.4 International Tropical Timber Agreement (ITTA), 1994. Its overarching objectives are to promote: the expansion and diversification of internationaltrade in tropical timber from sustainably managed and legally harvested forests; and the sustainable management of tropical timber-producing forests.

2.2.5 Convention on Biological Diversity (CBD), 1992.

The convention aims atpreservation of biological diversity; sustainable use of its components; and,the fair and equitable sharing of genetic resources. All areas of biodiversity fall under these objectives, including protection of terrestrial and marine species, forests and habitats. The Convention places responsibility on States to ensure that state activities related to the exploitation of forest resources that are located within their state's territories, do not impose damage beyond the limits of their national jurisdiction.

2.2.6 The Convention to Combat Desertification (UNCCD), 1994.

This Convention aims at combating desertification and mitigate the effects of drought through national action programs that incorporate long-term strategies in those countries experiencing serious drought and/or desertification. The Convention addresses specifically the arid, semi-arid and dry sub- humid areas, known as the drylands, where some of the most vulnerable ecosystems and peoples can be found. Forests/or trees are considered to be key in maintaining and restoring land and soil productivity; reversing and preventing desertification/land degradation and in mitigating the effects of drought.

2.2.7 United Nations Framework Convention on Climate Change (UNFCCC),1994 –

Provides the basis for concerted international action to mitigate climate change and to adapt to its impacts. It considers forestry as major land use with potential to increase the removal of GHGs from the atmosphere(e.g. by planting trees or managing forests) or reduce emissions (e.g. by curbing deforestation). It mandates parties to also consider forests as part of national inventories of greenhouse gas emissions and removals, in technology transfer and in national programmes of adaptation to climate change.

2.2.8 United Nations (UN) Sustainable Development Goals (SDGs)- Specifically SDG 15 whose aim is to protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification,and halt and reverse land degradation and halt biodiversity loss by 2020.

2.2.9 Kyoto Protocol on the Protection of the Ozone Layer, 1997- is a global treaty to reduce the emission of CO2, the leading greenhouse gas, and five other gases. It commits its Parties by setting internationally binding emission reduction targets. Today it is acknowledged that planting forests can help mitigate climate change through absorbing excess CO2 in the atmosphere.These protocols promote sustainable forest management and promoteand cooperate in the conservation and enhancement of forests as sinksand reservoirs of greenhouse gases. The protocol also mandates states to promote afforestation and reforestation as well as renewable energy.

2.2.10 Agenda 21, Chapter 11 - the 1992 Rio Declaration on Environment and Development is a comprehensive plan of action to be taken globally, nationally and locally by organizations of the United Nations system, Governments, and major groups in every area in which humans impact on the environment. In particular, annex three: non-legally binding authoritative statement of principles for a global consensus on the management, conservation and sustainable development of all types of forests.

2.2.11 Rio Forest Principles, 1992- The Forest Principles is the informal name given to the non-legally binding authoritative statement of principles fora global consensus on the management, conservation and sustainable development of all types of forests. This document was produced at the United Nations Conference on Environment and Development (UNCED), informally known as the Earth Summit. It is a non-legally binding document that makes several recommendations for conservation and sustainableforestry development.

2.2.12 Climate change and forest governance – including Reduction of Emissions from Deforestation and Forest Degradation (REDD+).

Forests are taken as critical resources for climate change adaptation, mitigation, carbon trading, and payment for other environmental services. This is evident in emerging global forestry related instruments and market initiatives such as Clean Development Mechanisms and REDD+ geared towards restoration of natural forests and other conservation and sustainable forest management (SFM) initiatives. There are also emerging global markets that are responsive to products harvested from forests under SFM standards, especially forest certification.

2.3 The National and Local Spheres of Forestry Governance

There are a number of instruments that establish norms, standards and mechanisms for forest governance at the national level.

At the national sphere, Vision 2040, the second National Development Plan(NDPII), the National Forest Plan (NFP), and the District Development Plans (DDPs) are the overarching planning frameworks for Uganda that recognizeforests as natural endowments relevant for socio-economic transformation to middle income status by 2021.

2.2.1 The Uganda Constitution, 1995.

Article 245, provides for management of the environment for sustainable development. To do this, all-natural resources, forests inclusive, must be well planned for to avoid over utilization.

2.2.2 Vision 2040

The Vision 2040 aims at transforming Ugandan society from a peasant to a modern and prosperous country within 30 years". Uganda Vision 2040 builds on the progress that has been made in addressing the strategic bottlenecks that have constrained Uganda's socio-economic development since her independence, including; ideological disorientation, weak private sector, underdeveloped human resources, inadequate infrastructure, small market, lack of industrialization, underdeveloped services sector, under- development of agriculture, and poor democracy, among others. The implementation of Vision 2040 will depend on the actions and measures thatwe undertake as Government, private sector, civil society and as individuals through short and medium-term National Development Plans. Natural resources including forestry, are fundamental resources to be harnessedfor social and economic development.

2.2.3 The National Development Plan I & II (NDP I and II)

This National Development Plan (NDPII) is the second in a series of six five-year Plans aimed at achieving the Uganda Vision 2040. It is premised on "Strengthening Uganda's Competitiveness for Sustainable Wealth Creation,Employment and Inclusive Growth". The goal of this Plan is to propel the country towards middle income status by 2020 through strengthening the country's competitiveness for sustainablewealth creation, employment and inclusive growth. The NDP has placed forestry at the centre of Uganda's development agenda by categorizing forestry as a primary growth sector alongside other sectors like tourism. Thus, the recognition of forestry in national development today offers favorable prospects for increased funding by government and donors.

2.2.4 The National Forest Plan (NFP), 2011/12 – 2021/22

The National Forest Plan (NFP) is a sector-wide national instrument for managing and utilizing forestry resources in Uganda. The first NFP was developed in 2002, in order to put into effect, the Uganda Forestry Policy (2001). The objectives of the NFP conform to national planning framework, the Poverty Eradication Action Plan (PEAP), that was

replaced by theNational Development Plan I (NDPI) and NDPII (GoU, 2015). The main focus of the first NFP, 2002 was on the management of forest resources foreconomic, social and environmental benefits for all the people of Uganda inline with the then pillars of PEAP:

- to raise the incomes and quality of life of poor people through forestrydevelopments, targeting sustainable livelihoods amongst small- scale, mainly rural stakeholders, with strategies based on-farm, in natural forests or off-farm
- to increase economic productivity and employment in forest industries,targeting large-scale, commercial, investors with strategies based mainly on plantation forestry and wood processing
- to achieve sustainable forest resource management, targeting local, district, national and international interests in biodiversity and environmental conservation

The 2002 NFP was revised in 2011. The NFP 2011/12-2021/22 focuses onthe development of products and services which have high contribution towards socio-economic transformation. The achievement of NFP objectives depends on the improvement of the resource base, its productivity to counterdeforestation and forest degradation, and stepping up supply of goods and services that support enterprise development in the forest sector.

2.2.5 National Forest Policy, 2001

It addresses policy statements, each of which having a broad outline that it aims to achieve as shown in the table below:

Forest on government land	The Permanent Forest Estate (PFE) under government trusteeship will be protected and managed sustainably. The main functions of the PFE include conservation of biodiversity, protection of environmental services, and sustainable production of domestic and commercial forest produce.
Forest on private land	The development and sustainable management of natural forests on private land will be promoted. The main purpose is sustainable production of forest resources within the context of the wider integrated land use, and expanding agricultural needs.
Commercial forest plantations	Profitable and productive forest plantation businesses will be promoted. Forest plantations may be established on private or institutional lands, either by the land owners themselves or under contract arrangements with other parties.
Forest products processing industries	A modern, competitive, efficient and well-regulated forest products processing industry will be promoted in the private sector.
Collaborative forest management	Collaborative partnerships with rural communities will be developed for the sustainable management of forests for both government and private forest lands. The purpose of this policy statement is to “address the disincentives associated with a

	protectionist approach to forest management, and the destructive practices associated with open access to forest resources"
Farm forest	Tree-growing on farms will be promoted in all farming systems, and innovative mechanisms for the delivery of forest advisory services will be developed.
Conservation of forest biodiversity	Uganda's forest biodiversity will be conserved and managed in support of local and national socio-economic development and international obligations.
Watershed management	Watershed protection forests will be established, rehabilitated and conserved.
Urban forest	Urban forest will be promoted.
Education, training and Research	Government will support sustainable forest sector development through appropriate education, training, and research
Supply of tree seed and planting stock	Innovative mechanisms for the supply of high-quality tree seed and improved planting stock will be developed.

Source: State of Uganda's forest 2016

2.2.6 The National REDD+ Strategy

The Reduction of Emissions from Deforestation and Forest Degradation (REDD+) is an international mechanism for providing result-based payments for reducing emissions from deforestation and forest degradation. It also aspires to enhance the role of biodiversity conservation, promoting sustainable management of forests and enhancing carbon stocks. It offers an opportunity for Uganda to serve the common interest in managing its forests in a balanced way for long-term, sustainable, economic growth; to support the livelihoods of local, rural and forest dependent communities; and to ensure that the country's important natural heritage is conserved.

In Uganda, the REDD+ process is a national undertaking, well positioned within the policy framework of Climate Change Policy and national climate change initiatives as well as the National Forest Plan. Its implementation hinges on 5 main components; (a) reducing emissions from deforestation;

(b) reducing emissions from forest degradation; (c) conservation of forest carbon stocks; (d) sustainable management of forests; and (e) enhancementof forest carbon stocks.

To ensure that its implementation adheres to the principles of good governance applicable in the forest sector, REDD+ readiness packages have been developed. These are:

- The National REDD+ Strategy and Implementation Plan that details thestrategic options including an option on improved governance of the forest sector;
- The Forest Reference Emission Level;
- The National Forest Monitoring System;
- The Safe-guards;
- Benefit Sharing Arrangements for REDD+ Programme;

- ❖ Strategic Environmental and Social Management Framework;
- ❖ Feedback and Grievances Redress Mechanisms for implementation of
- ❖ REDD+ Strategy;
- ❖ Capacity building at national, sub-national levels and among othersectors; and
- ❖ Consultation and Participation framework based on the principle ofFree, Prior and Informed Consent (FPIC).

