

Publication Draft



REPUBLIC OF ZAMBIA

MINISTRY OF GREEN ECONOMY AND ENVIRONMENT



NJOVU LOCAL FOREST: P232 MANAGEMENT PLAN 2025-2035

APPROVAL PAGE

NJOVU LOCAL FOREST No. P232 - FOREST MANAGEMENT PLAN

Notice of completion

This Forest Management Plan has been prepared in accordance with the requirements of section 40, Part IV of the Forests Act, 2015. National and local enquiries were conducted as required to obtain representation from the local community, Chief and other stakeholders in the prescribed manner. Further, consultations were conducted with holders of rights and the local community in the area and account taken of their submissions.

In accordance with section 43 of the Forests Act, 2015, I therefore cause notice of completion to be published in the Gazette.

Director of Forestry

Date: _____

Registration of the Forest Management Plan

Following receipt of notification from the Director of Forestry, that the Forest Management Plan has been notified in the Government Gazette in accordance with the provisions of section 43 of the Forests Act, 2015, I therefore cause this Forest Management Plan to be registered and approve a notice of registration to be published in the Government Gazette.

Minister for Green Economy and Environment

Date: _____



FORESTRY DEPARTMENT

FOREWORD

Forest resources are important because they provide essential functions and services to the community and the country at large, for conservation of biodiversity, and supporting social and livelihood wellbeing. Natural resources management trends in all the corners of the global are moving away from the predominantly earlier practiced protective plan and control, management approach to more collaborative and participatory forest management approaches. Zambia has adopted participatory Forest Management (PPM), and Community Forest (CF) approaches to forest management allowing for co-management of Zambia's forest resources and communities, partnering organisations and institutions. The change in forest management approach is driven by the need to promote sustainable use and management of forest resources in the country. The high demand for forest products and services has rendered the present use and management of forest resources unsustainable, this is because of increase in human population, and the everlasting social-economic and environmental conditions around the country. It is for this reason that the Njovu Forest Management Plan (NFMP) has been formulated

Signature:

Director of Forestry

Date:

ACKNOWLEDGEMENTS

The development of this Forest Management Plan was made possible through support from the Zambia Integrated Forest Landscape Project (ZIFLP). The Forestry Department would like to recognize and appreciate the efforts of their Royal Highnesses, Headmen and the community around Njovu Local Forest for the commitment to support this plan and importantly the sustainable management of the Local Forest.

In addition, the Forestry Department, Eastern Province, would like to recognize and appreciate the efforts of the participants in the consultation workshop for their valuable contribution to the development of the Forest Management Plan.

The production of the Plan would not have been possible without the input from ZAMSTATS and present and past officers of the Forestry Department. The contribution of the members of the forestry inventory, livelihood data collection, analysis and reporting teams who made it possible to generate the needed information to develop this forest management plan is acknowledged. Local community contribution was vital in both the livelihood and biodiversity surveys as well as in the participatory discussion. Their Royal Highness' contributions during the awareness meetings leading to livelihood survey for the development of the FMP are also highly appreciated.

The Forestry Department acknowledge the financial support of the World Bank and its partners through the Zambia Integrated Forest Landscape Project (ZIFLP) in the development of the draft FMP. Finally, since it is not possible to mention each person engaged in the development of the FMP, the contribution of all persons who participated directly or indirectly in the preparation and completion of this document is appreciated.

EXECUTIVE SUMMARY

Forests, woodlands and trees are among the nation's most important natural heritage resources. The vision of the National Forestry Policy, 2014 is to attain sustainable forest management in all types of forests to enhance forest products and services that will contribute to mitigation of climate change, income generation, poverty reduction, job creation and protection and maintenance of biodiversity. The Policy encourages participatory forest management anchored on the active participation of local communities, traditional institutions, private sector and other stakeholders in the management and utilisation of forest resources at all levels of decision making, implementation, monitoring and evaluation.

This Forest Management Plan has been prepared for Njovu Local Forest with the aim of equipping the management team and other interested stakeholders with a capable tool of directing the approach to be followed, guiding the process of partnerships with key stakeholders and addressing the challenges facing the management of the forest at present. These in the case of Njovu Local Forest are urgent and if not addressed immediately may result in further loss of forest and the functions it was reserved to protect. Adjacent communities can play an important role in the rational utilisation of the existing forest through participation in decision making, active management, and protection and benefit sharing. Thus, community collaboration is an imperative so as to protect the remaining forest cover of Njovu Local Forest from degradation in order for it fully contribute to local and national development, as well as for the benefit of the future generations of Zambia.