Uganda aspires to have a socially and environmentally viable nationalstrategy for reducing emissions from deforestation and forest degradation. The National REDD+ Strategy document guides development of the nationallyagreed set of policies and programs/strategic options for addressing the drivers of deforestation and forest degradation. These options are cognizantof the pillars and principles of good governance of the forest sector.

2.2.7 District Development Plans (DDPs)

District Development Plans are a legal requirement for all higher and lower local governments in Uganda. They form a baseline tool for tracking implementation of government programs and the basis of controlling the pace and direction of development investment.

District Development Plans are a legal requirement for all higher and lower local governments in Uganda. Section 35 of the Local Government Act (Cap243) requires district councils to prepare comprehensive and integrated development plans incorporating plans of lower local governments. The same section also obliges lower local governments to prepare development plans incorporating plans of lower local councils in their respective areasof jurisdiction. Development plans, therefore, form a basic tool for the implementation of decentralized development programs and servicedelivery by government and non-government actors in local governments. Local government development plans are the main modality through which strategies and activities of the NDP are cascaded to lower levels where citizens can participate and benefit from them.

2.2.8 Other relevant laws and policies

The National Water policy (1999); The National Policy for the Conservation and Management of Wetland Resources (1995); The Uganda Wildlife Policy (1999); The National Land Use Policy (2007); The Uganda Land Policy (2011); The National Environment Regulations on wetland and river bank management, 2000; The Water Act; The Prohibition of the Burning of Grass Act, 1974.

2.3 Institutional Architecture and Forest Governance

At the heart of any governance regime are the institutions that are mandated to discharge a wide range of governance functions. These institutions may be in the public sector, private sector or civil society including the media. Unless these institutions are enabled to discharge their respective mandates, the normative framework for forest governance at the various levels cannot be effective. Like many other sectors of the Ugandan economy, there are various institutions that are engaged in the governance of the forest sector in various ways.

The forest sector governance institutions play a variety of roles as may be stipulated by the nature of the instruments by which they are established. This,they do at various levels (national, sub-national, across districts, districts, sub-counties, communities) and across sectors (forestry, agriculture, environment, wildlife, infrastructure among others).

Table 1: Selected forest institutions in Uganda and their key functions

INSTITUTIONS & THEIR MANDATES	
Ministry of Water and Environment (MWE) MWE, through the Directorate of Environmental Affairs (DEA) is responsible for environmental policy, regulation, coordination, inspection, supervision and monitoring of the environment and natural resources as well as the restoration of degraded ecosystems and mitigating and adapting to climate change.	**National Forestry Authority (NFA)** ➢ Management of CFRs in partnership with private sector and local communities ➢ Advisory, research or commercial services on contract ➢ Seed supply from the National Tree Seed Centre (NTSC) ➢ National forest inventory and other technical services (National Biomass Studies)
Forest Sector Support Department (FSSD) • Formulation and oversight of appropriate policies, standards and legislation for the forest sector • Co-ordination and supervision of technicalsupport and training to local government • Inspection and monitoring of local government and the NFA performance in forest sector development • Co-ordination of the NFP and cross-sectorial linkages • Mobilisation of funds and other resourcesfor the forest sector • Promotion, public information and advocacy for the forest sector	**Civil Society organizations (CSOs)** • Advocacy for increased understanding of the role of forests innational and local development • Promotion of government accountability with regard to useof resources and delivery of services • Participating in partnership arrangements for management and utilization of forests • Public education, information dissemination, • Training of local communities, privateforest owners and resource managers • Action research • Advisory servicedelivery • Mobilize local communities to participate in the developmentprocess
Uganda Wildlife Authority (UWA) • Management of the forest resources innational parks, wildlife • reserves and wildlife sanctuaries (about	**Private Sector Institutions** ➢ Forest management and tree farming investments on ➢ private land ➢ Forest investments in CFRs on rented land

INSTITUTIONS & THEIR MANDATES	
50% of the gazetted forests) • Joint-management with NFA of some central forest reserves under this management status	➢ Collaborative Forest Management of CFRs ➢ Wood and NWFP processing ➢ Trade in forest products ➢ Efficient use of fuel-wood
Academic /Research institutions ➢ Research and development ➢ Promotion of forestry technologies ➢ Forestry training ➢ Research	
District Forest Services (DFS) of the DistrictLocal Governments Section 48 of the National Forests and Tree Planting Act provides for the establishment by DLGs of the District Forestry Office (DFO) to function as a decentralized service under the aegisof the DFS. They are mandated with following rolesand responsibilities: • Strengthen forestry in production andenvironment committees and District Development Plans. • Implement international and national policieson forests. • Issuance of Permits, collection of license feesand tax collection. • Mobilize funds for forestry development • Support and quality control of forestry extension, brokering between farmers and service providers, providing market information • Manage LFRs in partnership with communitiesand private investors. • Surveying, approval of Community Forests • Liaise with NFA and other lead agencies onmatters relating to forestry. • Promote forestry awareness in the districts. • Promote tree planting. • Developing District Forestry DevelopmentPlans (DFDPs). • Manage Local Forest Reserves (LFRs). • Advise and support the management ofCommunity Forests. • Promoting innovative approaches to forestryadopt in planning management and regulation of forestry practices. • Assist in the development and provision of advisory services relating to private forests, • Cause to be prosecuted, any person willfully destroying any forest resource in contravention of the National Forestry and • Tree Planting Act (NFTPA, 2003).	

CHAPTER THREE: SITUATIONAL ANALYSIS

The situation of Kasese Municipality was assessed using Land Use Land Cover Analysis. This involved a critical and comprehensive examination of the various land use types in the Municipality, their impact on vegetation and forest resources, the spatial and temporal variations in land use. Participatory Appraisal tools like Focus Group Discussions, transect walks, and Key Informant Interviews were adopted. These generated community perceptions, knowledge and practices related to land-use and vegetation cover. Besides, information on the trends in Land use was generated. Geo-spatial analysis using highly resolution satellite imagery was used to assess the spatial and temporal variations in land use and land cover in Kasese Municipality. This section therefore presents a comprehensive analysis of the land use land cover status in Kasese Municipality and how it has changed over time.

3.1 Settlement and Land Tenure

There is a mix of both public and privately-owned land in Kasese Municipality with significant spatial variations in the settlement patterns and land tenure system. These differences are mainly attributed to the historical profiles of the different cells. Kasese being a Natural resource rich region, was a hub of colonial activities and these greatly influenced human settlement patterns and land access.

Private ownership with clear land titles is the dominant land tenure system in the Central Division. Though previously, much of this land belonged to the government through its various developments like the Kilembe mines, railways, cotton processing factory, industrial parks, among others. For instance:

Text Box 1: Settlement Patterns and Tenure trends in Central Division

- *Land in Railway cell was believed to be reserved for the railway, hence when the railway demarcated its land, people started occupying the remaining parts. Some locals have today acquired land titles for their plots.*
- *Kidodo cell was proposed and spared to be an industrial area in Kasese. All the forests in the area were cleared by government as they invited for industries. However, when ADF started, this land was allocated to ADF affected people in mountains.*
- *Kikonzo cell land used to belong to Kasese town board. Eventually locals started buying it from the council at a little price, the same with Kamaiba cell.*
- *Kilembe mines cell used to be quarters for Kilembe mines staff and workers, and belonged to the government. Later workers started getting private ownership of plots through the town board (Kasese town council).*
- *Nyakatonzi cell was named after a cotton processing factory called Nyakatonzi during Obote I regime and the land initially belonged to Nyakatonzi farmers who got it from Isha Marambo the original land owner.*
- *The land in Katadhoba initially belonged to a family of one Kaheni family and when the family members shared this land, they started selling to other settlers especially those displaced by River Nyamwamba.*

Bulembia Division is mostly occupied by the Bantu tribes (Bakonzo) who migrated from Congo many years ago are the major occupants of Bulembia District. The people in this ward mostly occupied the Mountain area and along the mountain slopes.

In Bulembia Division, there is a mix of both private and public land ownership. The settlement pattern in this area has evolved overtime. Results of the Focus Group Discussions revealed that majority of the occupants in Bulembia are descendants of Kilembe workers since most of the area was gazette for the Kilembe mines in 1956.

Text Box 2: Settlement and Land Tenure trends in Bulembia Division

The biggest part of the division was Kilembe mines gazetted area in 1956, it was a camp of Kilembe workers. It was initially occupied by Asians, who were chased by Amin. When Amin chased the Asians, people started renting the houses. But initially only the workers used to stay there. So most of the people living in the area are descendants of Kilembe workers and the rest are renting the houses which were initially for the Canadians who had occupied Kilembe mines. Other people came to the area to seek employment opportunities since the area was a mining area for copper, cobalt and Gold. Some areas which was initially for Kilembe workers now belongs to the public/Government including Gold Cost in Nyakabingo III.

Nyamwamba Division has low population density due to the 1996 – 2000 ADF activities that led to death and displacement of people like in kyoli quarters.

Generally, there has been spontaneous changes in the settlement patterns. Results of the land use land cover change analysis indicated that the totally built up area increased from 329.31ha (2.1% of the total land areas) to 1733ha (11% of the total land area). Rapid increase in human settlement is a great threat to the forest resources hence proper land use planning is critical for effective forest resource utilization. Its predicated that total biilt up area will be 18% of the total land area.

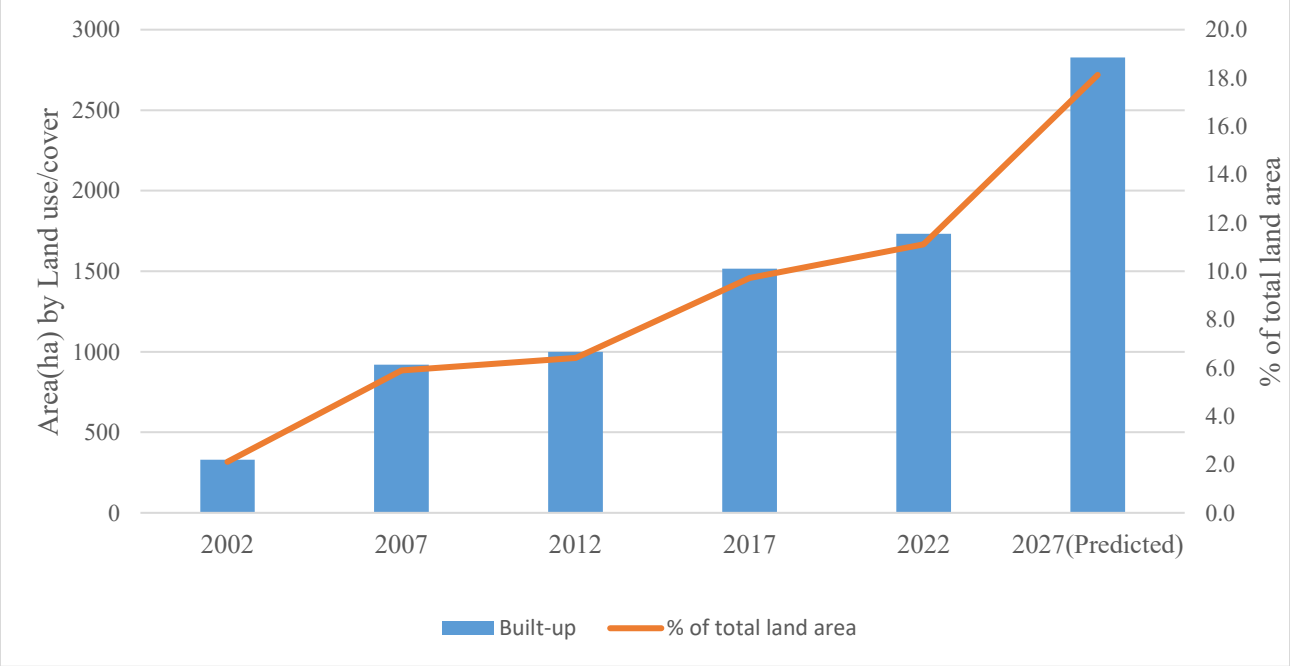


Figure 6: Changes in Human settlement in Kasese Municipality

3.2 Land Use and Land Cover

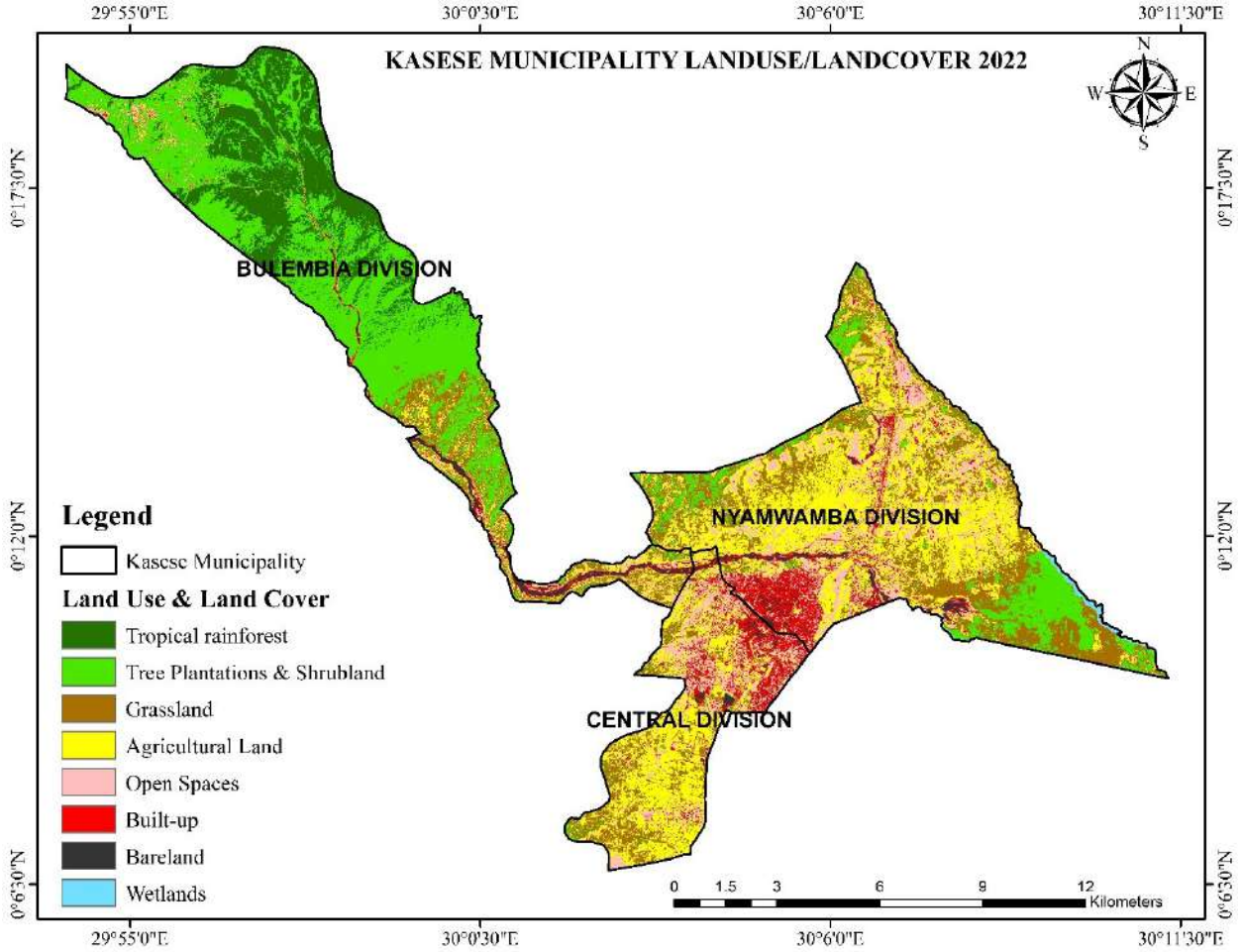


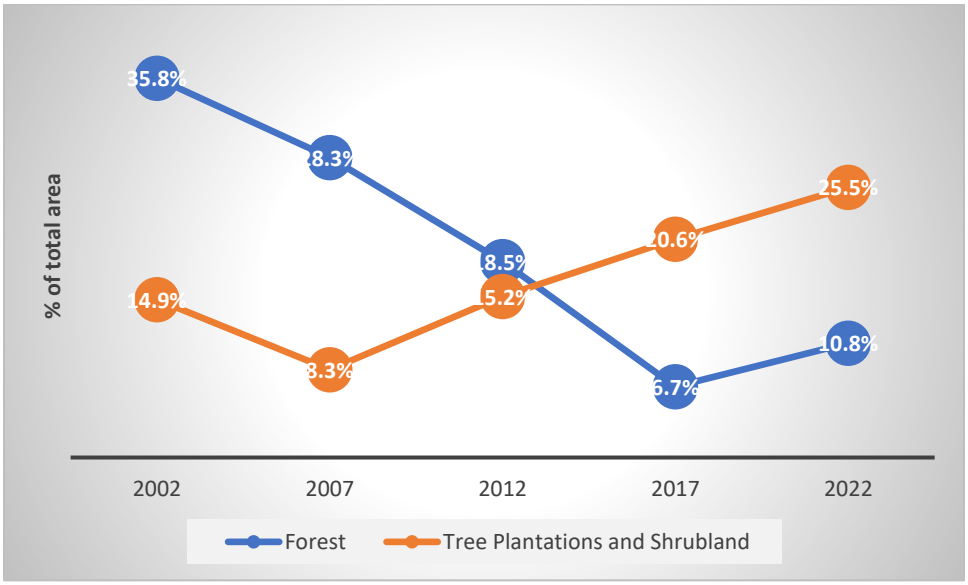
Figure 7: Landuse and Land Cover (LULC) in Kasese Municipality

Much (25%) of the land in Kasese Municipality is under tree plantation and shrubland, occupying over 3,969hectares of land. Results of the Geo-spatial analysis indicated a 70% increase in tree planting efforts between 2002 to 2022. The total area under tree plantation increased from 2335.05hectares (representing 15% of the total area) to 3969.34hectares (representing 25.5% of the total area). The increased climatic shocks and stresses like flooding of River Nyamwaba has greatly contributed to the tree growing efforts in the Municipality from both government and non-government actors like Non-Governmental Organizations and private sector players. The major trees planted are eucalyptus and Pine with very minimal uptake of indigenous trees. Worldwide Fund for Nature and Eco-trust are the major actors along the tree growing value chain.

On the other hand, the total area under forest cover reduced from 5,579.7hectares in 2002 to 1690.25 in 2022, representing a 70% decrease. Results of the Focus Group Discussions indicated that deforestation rate is higher on the mountain slopes which has resulted in to erosion and soil infertility. The major attributions to this rapid reduction in forest cover include population pressure which increased human settlement, excessive demand for wood and other forest products, and expansion of agricultural fields.