Translating Policy into practice

This management plan translates national policies into a well-thought-out strategic framework to guide the preparation of annual operational programmes for effective and efficient management of this Local Forest. The management plan will regulate forestry activities for a period of 10 years through the application of prescriptions that specify targets, actions and control arrangements. In this respect this plan will form part of the general forest management system that regulates protection, silviculture practices, conservation, monitoring and other relevant operations to ensure sustainable management of the forest.

Community based natural resource management is core to this Forest Management Plan. Through promoting community involvement in the management of Njovu local Forest, rights to forest products and uses of the forest will be negotiated whilst agreeing obligations and other responsibilities for protection and management activities with local communities. This is intended to achieve the parallel goals of ending open access, promoting enhanced forest management, whilst unlocking the full potential of sustainable forest use for economic development in the local communities. Surrounding communities have both the most to lose from its destruction and most to gain from its good management. The Community Forestry approach followed in Zambia provides an incentive mechanism and capacity development process to make this a reality.

To ensure effective implementation, including monitoring, this plan has been prepared using up to date and accurate information on the reserve covering: location and extent; ownership and rights; topography, climate and soils; flora and fauna; potential income and other benefits; as well as challenges and opportunities for

sustainable management. This forest management plan has the purpose not only of setting out approved management objectives and specified actions, but equally important, communicating these to the resource users and other stakeholders who are concerned with the implementation of the plan.

The Forest Management Plan was prepared through a consultative, interactive and participatory strategic planning process involving all key stakeholders. The data collection and consultation process was financed through the Zambia Integrated Forest Landscape Project (ZIFLP) a Zambian Government initiative in the Ministry of Green Economy and Environment.

Forest resource & community well being assessment

During 2019 and 2021, the Forestry Department undertook forest resource assessments, engaging surrounding local communities and their traditional leaders as part of the enquiries for the purpose of preparing this forest management plan in accordance with the Forests Act, 2015. In parallel, ZAMSTATS undertook forest livelihoods and economic surveys with communities surrounding the local Forest.

Traditional leaders were consulted and approvals to proceed with data collection and subsequent participatory land use planning processes. Local stakeholder meetings were held with community representatives, local organisations and other Government Departments to raise awareness of climate change issues, the sources of greenhouse gas emissions in the province, sensitise on the policy and legal framework, the proposed collaborative planning approach, issues affecting the specific forest areas and exploring opportunities for a partnership for management.

The information collected allowed assessment of the condition of the forest, the value of the forest both economic as well as biodiversity value in terms of species diversity and abundance. Past management, exploitation as well as current management and pressures on the forest can be seen in the species abundance and size distribution in the areas assessed. These as well as the current Policies and development priorities can guide the short to medium and long-term management of Njovu Local Forest.

In view of the current condition of the forest, stratified sampling was used in the forest accounting for the degraded areas and land under settlement. The inventory results indicate a total standing volume for all species in Njovu Local Forest estimated at 61.24m³/ha, with a total bole volume estimated at 20.73m³/ha. Total Biomass for trees ≥5cm DBH is estimated 110.91 tonnes per hectare with an above ground carbon estimate of 55.46t/ha. A basal area figure of 7.16m² per hectare is an average figure for the type of forest. This confirms the capacity of Njovu Local Forest to achieve greater growth potential.

Summary socio economic analysis

The livelihood survey conducted in 2021 covered 12 villages surrounding with a total population of about 279. These households depend on farming as their main occupation, the principal crops grown are maize, sunflower and groundnuts from land holdings ranging between 0.25ha to 3 ha. Almost all households use firewood as their energy for cooking at 95.0 percent and those who use gas stoves at 5.0 percent. The survey also revealed that all households surrounding the Njovu local Forest utilise the forest for everyday livelihood needs. The survey revealed that 95

percent of all the households were willing if called upon to voluntarily support management of the Local Forest with Forestry Department.