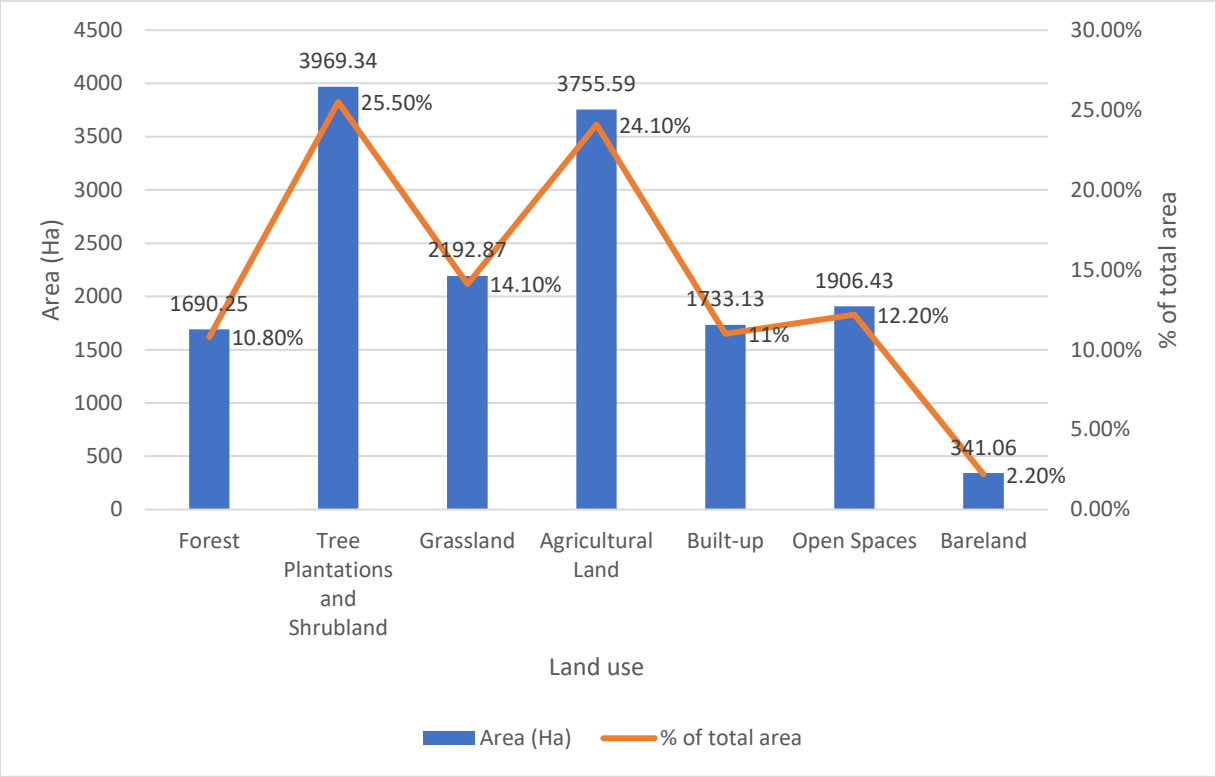
However, in the past five years, the municipality has registered some increase in the forest cover from 1047.85hecares to 1690.25hecrares representing a 61% increase. Though promising, the rate of increase is still lower than the 70% rate at which the forest cover decreased between 2002 to 2017. Therefore, more efforts are required to reverse the forest cover reduction rate.

Figure 8: Proportionality in the trends of Forest cover and Tree plantation



Agriculture is the second landuse type in Kasese Municipality. Results of the geospatial analysis indicated that 3,755.59hectares of land is under agricultural production representing over 24% of the total land cover. However, agriculture is mainly practiced on subsistence level with the average household size of agricultural field being 1.5acres. results of the Focus Group Discussions indicated that small-scale farming is mainly attributed to the tenure system with a few people having disposable income to access agricultural land while those with plenty of land complain of soil infertility caused mainly by flooding and erosion. The main crops grown include Matooke, cassava, Soya, beans and maize, and coffee. Animal rearing is also practiced at a small scale and the major animals reared include; Goats, cows, and pigs. Animals are mainly reared on free range system which consequently affects crop production as crops are destroyed by animals.
Other land uses include; Grassland covering 14% of the total area, open spaces covering 12%, built-up area covering 11%, and bareland covering 2.2%. The figure below illustrates the area coverage of the various land uses in Kasese Municipality.

Figure 9: Land use and Land Cover (LULC) in Kasese Municipality



3.3 Land Use Change

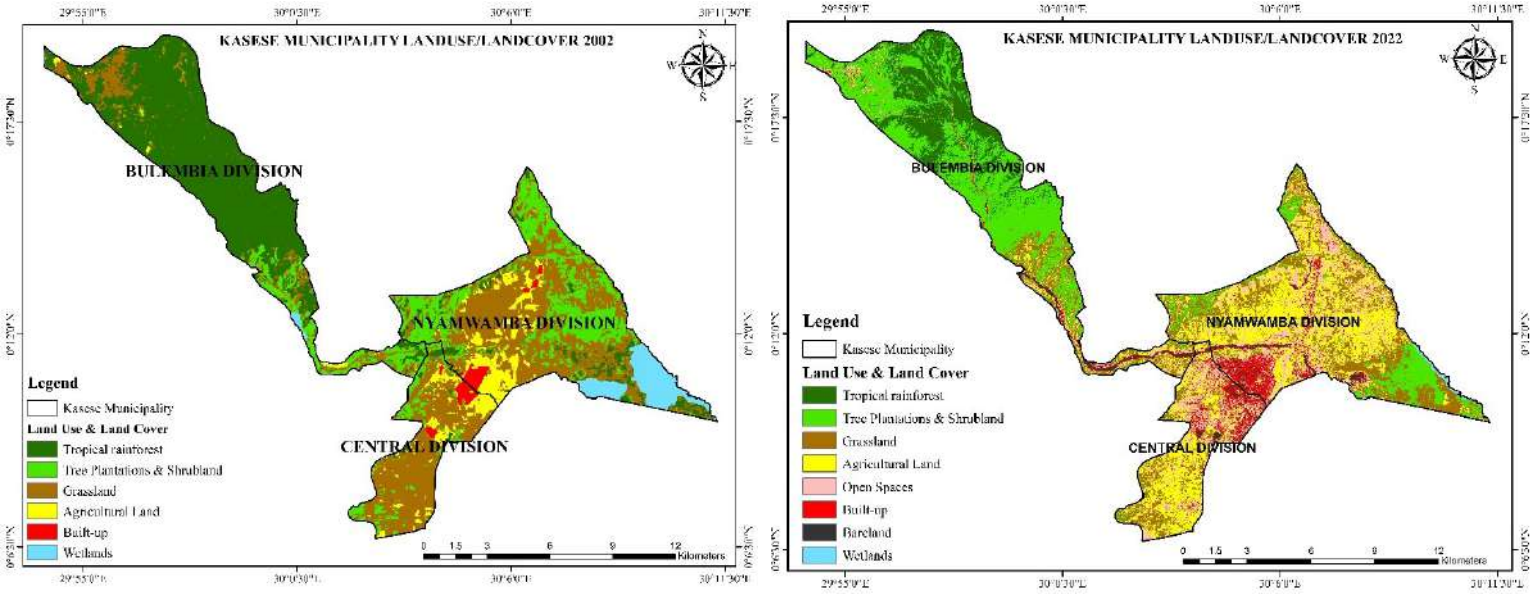
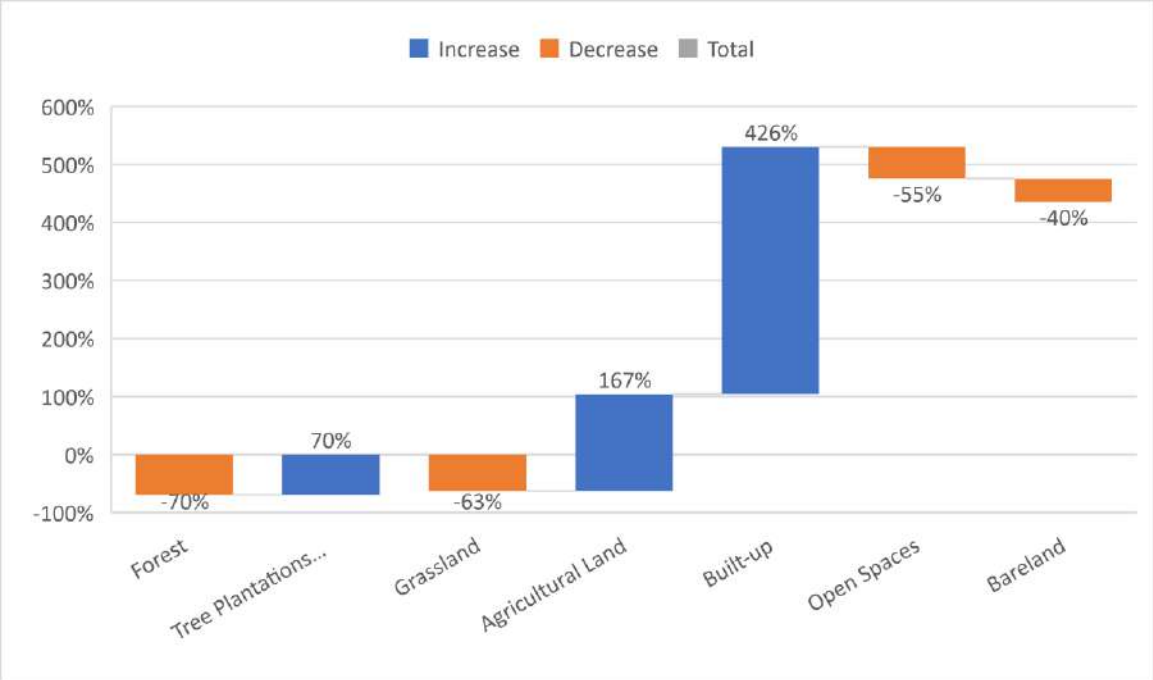


Figure 10: Land Use and Land Cover scenario 2002 - 2022

Figure 11: Land Use Land Cover (LULC) change



Results of the geo-spatial analysis indicated that proportion of land under built up area registered the highest increase of 426% between 2002 and 2022, followed by agricultural land at 167%, and tree plantation at 70%. The increase in built-up area and agricultural land is attributed to rapid population increase that increased settlement and opening of more land for agriculture. This has greatly affected forest cover which registered a 70% decrease, followed by grassland at 63% decrease, open space at 55% decrease and bare land at 40%. The reduction in forest cover is one of the drivers of flooding in the downstream areas and erosion in the upstream.

3.4 Climate Change in Kasese Municipality

In recent years the adverse impacts of climate change on the natural environment and the multiple threats it poses to the human environment, have become increasingly evident and these are likely to increase in the near future, with more people likely to be at risk. For instance, in the last decade, at least three major flood disasters have ravaged Kasese municipality (IFRC, 2013[2]; KDLG, 2020[3]) and left a trail of destruction. According to the focus group discussion, one of the major drivers of vulnerability to floods is high levels of poverty. Key informants explained that poverty associated with lack of resources and low-income levels had influenced people to live and work in areas exposed to potential hazards, while they had less or no resources to cope with when a flood disaster strikes. They further explained that, due to the high levels of poverty in the community, people were not even in a position to access better health services, and enough food to support their

[2] IFRC. (2013). Disaster relief emergency fund (DREF) Uganda: Kasese Floods, The International Federation of Red Cross and Red Crescent, Uganda.
[3] KDLG. (2020). Brief Report on the Impact of Floods that Ravaged Kasese District On the 20th of May 2020. Kasese District Local Government Disaster Management Committee.

families. This is consistent with studies that revealed, that poor populations are less resilient to stress and disasters due to a lack of capacity and resources to cope with and recover from disasters (Mahanta and Das, 2017; Oluoko-Odingo, 2011). There is a consensus in the literature that low income households suffer greater losses from floods than households with high income (Mucherera and Mavhura, 2020).

Low levels of education are another driver of vulnerability to flood hazards in Kasese municipality, however, it was ranked moderate. Results of the Focus Group Discussions indicated, that highly educated households and household heads were better aware of the flood risk. Educated household heads have fair knowledge and have access to information that influences their decisions towards mitigation, preparedness, and response to flood hazards. Educated household heads are found in less flood risk areas and can capably involve flood-proof designs and other measures in their buildings. This is consistent with a study in which it was found that better education in the population had clear short-term effects on reducing vulnerability through awareness about crucial information, more efficient responses to alerts, and better post-disaster recuperation (Pichler and Striessnig, 2013). Education enhances individual resilience in dealing with disaster risks.

Lack of knowledge and information on disaster risk management. There is a growing need for accurate and reliable information concerning flood risk and other natural hazards as an aid to political and economic decision-making. Results of the Focus Group Discussion indicated that the lack of information especially on mitigation, preparedness, response, and recovery before, during and aftermath of flood disasters is critical and hampers efforts towards flood risk management. They mentioned that the government has not done enough to train, educate and sensitize people on how to manage flood risk despite the increased frequency of flood disasters in their area.

Lack of adequate land for settlement and farming. Results of the Focus Group Discussion indicated that limited access to land especially for farming and settlement was a critical driver of vulnerability to flood hazards in their community. They indicated that the population of the municipality has been rapidly increasing since 2008. According to UBOS (2017), the municipality had 25,497 households with an average household size of 5.3 persons and is projected to increase to 31,743 households by 2024 with its associated negative impacts on land management. The low land acreage per capita has led to fragmentation of land leading to low marginal productivity on farm per household. They explained that people have been settling and farming in flood plains near the Nyamwamba river and other rivers, where they are highly exposed to river and flash flooding due to the increased urbanization.

Lack of early warning system. An early warning system (EWS) helps to reduce economic losses and mitigate the number of injuries or deaths from a disaster, by providing information that allows individuals and communities to protect their lives and property. An early warning system empowers people to act before a disaster. In Kasese municipality, the key informants indicated that there was no early warning system in place, and the focus group indicated this was a very high factor or driver of vulnerability of the households to flood hazards. They indicated that the continued lack of an early warning system in place to timely alert communities and people

significantly affects households' capacity to reduce damages to movable properties in case of an imminent danger especially floods. They attributed the continuous loss of properties during the flood disasters to the lack of early warning to people by the government since the floods come abruptly and do not allow people to take their properties to safer places.
However, a poor early flood warning system is a key obstacle in mitigating households to floods and therefore, the need for access to quality weather forecasting and early warning system (Shah et al., 2018).

3.5 Forestry Governance challenges in Uganda

Uganda possesses very good forest policies, laws, and strategic plans, but its reputation for translating these institutional frameworks into actions that can transform the sector remains wanting. Between 2000 and 2004, the country undertook forest sector reforms with a view to creating a positive, effective, and sustainable policy and institutional framework for the forest sector, for purposes of increasing economic and environmental benefits from forests and trees, particularly for the poor and vulnerable. However, over 15 years down the road, stakeholders are dissatisfied with the results of forest sector reforms.

Kasese Municipality being located over 400kms away from the centre with fragile ecosystems is more affected with these forest bottlenecks. The municipality is faced with various challenges including: limited transparency and accountability whereby decision makers and implementers rarely account for their actions. Openness and access to forest information is regarded as a favor and not a right. The sector is also characterized by inefficiency and ineffectiveness in enforcement of policies, laws and administrative decisions, poor funding, poor rationalization and utilization of financial resources, poor mechanisms for benefit sharing, and poor coordination within mandated government institutions as exemplified by the issuance of land titles in gazetted forest reserves. The section below presents the major challenges affecting the forest sector in Kasese Municipality.

Inadequate institutional coordination: Although the Uganda National Forestry and Tree Planting Act (2003) is in place and provides for coordination structures, the sector still faces challenges of institutional coordination which presents implementation and enforcement challenges. For example, control of reserved trees (such as *Milicia excelsa)* that grow on farmers' land, provision of extension services to tree farmers, protectionof fragile ecosystems on private land and commercial harvesting of forest produced from private forests, is by law the responsibility of the District Forest Officers that are inadequately equipped to execute their mandate. As a result, the municipality and other various agencies and institutions like the National Forestry Authority, the Uganda Police, the National Environment Management Authority and Operation Wealth Creation have tried to intervene in some aspects without proper coordination to the detriment of the sector.

Inadequate extension staff. Currently the Municipality lacks a Forest Officer. The mandate of forest management is currently vested in the environment office which is also understaffed, yet the supervision and provision of technical guidance to the management of LFRs, private forests and community forests is under their mandate.

Lack of efficiency and effectiveness in the sector. This is mainly due to the use of rudimentary techniques in the processing of timber/ wood leads to wastage along the timber conversion value chain. This is mainly due to limited capital and knowledge to adopt efficient wood conversion techniques. Besides, there is un-regulated timber marketing the Municipality. Just like other parts of the Country Uganda, the timber market in the Municipality is largely unregulated. This is a challenge to potential commercial tree growers because everyone invests resources in anticipation of profits. When the timber market gets flooded with illegally soured and processed timber, it affects the prices and this is a discouragement to the intending tree growers at a commercial level. Excessive demand for forest products such as timber, firewood, poles, among others has greatly reduced forest cover in the district. This demand is not being reciprocated with an equivalent effort to establish additional forests or trees. This has resulted into over exploitation of the current wood stocks. This therefore calls for maximum efforts to mitigate the unregulated cutting of trees.

3.6 SWOT Analysis

This section analyses the internal strength of the Municipality to effectively implement the objectives of this plan. It also analyses the weaknesses that might affect the achievement and how they can be mitigated. There is also analysis of the opportunities that can be tapped into such as availability of willing development partners to support the municipality. Lastly, it analyses the threats to the implementation of the Management plan.

Figure 12: SWOT Analysis

Strength	Weakness
❖ Presence of Local Government units to support in implementation of activities. ❖ Increased community awareness concerning tree planting ❖ Approved Responsible Timber Procurement guideline by Kasese District. These can as well be utilized by the Municipality.	❖ Inadequate staff within the sub-sector to carryout forest extension services and regulation of illegal forest practices ❖ Inadequate transport to enhance forest extension services ❖ Uncertified source of seed by private tree nursery operators ❖ Inadequate capacity building opportunities ❖ Inadequate technology to access spatial data about forest cover in the municipality ❖ Lack of equipment for updating forest data ❖ Limited funding to implement the planned activities

Opportunity	Threat
❖ Availability of the District Forest Officer and other Forest staff at the District can be explored to support the Municipality. ❖ Presence of NGOs supporting Environmental protection initiatives ❖ Sufficient demand for forest products will trigger Payment for Ecosystem Services. ❖ There is a Cooperative in the industrial area that has already setup a briquette machine ❖ Eco-friendly termite management techniques have been piloted in Kyegegwa District. Exposure visits can be explored to replicate the best practices	❖ Straw animals might destroy the planted trees ❖ Bushfires may affect the survival rates of the planted trees ❖ Increased human settlement and urbanization

CHAPTER FOUR: PLAN OF ACTION

Tree planting will focus on the fragile areas like bare hills, River banks, mountain roads, green belts, and over cultivated farmlands. This will also include forest reserves.

This section therefore presents the Forestry Management Result Framework for the proposed Forest management interventions in Kasese Municipality.

4.1 Vision:

To Increase sustainable utilization and management of forest resources for improved livelihood and ecological enrichment.

4.2 Strategic Objectives

1. Increased vegetation cover and afforestation efforts for ecosystem enrichment
2. Sustainable utilization of forest and non-forest products promoted
3. Increased sustainable production & use of energy efficient cooking technologies.
4. Strengthened legal and institutional frameworks on sustainable forest management

Table 2: Forestry Management Plan

Strategic Objectives	Strategies	Target	Performance Indicator	Existing Opportunity
	Establish Central Tree Nurseries at all the 3 Divisions to raise both exotic and indigenous tree species	3 nurseries	3 Central Tree Nurseries at Division level with total production capacity of 300,000 tree seedlings per season established.	Presence of small-scale private tree operators
	Conduct community-wide awareness and sensitization sessions on the benefits of tree planting and forest resources	12 sessions	12 community awareness sessions on tree planting conducted.	Existence of NGOs already involved in community sensitizations
	Plant and maintain assorted indigenous tree seedlings in the buffer zones of fragile ecosystems	300,000 seedlings	300,000 indigenous tree species with at least 75% survival rate planted in the buffer zones of fragile ecosystems	Presence of small-scale private tree operators
			600 hectares of forest land restored with integrated soil and water conservation measures.	
			Adoption of Soil and Water conservation increased by 20%	

Strategic Objectives	Strategies	Target	Performance Indicator	Existing Opportunity
	Promote avenue planting along major roads and institutions in the Municipality	20kms	20kms of roads beautified with ornamental trees like Ashok	Existence of private nursery operators to provide ornamental trees
	Promote Integrated Pest Management (IPM) practices like the eco-friendly termite management techniques	Trainings	Number of farmers trained in IPM techniques	Eco-friendly termites management techniques have been piloted in Kyegegwa District
	Acquire and utilize efficient sawlog machine	3 portable sawmills 1 briquette making machine		
	Train 3 Timber Producers Association on the operation of the efficient saw log machine	3 Associations (1 per Division)		
	Acquire and utilize efficient charcoal production technologies	100 Casamance kilns	Charcoal production efficiency increased by 30% by 2027.	Existence of local fabricators
	Train 6 charcoal producer groups on the Casamance kiln	6 groups	Adoption of efficient charcoal production techniques increased by 70% by 2032	Increased restrictions on charcoal production
	Train 3 Community groups in apiculture	3 groups		
	Support 3 Community Groups with 300 beehives	300 beehives		
	Train and support 12 youth and women groups in briquette production	12 groups	Reliance on fuelwood reduced by 30% by 2032	Local knowledge exists on briquette production Cooperative in the industrial area that has already setup a briquette machine.