Forest change & issues analysis

A consultation meeting of stakeholders for Njovu local Forest was held on 20th December 2023, at the Catholic Hall in Lundazi. Participants were requested to review the uses and users of the forest, the issues that are contributing to forest loss and forest degradation, but importantly to propose local solutions to these issues. Utilising forest cover imagery, participants were able to relate to the areas of forest and forest loss through agriculture and settlement across the forest and surrounding areas. This was used to focus discussion on issues, identifying different zones of use and management, possible strategies and priorities for management as well as agreeing permitted and non-permitted activities within each of the identified zones.

Stakeholders' observations and Concerns

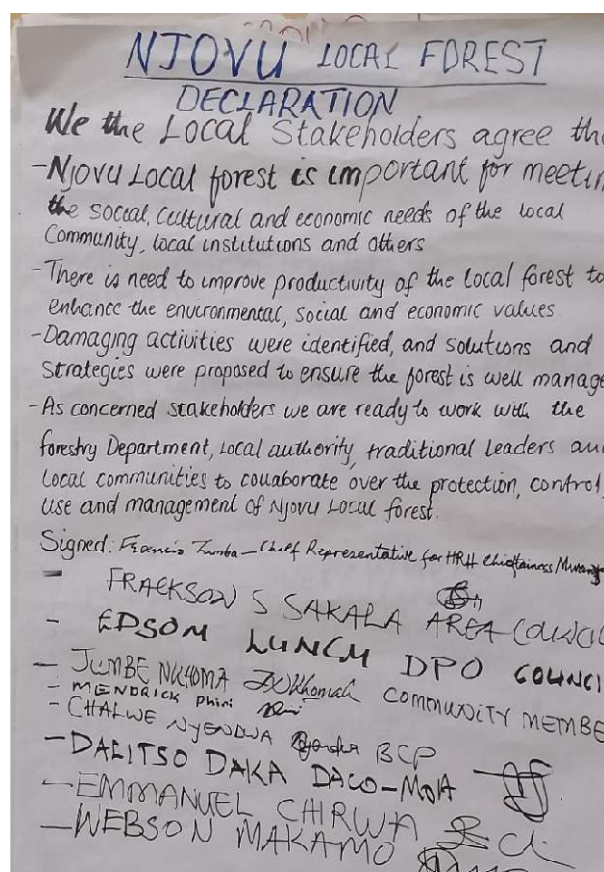
The stakeholders made several observations and raised some concerns notable among them include the following:

- The forest is important to the surrounding communities as well as a habitat for animals. Forest loss threatens everyone and everything that depends on this forest.
- There are serious encroachments in Njovu local Forest, therefore there is need to protect what is remaining of the forest as well as bring it back to its former glory at the same time find a lasting solution to the illegal settlements.
- Need to change the mindset of the people through awareness for them to appreciate the grave consequences of deforestation as well as need to provide sustainable/ alternative livelihoods.
- To resolve the inadequate human resource issue there was need to re-introduce community forest guards to police the Njovu Local Forest and need to stiffen laws.
- Headmen, senior headmen and Indunas, are allocating land to people coming from outside, in this regard consideration should be to ensure no further encroachments and provide means to restore the deforested areas.
- The community forestry model should be promoted as it also promotes local ownership

Making a commitment to work together for change

As a statement of concern, but interest to work together with the Forestry Department, the Local Authority, Traditional leaders, and stakeholders agreed that there was need to collaborate over the protection, sustainable use and management of the protected forest area and a declaration of intent was signed pledging to collaborate in the sustainable management of Njovu local Forest.

The declaration confirmed that Njovu Local Forest is of importance for meeting the local needs, social, cultural and economic needs of the surrounding communities as well as of environmental importance, primarily through securing local water resources. The stakeholders requested to work in partnership with the Forestry Department and others to safeguard the forest.



Objectives and management actions

Based on the policy and legal framework and the consultation process conducted, the General Management Objectives for the management of Njovu Local Forest are:

- (a) To secure forest resources of local and national importance
- (b) To protect and restore ecosystems, particularly the protection of land and water supplies of local and strategic importance.
- (c) To ensure the sustainable utilisation of forest resources and other natural resources within the protected area.
- (d) To ensure full participation of all stakeholders at all levels of society for sustainable forest resource and ecosystem management through appropriate incentives and benefit sharing mechanisms.
- (e) To meet the social, cultural and economic needs of the local community and wider society involved in management of the Forest in a gender equitable manner.