Strategic Objectives	Strategies	Target	Performance Indicator	Existing Opportunity
	Conduct Social behavioral change campaigns to promote use of efficient forest products	100 Radio talkshows 1000 spot messages 50 road drive sessions	70% of the community members reached with assorted SBCC messaging	Local radio stations
	Improve forest infrastructure (extraction roads, storage facilities)	3 improved stores 10kms of roads		
	Mainstream responsible timber procurement in the municipality	All municipal council bid documents and construction works		
	Mobilize and sensitize tree growers and dealers in forest produce about the benefits of adopting efficient products	10 awareness sessions	Adoption of tree growing activities by local community members increased by 20% by 2032	There is demand for tree seedlings
	Enroll, train, support 30 youth and women groups on varieties of energy saving stoves technologies.	30 groups		
	Conduct community-wide awareness sessions on energy saving stoves	12 sensitization sessions		
	Promote market linkages between the women and youth groups and other large-scale energy dealers.	12 linkage meetings		
	Promote linkages between energy saving stoves suppliers and financial institutions to boost production.	12 linkage meetings		
	Implement a revolving fund to increase access to energy saving stoves by the end-mile user.	10,000 Households		

Strategic Objectives	Strategies	Target	Performance Indicator	Existing Opportunity
	Conduct annual energy fairs to increase adoption of energy saving stoves	10 fairs		
	Conduct social behavioral change campaigns to increase adoption of energy saving stoves	100 Radio talkshows 1000 spot messages 50 road drive sessions		
	Promote adoption of biogas energy through construction of institutional biogas digesters	12 institutions		
	Conduct community sensitizations on biogas energy	50 Radio talkshows 100 spot messages		
	Train youth on construction of biogas digestors	12 institutions		
	Provide extension services to tree growers	1 staff	Extension services to tree growers increased by 20% by 2032	There is an Environment Officer at the Municipality
	Form and strengthen forestry and wood user's association	1 association	Coordination of forest and wood value chains improved	Growing private sector interest in the wood value chain
	Build capacity of forestry and Natural resources staff in sustainable forest management policies	5 staff	Technical capacity of 05 Municipal Natural Resources staff strengthened	There is an Environment Officer at the Municipality
	Identify and federate charcoal producers into Charcoal producers Association	3 associations	Illegal charcoal production reduced by 50% by 2032	Existing restrictions on charcoal production
	Equip the Environment officer with relevant tools like GPS, drone, and other logistical requirements for effective implementation of the plan	Assorted items		

Strategic Objectives	Strategies	Target	Performance Indicator	Existing Opportunity
	Conduct quarterly stakeholder coordination meetings for all forest actors to harmonize and coordinate the various forest management interventions	Quarterly		
	Formulate an ordinance at the municipality and ordinances at the Division to ensure sustainable management of forest resources	1 ordinance 3 bye-laws		
	Popularize the ordinances and bye-laws on sustainable forest management	50 radio-talkshows 100 spot messages 1000 IEC materials		
	Prepare management plans for Local Forest Reserves and private forests	2 management plans		
	Develop and disseminate best practice guidelines	1,000 Fliers, 500 posters, 30 Radio shows, 3 Documentaries 50 Music, dance and drama shows		
	Implement best practices in forestry management and utilization (silviculture, harvesting, etc)	5 demonstration plots 5 field days		
	Sign MOUs with parties planting trees in local forest reserves	TBD	Atleast 90% of actors planting trees in LFRs have MOUs with the Municipality	Some actors already have MOUs with the municipality
	Develop and populate a database of private forest owners	1 database		

Strategic Objectives	Strategies	Target	Performance Indicator	Existing Opportunity
	Register all private forests in the municipality	1 register		

4.3 URBAN GREENING STRATEGY

Tree growing will focus on the fragile areas like bare hills, River banks, mountain roads, green belts, avenues, institutions, and over cultivated farmlands.

A total of 1393 acres of Open spaces for tree growing were identified and profiled with Nyamwamba Division taking the biggest portion of 96% of the available open space earmarked for tree growing, while Central and Bulembia Divisions each had 2%.

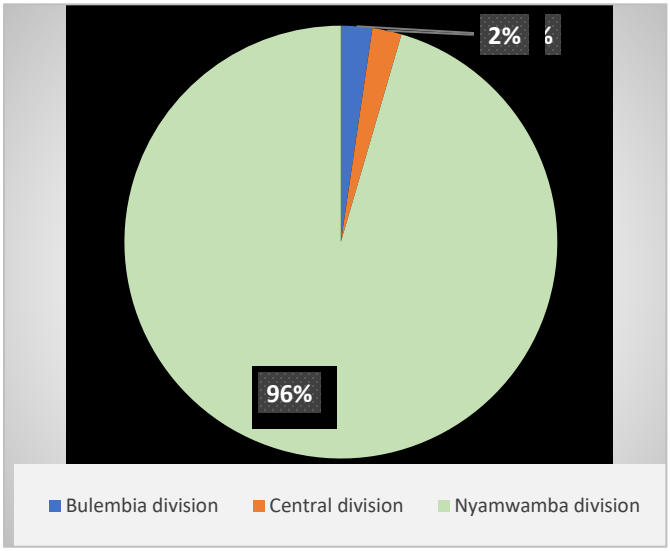


Figure 13: Open Space per Division

79% of the available open space for tree planting is on government land, 20% is freehold, and 1% is on communal land. This land tenure system is very conducive for tree growing more especially indigenous trees which are highly desirable by regulators (government), while the private owned land is conducive for woodlots. The tragedy of the commons associated with communal land will not apply to the tree growing initiative since only 1% of the land is communally owned. Therefore, indigenous trees will be more targeted for this Forestry Management Plan. The presence of River Nyamwamba in Nyamwamba Division is the major factor to the availability of land for tree planting. This is associated with the need to restore the banks of the River and the recent displacement of people from the River banks due to flooding. Therefore, much of the tree growing effort will be along River Nyamwamba.

Other government institutions in charge of government land are schools whose interest in Greenbelts is for establishing play grounds, resting places, food forests, forest for study purposes, woodlots for firewood, and demarcating the school boundaries.

Various Innovative approaches shall be undertaken to promote tree growing in the different areas. The section below details the various tree planting approaches to be considered in line with the available open spaces.

4.3.1 Tree growing on Bare hills.

Indigenous trees like Albizia Coriaria, Melia (Giant Lira), *Merkhamia Lutea* will be planted on the bare hills. These will be incorporated with Soil and Water Conservation structures such as Terraces and planting basins. Farmyard manure will be used to improve on the soil profile. Terraces will be stabilised with calliandra or *Sesbania Sesban*. A spacing of 3meters by 3meters will be maintained for these trees. Where the slope of the hill exceeds 2%, trees will be planted in a triangular mode for maximum utilisation of surface water.

4.3.2 Wetlands and River Banks

The major River within the Municipality is River Nyamwamba whose degradation has resulted in to series of flooding over the past decade. Indigenous trees like Acacia species, Melia will be planted along the River and within the catchment to stabilise the soil and prevent collapse of the banks. These will be planted on both sides of the River. Soil and Water Conservation structures like Gabion boxes will be used to stabilise the banks. Fast growing and creeping grass will be planted at the edges of the River to quickly stabilise the banks. Apiculture will be integrated in the buffer of the River to provide short term livelihood to the Management committee and to scare the potential encroachers.

4.3.3 Green belts

Woodlots comprising of indigenous trees like Giant Lira, Maesopsis Emini; exotic trees like Pine and fruit trees will be established in areas designated as Green belts on both private and government land. Private owners are mostly interested in exotic trees like Pine and Eucalyptus, while indigenous trees like Giant Lira, Albizia, Mahogany, Maeospis, among others will be planted on government land. For the privately-owned woodlots, the Municipality will work with private companies and other actors to promote Payment for Ecosystem Services (PES) where the private actors will be able to generate funds to continuously manage their woodlots. Besides, short-term income generating activities like Apiary will be integrated in the woodlots to generate income to improve the livelihoods for the woodlot owners and support maintenance of the woodlots.

Woodlot farmers will also be trained on Taungya system, a type of agroforestry system where the temporary food crops and permanent forest trees are grown simultaneously with the ultimate aim of developing a well-established forest in future.

4.3.4 Avenue planting

Figure 14: Ashok trees planted along a road

Within the town, ornamental trees such as Ashok, and other woody trees like, Grevillea, Maesopsis will be planted along the major roads to beautify the town and protect the roads from erosion. The spacing varies with the tree species. On average a spacing of 15meters on either side of the road is recommended. At least 20kms of roads within the town will be planted with trees. Other than beautifying the town, trees along avenues will also contribute to the micro-climate of the Municipality, provide shade, and prevent encroachment of the road reserves.

4.3.5 Cultivated Farmlands

Agroforestry and Farmer Managed Natural Regeneration (FMNR) will be promoted in Farmlands. For agroforestry practices trees such as Maesopsis, Grevillea, among others will be integrated in croplands and alongside the boundaries of the gardens. Trees are critical in nutrient recycling, stabilise the soil, and protect the garden against erosion. Therefore, massive sensitization will be undertaken to create awareness amongst farmers on the need to adopt agroforestry practices.

FMNR involves the systematic regeneration and management of trees and shrubs from tree stumps and roots. FMNR has potential to increase food and timber production, and enhance resilience to climate extremes using low-cost techniques. Therefore, farmers will be trained on maintenance and conservation of tree stands in farmlands, facilitating coppicing.

4.3.6 Tree planting and Household level

Households with small pieces of land will plant trees such as Maesopsis and Grevillea along their plot boundaries, mixed with fruit trees like Ovacado within the compound. Trees along the boundaries will help to demarcate the plots, protect the house against strong winds, while fruit trees will provide fruits and shade to the household.