These in the case of Njovu Local Forest are urgent and if not actioned immediately may result in the loss of the forest and the functions it was reserved to protect.

Proposed management actions

The following management actions which are proposed for Njovu Local Forest reflect the statutory purpose of the Local Forest as set out in section 19 of the Forests Act, 2015. The actions are intended to address and reverse the degrading factors threatening the existence of Njovu Local Forest.

Forest Conservation through Community Participation and Livelihood Development

Community empowerment is central to participatory forest management for the effective coordination and sustainable management of forest resources. This Plan recognizes that communities surrounding Njovu Local Forest are key stakeholders in the conservation of this forest as well as beneficiaries from its sustainable management. This aims to meeting the social, cultural and economic needs and thereby improving the livelihoods of the communities around Njovu Local Forest. This will be achieved through promotion of community forestry and the establishment of a community forest management group to partner over the management of Njovu Local Forest, as well as a development of the immediate surrounding area to promote greenhouse gas emission reduction interventions.

Forest Protection, Restoration, Management and Conservation of Biodiversity

Njovu Local Forest is an important forest ecosystem containing different plant species and fauna as well as being part of a wider network of protected areas for the conservation of wildlife. The forest is impacted by an increasing population which is highly dependent on it for subsistence and increasingly economic needs including collection of mushroom, wild fruits, caterpillars, honey, firewood and poles. The level of unsustainable use is anticipated to intensify with increasing human populations resulting in higher levels of resource exploitation and degradation. Protection of this forest habitat is therefore essential to ensure the continued ecosystem services and local livelihood needs.

Without considering the needs of local communities, gaining their support, and working with them, rather than against them, forest protection and management goals and objectives will not be reached. Consequently, the strategy will be to work together with communities to develop joint protection systems in return for agreed levels of utilization within the capacity of the forest to meet subsistence needs whilst safeguarding the environmental aspects including conservation of biodiversity.

Safeguards & other crosscutting issues

In implementing the above management actions, cross cutting issues as well as other environmental and social safeguards processes will be mainstreamed in all aspects of forest management. Specific activities as well as the annual workplan and operational plans should include a process of social and environmental screening. These should be reviewed and updated in accordance with the type of activity being planned and general screening reviewed annually. A Grievance Redress Mechanism will be operational at the District and Provincial level to allow a mechanism for grievances to be raised, documented and addressed. Documentation and tracking is core to this issue. Women shall be integrated into all aspects of management of Njovu Local Forest and empowered through equal participation in decision making, governance and benefit sharing.

Contribution to Emissions Reduction in Eastern Province

Improved management of Njovu Local Forest through the proposed interventions will directly address the need for emissions reductions through promotion of Sustainable Forest Management. This centres on expansion of community forestry and strengthening collaboration in the management of this forest with local stakeholders and other partners.

Delivering sustained results

The expected outcomes of participatory management through local stakeholder involvement in the management of this and other protected forest areas will be to reduce emissions in the Eastern Province. Strengthening sustainable land and forest management practices, creating increased incomes and resilience of local communities, conforming to national strategies will reduce the effects of climate change. Implementing the proposed management actions should result in improved local livelihoods and local economic development, improved availability of major forest products whilst sustaining the key ecological functions of the Local Forest and its surrounding area.

Definition of Terms

Above ground Biomass- refers to *vegetation above the soil, including stem, stumps, branches, bark, and foliage*

Basal Area- is the measure of cross-sectional areas of a tree trunk at breast height, typically measured in square meters per hectare

Below ground Biomass this is one of the carbon pools including biomass of the roots and organic matter

Biomass- refers to the total mass of living organisms in a particular ecosystem or biological community

Bole height - The distance from the base of a tree to the base of the living branch that part of the tree crown

Bole volume- refer to the amount of wood contained in the trunk or stem of the tree, typically from the ground level up to a point where the trunk reached a certain diameter or height. It is used in forestry inventory

Community Forest - refers to forest management that has ecological sustainability and local community benefit as central goal

Fauna- refers to the animals in particular region or ecosystem it includes all animal species that inhabit a given area from tiny insects to and microorganisms to large mammal and birds

Flora- refers to the plants, trees, flowers and other living organisms that are classified as part of the plant kingdom

Regeneration- refers to the process of renewing a forest or woodland to replace those that have been harvested or lost due to natural causes

Topography- refer to the physical features of a particular area of land, including its elevation, shape and relief

Traditional Housing unit: referred to a housing structure usually made of mud material around the walls/poles and usually has a thatched roof.

ACRONYMS

CAPI	Computer Assisted Personal Interviews
CFMG	Community Forest Management Groups
CSA	Climate smart agriculture
DBH	Diameter at Breast Height
DNPW	Department of National Parks & Wildlife
EA	Enumeration Area
EP-JSLP	Eastern Province Jurisdictional Sustainable Landscape Programme
FD	Forestry Department
FLPR	Forest landscape protection and restoration
FMA	Forest Management Area
FMP	Forest Management Plan
FPIC	Free Prior Informed Consent
GHG	Greenhouse gases
GMA	Game Management Area
GMP	Game Management Plan
HFO	Honorary Forest Officers
MGEE	Ministry of Green Economy and Environment
MOE	Ministry of Energy
NFMP	Njovu Forest Management Plan
NGO	Non-Governmental Organization
REDD	Reducing emissions from deforestation and forest degradation
SFM	Sustainable forest management
ZAMSTATS	Zambia Statistics Agency
ZIFLP	Zambia Integrated Forest Landscape Project

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NJOVU LOCAL FOREST - FOREST MANAGEMENT PLAN

1 INTRODUCTION

The Njovu Local Forest Management Plan (NLFMP) is prepared in response to the National Forestry Policy of 2014 which has set forth clear guidelines to: “ensure adequate protection and sustainable utilization of forests, by promoting the development and use of forest and non-forest products by involving all interested key stakeholders particularly local communities around the forest reserve in the management of the forests and non-forest products in line with provisions of the Forests Act No. 4 of 2015. The Management Plan relates to the Njovu Local Forest which falls in Lumezi District, Eastern Province.

1.1 Purpose of the forest management plan

The purpose of the forest management plan is to guide the management of the forest resources of Njovu Local Forest in a sustainable approach and manner whilst involving rural communities, traditional and local leadership, and Key stakeholders in collaboration with the Forestry Department. The plan will serve as a legal document to guide utilization and management of resources by local communities and key stakeholders around the forest and the Forestry Department through the Ministry of Green Economy and Environment (MGEE).

This Forest Management Plan aims to contribute towards the Goal of the National Strategy for Reducing Emissions from Deforestation and Degradation (REDD) which is to reduce deforestation and forest degradation for sustainable natural resource management, improvement of livelihoods and achievement of a green economy.

1.2 Duration of forest management plan

The duration of the FMP is ten (10) years from the date that the plan is approved and registered in the Government Gazette. However, implementation of the Plan will be monitored periodically and evaluated at year 5 and may be adjusted accordingly as lessons are learned.

1.3 Policy Objectives

The Development Objectives for this Forest Management Plan are aligned with the objectives of the Local /National Forestry Policy, 2014, which include:

Objective 1: To manage the country’s forest resources in order to maximize productivity and the development potential of the forest resources:

Objective 2: To empower local communities and traditional leaders in order to ensure adequate protection and management of forests:

Objective 3: To improve the role of forests in addressing climate change in order to contribute to reducing its impact through mitigation and adaptation measures:

1.4 General Management Objectives

The General Objectives for the management for the Forest Reserve are aligned with the purpose of a Local Forest as defined in the Forests Act, 2015, and include:

- (a) To secure forest resources of local and national importance.
- (b) To protect and restore ecosystems, particularly the protection of land and water supplies of local and strategic importance.
- (c) To ensure the sustainable utilisation of forest resources and other natural resources within the protected area.
- (d) To ensure full participation of all stakeholders at all levels of society for sustainable forest resource and ecosystem management through appropriate incentives and benefit sharing mechanisms.
- (e) To meet the social, cultural and economic needs of the local community and wider society involved in management of the Forest in a gender equitable manner.