4.3.7 Tree planting at institutional Level

Institutions such as schools, churches, hospitals, among others will be targeted for growing mostly indigenous trees like Acacia, Melia, Albizia, among others. These will provide shade, modify the micro-climate, provide fuelwood, protect institutional land against encroachment, and demarcate the boundaries of these institutions.

CHAPTER FIVE: FINANCING FRAMEWORKS AND STRATEGY

This section therefore presents a brief analysis of the funding requirements to finance the priorities laid down in the plan for the next ten-year period.

5.1 Financing sources

The Municipality proposes to fund the implementation of this FMP using a variety of approaches. These will involve use of taxation and nontax locally collected revenues, grants from Central Government, donations from development partners, private investment resources and loans where possible. The major sources of financing the plan have traditionally remained central government transfers, external financing and locally raised revenues therefore, it is also clear that concerted efforts are required to mobilize finances to achieve the objectives of the plan.

5.2 Costed Workplan

Table 3: Forestry Management Workplans and Budgets

Strategic Objectives	Strategies	Target	Responsible persons	Budget
	Establish Central tree nurseries to raise both exotic and indigenous tree species	3 nurseries	Municipality	100,000,000
	Conduct community-wide awareness and sensitization sessions on the benefits of tree planting and forest resources	12 sessions	Municipality, Civil Society Organizations Cultural and religious leaders Local leaders	24,000,000
	Plant and maintain assorted indigenous tree seedlings in the buffer zones of fragile ecosystems	300,000 seedlings	Municipality, Civil Society Organizations Private sector	600,000,000
	Restore degraded forest land with soil and water conservation measures.	600 hectares	Municipality Civil Society Organizations	12,000,000
	Promote avenue planting along major roads and institutions in the Municipality	20km	Municipality NGOs	50,000,000
	Acquire and utilize efficient sawlog machine	3 portable sawmills	Private sector Municipality NGOs	500,000,000

Strategic Objectives	Strategies	Target	Responsible persons	Budget
and non-forest products promoted		1 briquette making machine		
	Train 3 Timber Dealers Associations on the operation of the efficient saw log machine	3 Associations	Municipality	12,000,000
	Acquire and utilize efficient charcoal production technologies	100 Casamance kilns	Private sector Municipality NGOs	50,000,000
	Train 6 charcoal producer groups on the Casamance kiln	6 groups	Municipality	18,000,000
	Train 3 Community groups in apiculture	3 Groups groups	Municipality NGOs	18,000,000
	Support 3 Community Groups with 300 beehives	300 beehives	Private sector Municipality NGOs	30,000,000
	Train and support 12 youth and women groups in briquette production	12 groups	Private sector Municipality NGOs	18,000,000
	Conduct Social behavioral change campaigns to promote use of efficient forest products	100 Radio talk shows 1000 spot messages 50 road drive sessions	Municipality NGOs	18,000,000
	Improve forest infrastructure (extraction roads, storage facilities)	3 improved stores 10kms of roads	Municipality	1,000,000,000
	Mainstream responsible timber procurement in the municipality	All municipal council bid documents and construction works	Municipality	0

Strategic Objectives	Strategies	Target	Responsible persons	Budget
	Mobilize and sensitize tree growers and dealers in forest produce about the benefits of adopting efficient products	10 awareness sessions	Municipality	10,000,000
	Enroll, train, support 30 youth and women groups on varieties of energy saving stoves technologies.	30 groups	Private sector NGOs Municipality	30,000,000
	Conduct community-wide awareness sessions on energy saving stoves	12 sensitization sessions	NGOs Municipality	24,000,000
	Promote market linkages between the women and youth groups and other large-scale energy dealers.	12 linkage meetings	Private sector NGOs Municipality	12,000,000
	Promote linkages between energy saving stoves suppliers and financial institutions to boost production.	12 linkage meetings	Private sector NGOs Municipality	12,000,000
	Implement a revolving fund to increase access to energy saving stoves by the end-mile user.	10,000 Households	Private sector NGOs Municipality	500,000,000
	Conduct annual energy fairs to increase adoption of energy saving stoves	10 fairs	Private sector Municipality	100,000,000
	Conduct social behavioral change campaigns to increase adoption of energy saving stoves	100 Radio talkshows 1000 spot messages 50 road drive sessions	Municipality NGOs	18,000,000
	Promote adoption of biogas energy through construction of institutional biogas digesters	12 institutions	Municipality Private sector NGOs	600,000,000

Strategic Objectives	Strategies	Target	Responsible persons	Budget
	Conduct community sensitizations on biogas energy	50 Radio talkshows 100 spot messages	Municipality NGOs	18,000,000
	Train youth on construction of biogas digestors	12 institutions	Municipality Private sector NGOs	18,000,000
	Provide extension services to tree growers	100	Municipality	12,000,0000
	Form and strengthen forestry and wood users association	1 association	Municipality Private sector	12,000,000
	Build capacity of forest and Natural resources staff in sustainable forest management policies	5 staff	Municipality	15,000,000
	Identify and federate charcoal producers into Charcoal producers Association	3 associations	Municipality	9,000,000
	Equip the Environment officer with relevant tools like GPS, drone, and other logistical requirements for effective implementation of the plan	Assorted items	Municipality	300,000,000
	Conduct quarterly stakeholder coordination meetings for all forest actors to harmonize and coordinate the various forest management interventions	Quarterly	Municipality	30,000,0000
	Formulate an ordinance at the municipality and ordinances at the Division to ensure sustainable	1 ordinance 3 bye-laws	Municipality	15,000,000

Strategic Objectives	Strategies	Target	Responsible persons	Budget
	management of forest resources			
	Popularize the ordinances and bye-laws on sustainable forest management	50 radio-talkshows 100 spot messages 1000 IEC materials	Municipality NGOs	20,000,000
	Prepare management plans for Local Forest Reserves and private forests	2 management plans	NFA Municipality	20,000,000
	Develop and disseminate best practice guidelines	1,000 Fliers 500 posters 30 Radio talkshows 3 Documentaries 50 Music, dance and drama shows	NFA Municipality NGOs	50,000,000
	Implement best practices in forest management and utilization (silviculture, harvesting, etc)	5 demonstration plots 5 field days	Municipality NFA NGOs	100,000,000
	Sign MOUs with parties planting trees in local forest reserves	TBD	Private sector Municipality NFA	10,000,000
	Develop and populate a database of private forest owners	1 database	Municipality	10,000,000
	Register all private forests in the municipality	1 register	Municipality	10,000,000

CHAPTER SIX: IMPLEMENTATION OF THE PLAN

This chapter looks at the implementation and coordination strategy of the FMP, the institutional arrangements including partnerships within the Municipality and District levels that will be explored and the pre-requisite for successful implementation of FMP.

6.1 Implementation and Coordination Strategy

The implementation strategy to be deployed in the execution of this plan will be entirely the use of the existing Municipal/ Local Government institutions, structures, systems, procedures and regulations, instruments (Budgets, BFPs work plans etc.), synergies among stakeholders (including non-state actors) will improve efficiency and effectiveness in the implementation and coordination of the Forestry Management Plan.

The Forestry Management Plan will employ public private partnership that will involve government and private sector led approaches in its implementation. PPPs will enable the public sector to harness the expertise and efficiencies that the private sector can bring to the delivery of certain forest protection outcomes and services traditionally procured and delivered by the public sector. In addition, the FMP will be implemented in line with the overall Forestry and Tree planting policy and Forest Land Restoration guidelines.

6.2 Kasese Municipal Forestry Management Plan Institutional Arrangements

As noted earlier, the implementation of FMP will be undertaken within the existing local government structures, institutional framework of Government, and synergies with other non-state actors operating in the District. The Municipality will play a leading role while supported by other development actors. The table below indicates the roles to be played by each stakeholder in the implementation of the plan.

Table 4: Institutional roles in Forestry Management Plan implementation

Institution	Role
Kasese Municipality	• Coordinate implementation of the FMP at the Municipal level. • Ensure FMP priorities are mainstreamed in the Municipal Development Plan • Support capacity building for FMP implementation
National Forestry Authority	• Coordinate sustainable Management of Central Forest Reserves in the District • Provide technical oversight to the Municipality • Support in the training and certification of private Nursery Operators in the Municipality
Uganda Wildlife Authority	• Support the Municiplaity in the management of Forestry resources around Rwenzori Mountains National Park

Ministry of Water and Environment	• Provide the overall framework for sustainable management of Natural Resources including Forest Resources
MoFPED	• Mobilize and allocate resources for implementation of Municipality priorities. • Issue Budget Call Circulars to the Municipality in preparation for annual budgeting. • Ensure timely release of funds for implementation of the Municipality priorities. • Ensure accountability for resources disbursed • Ensure efficient and effective procurement systems • Ensure direct linkage between planning, budgeting and resource allocation during budgeting and implementation
Lower Local Government/ Divisions	• Implement the FMP in their respective Divisions • Support the implementation of Municipal FMP priorities • Mobilize local revenue to finance FMP priorities.
Private sector & other Non-state actors	• Partner with government through PPPs, and through other development interventions for effective implementation of the FMP in line with set priorities. • Align partnership strategies to the FMP and promote the use of government systems and procedures. • Promote accountability to Government and the citizens of Uganda in the use of Forest Resources. • Enhance efficiency and effectiveness in the implementation of FMPI • Support the Municipality through financial, technical and other forms of assistance that lead to the effective implementation of FMP.

6.3 Kasese Municipality FMP Integration and Partnership Arrangements

One of the key challenges affecting effective implementation of Forestry management priorities is integration and partnership arrangements with the NGOs, CSOs and the private sector. There is poor coordination in the implementation of forest management priorities with Divisions, NGOs and the CSOs. Although this plan will be implemented using both the public financing and public private partnership, the latter is still in an exploratory phase and is not envisaged to contribute immensely to the financing agreement of the plan. The key financing and implementing partnerships of the plan will be between government, districts and development partners. FMP priorities and unfunded activities will be submitted to the Municipal council for incorporation in the Municipal Development Plan.

Deliberate efforts have been made to link the FMP priorities with the Environment sector priorities. The Plan strives to achieve national targets on key Forest Restoration indicators.

To ensure integration, development plans of NGOs and CSOs will be discussed and reviewed by the Municipality Technical Planning Committee. This will be technically appraised by the planning unit staff. This arrangement must be adhered to by the office of the Town Clerk before the signing of any MoU. All Natural Resources Development partners during the consultative process of their proposed interventions will obtain the copy of the FMP so as to align their priorities to the plan. This will be done in close collaboration with the Municipality Environment Officer. Furthermore, Divisions will sign implementing MoUs with the implementing partners at their localities. This is to ensure sector compliance at implementation level and strengthen partnership at the lowest level of implementation. The MoUs to be signed at division level will be stand in agreement for the main MoU with limited or minor binding deviations from the main MoU. The Division Environment Focal Persons will ensure that all development partners operating in their Divisions sign and comply with MoU. To this effect, development partners will also attend Division sector performance review forums where they can communicate their performance.

6.4 Pre-Requisites for Successful Implementation of Kasese Municipality FMP

For successful implementation of this FMP, the Municipality intends to promote ownership of the plan by all stakeholders through the following mechanisms:

- Exploring a right based, and participatory approaches in planning to cater for views of all group categories in communities including the marginalized groups such as PLWHIV, PWDs, elderly, OVC, women, youth, and child headed households among others.
- Behavior and mind set change amongst the community. The Municipality will capitalize on Social Behavioral Community Change provisions of the FMP to improve the attitude of the community towards sustainable Forest Management. The communities will be mobilized for behavior and mindset change in Forest Management. The youth's ability to create bankable Nature-based Enterprises will be strengthened to mitigate the high dependency on forest resources. All stakeholders of forest protection will have to be mobilized to make their contribution in order to improve the forest restoration efforts in the municipality.
- A functional institutional framework is vital for the effective implementation of the plan. The coordination structures and Councils will be fully functional to properly manage and coordinate the implementation of the plan. The council and its standing committees and the executive committees will closely monitor and follow implementation.
- Adequate funding and financing for the priorities enlisted in the plan. The Municipality will annually allocated resources to the priorities in the plan. The Municipality will engage on lobby and advocacy as a means of resource mobilization from Government and development partners existing in the Municipality.
- Overall support for the plan. The success of implementing this plan will depend on ownership and support from across the different stakeholders. Therefore, the plan will be disseminated to various stakeholders. Political commitment is required at all levels to enlist support for implementing this plan.

- Transparency and accountability will be very critical for the successful implementation of the plan. Adherence and compliance to set rules and guidelines will have to be strictly followed by all the Municipality structures.
- Effective monitoring and evaluation will be required for the successful implementation of this plan. All the stakeholders charged with the responsibility of monitoring implementation will be expected to actively perform their tasks especially the political oversight function by councilors at all levels. The Municipality will further enhance joint monitoring, reviews, and evaluations of the FMP so as to strengthen ownership of the plan and achievement of its intended targets, goal, and objectives.
- Empowering the private sector. The Municipality is aware that effective and sustainable forest management is private sector driven. The government and development partners only facilitate business through provision of policies and technical backstopping. Therefore, the Municipality will build capacity of private sector and empower them through Local Economic Development (LED) to actively participate and champion the successful implementation of this plan.

CHAPTER SEVEN: MONITORING AND EVALUATION FRAMEWORK

7.0 Introduction

This section presents the monitoring and evaluation mechanism including the communication strategy for the FMP implementation. It provides highlights on the key institutions that will be involved in the monitoring and evaluation activities, the reporting frameworks, means of sharing the monitoring reports including importance of an effective communication and feedback strategies.

7.1 Monitoring and Evaluation Arrangements.

The Monitoring and Evaluation (M&E) arrangements of this FMP is aimed at supporting coordination in the implementation of plan and align development partners and other stakeholders in tracking progress made as far as implementation of the plan is involved, and generation of data for evidence-based planning, accountability, decision making, and lesson learning through measuring the performance, outcome and impact of the forest management interventions. The M&E of this plan will be informed by periodic reporting in the implementation of forest management initiatives, joint annual reviews, reflections and evaluations. This will be done in detailed as follows;

7.2 Periodic Reporting.

In order to track the progress made in the implementation of the FMP, the Municipality will generate progressive quarterly and annual reports These will be supplemented by field spot visits to ascertain value for money.

7.3 The Joint Annual Review.

In order to ascertain the progress made in the implementation of this FMP, the Municipality shall conduct annual review meetings that will draw attendance from all stakeholders. The review will be based on the cumulative quarterly performance reports produced by Municipality Environment office as well as on the first-hand experiences shared by implementing agencies. The annual joint review meetings will be attended by all key development actors including representatives of FLR networks, politicians, CSOs, private sector, and selected citizens interest groups (youth groups, women groups, PLWD, etc).

7.4 FMP Midterm and End of Plan Evaluation.

The mid-term evaluation of the FMP will be undertaken after five years of the implementation of this 10year plan. It will draw insights and participation of all relevant stakeholders involved in the generation and implementation of the plan. The Environment department in collaboration with the Planning department at the municipality will play a lead role in the entire exercise, and the focus will be to ascertain the effectiveness, efficiency, relevance and sustainability of the deliverables of the FMP. The report of the midterm review will include an assessment of challenges that could have inhibited the implementation of identified priority interventions, document lessons learned

to improve implementation of remaining period of the plan and to inform the production of the next plan. The report will be presented to the all the relevant stakeholders.
The FMP end-of-plan evaluation will be conducted after ten years of the Plan's implementation. The purpose of the end-of-plan evaluation is to assess achievement of results and their sustainability. The end-of plan evaluation will assess the overall effectiveness of the plan against its objectives and targets, and where possible, it will look at the impacts created by plan interventions.

7.5 M&E Matrix.

The FMP Monitoring and Evaluation matrix will guide the implementation and reporting of FMP activities, with a focus of ascertaining whether activities are implemented as plan, and are in line with the set strategic objectives and goal. The matrix will be the primary guide for implementing the FMP M&E strategy. The table below provides a broader picture of the FMP M&E plan.

Table 5: Kasese Municipality Forestry Management Plan M & E Framework

Strategic Objectives	Performance Indicator	Baseline Data	Target	Monitoring Frequency	Means of Verification	Data Disaggregation	Information use/ audience
	3 nurseries with total production capacity of 300,000 tree seedlings per season established.	TBD	3 nurseries	Semi-annual	Municipal database	Division Species	Municipal planning. Decision making, Report, fundraising
	12 community awareness sessions on tree planting conducted.	Zero starting point for the FMP	12 sessions	Semi-annual	Sensitizatio n reports	Event Division	Reporting Tree planting Market research
	300,000 indigenous tree species with at least 75% survival rate planted in the buffer zones of fragile ecosystems	Determinati on of the tree growing effort for the FMP to be counted from zero. seedlings 45% survival rate	300,000 seedlings 75% survival rate	Semi-annual	Satellite imagery	Species Division	Research Planning fundraising
	600 hectares of forest land restored with integrated soil and water conservation measures.	Zero at the start of implementat ion	600 hectares	Annually	Forestry inventory	Technique Division	Reporting Planning
	Adoption of Soil and Water conservation increased by 20%	5% (from primary data, 2022)	20%	Semi-annual	Forestry inventory	Sex Division Measures	Planning Reporting

Strategic Objectives	Performance Indicator	Baseline Data	Target	Monitoring Frequency	Means of Verification	Data Disaggregation	Information use/ audience
	20kms of roads beautified with ornamental trees like Ashok, Acacia	TBD	20KM	Semi-annual	Activity reports	Division	Follow-up Planning
	Wood conversion efficiency increased by 30% by 2027	0	3 sawmills 1 briquette machine	Annual	Survey reports	Equipment/ technology Division	Decision making Planning replication
	Charcoal production efficiency increased by 30% by 2027	10%	100 kilns	Annual	Monitoring reports,	Association Division	Decision making replication
	Adoption of efficient charcoal production techniques increased by 70% by 2032	0	6 groups	Annual	Monitoring reports,	Association Division	Decision making Planning replication
	Income levels of community groups increased by 30% by 2027	0	300 beehives	Annual	Outcome harvesting	Sex Division	Reporting Replication
	Reliance on fuelwood reduced by 30% by 2032	93%	12 groups	Annual	Outcome harvesting	Sex Division	Reporting Replication
	At least 3 storage facilities and 10kms of roads improved to facilitate transportation and storage of wood products		3 improved stores 10kms of roads	Annual	Engineering records, Direct observation	Division	Reporting
	Adoption of tree growing activities by local community members increased by 20% by 2032	43%	10 awareness sessions	Annual	Monitoring reports,	Association Division	Decision making Planning replication
	Access to energy saving stoves by local communities increased by 50% by 2027	22%	50%	Annual	Outcome harvesting	Sex Division	Reporting Replication
	Expenditure on firewood and charcoal in institutions reduced by 50% by 2027	TBD	50%	Annual	Outcome harvesting	Sex Division	Reporting Replication

Strategic Objectives	Performance Indicator	Baseline Data	Target	Monitoring Frequency	Means of Verification	Data Disaggregation	Information use/ audience
Strengthened legal and institutional frameworks on sustainable forest management	Extension services to tree growers increased by 20% by 2032	TBD	20%			Division	Reporting
	Coordination of forest and wood value chains improved	No association	Association in place	Annual	Association profile		Learning and replication
	Technical capacity of 05 Municipal Natural Resources staff strengthened	0	5 staff	Post training monitoring	Training report	Sex	Follow-up
	Illegal charcoal production reduced by 50% by 2032	98%	50%	Annual	Outcome harvesting	Sex Division	Reporting Replication
	Atleast a framework (database, SOPs) established for effective coordination of forest interventions in the Municipality	No framework	SOPs in place	Annual	minutes	n/a	Decision making Reporting
	One ordinance and 3 bye-laws formulated at the municipality and divisions respectively for effective management of forest resources	No customized policies	1 ordinance 3 bye-laws	Annual	Desk review	Division	Follow-up Decision making Planning
	2 management plans for LFR, and forests on private land prepared	No plans	2 management plans	Annual	Desk review	Division	Follow-up Decision making
	Atleast 90% of actors planting trees in LFRs have MOUs with the Municipality	TBD	90%	Annual	Forest inventory	Division Species	Learning and replication
	A database for private forests in place and regularly updated	No database	1 database	Annually	Database	Sex Division	Reporting