2 GENERAL DESCRIPTION

2.1 Location Details

Njovu Local Forest (No. P. 232) forms part of the forest estates in Eastern Province. The Njovu LF which falls in Lumezi District covers a land area of approximately 14,020.8 hectares in extent and is situated approximately 80km south west of the administrative centre of Lumezi District.

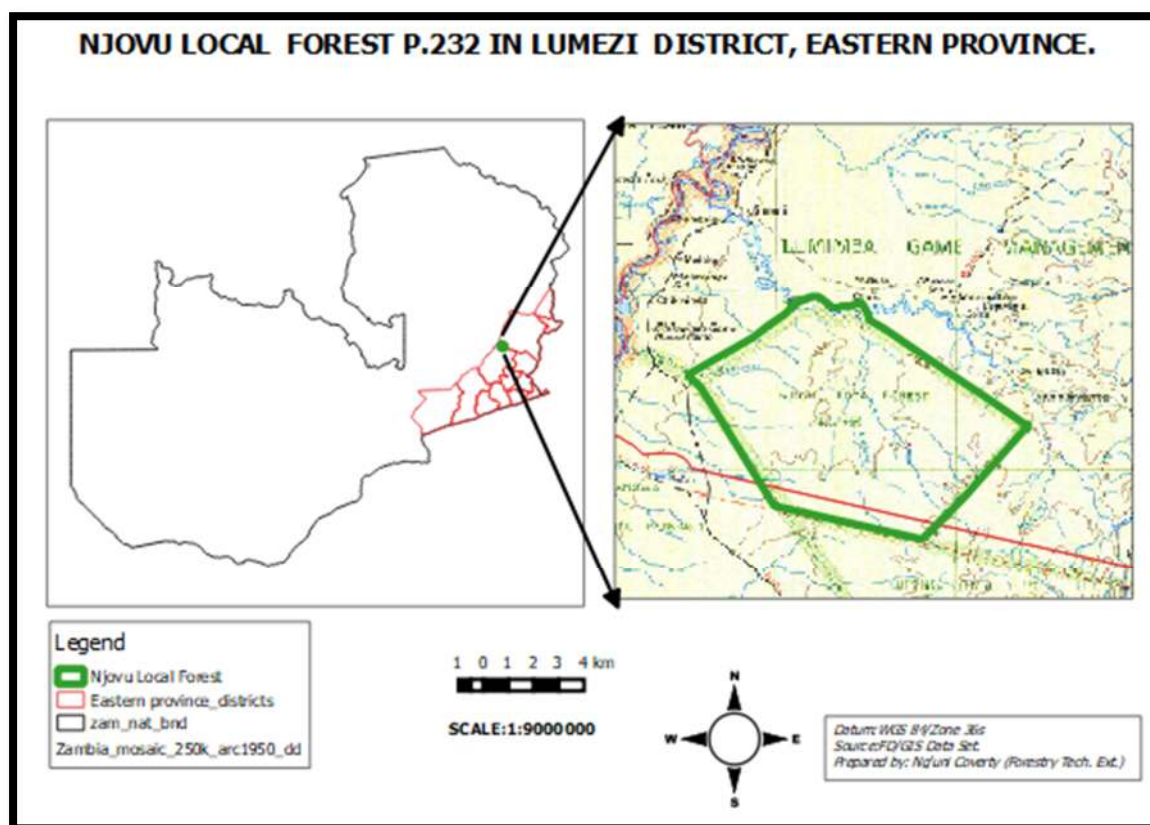


Figure 1: Map of Njovu Local Forest

The Local Forest falls within the Lupande Game Management Area (GMA) in Mambwe District and mostly within the Upper Lupande Hunting Block. A detailed description of the gazetted forest boundary is provided in Annex 1.

2.2 Ownership and control

Njovu Local Forest No. P.232 was originally declared a forest reserve and gazetted under Statutory Instrument No. 50 of 1970 and deposited in the office of the Surveyor-General on Map No. FR300. It is a protected forest area with the designation of “Local Forest” covered by section 19 of the Forests Act, 2015. The Forestry Department is responsible for the protection and management of Njovu Forest Reserve.

2.3 Reasons for Reservation

The area was identified as it contains a number of valuable timbers, while less suitable for agriculture. The aim was to help meet estimated future demand for timber in the district, to provide for specialised furniture and possibly veneer logs. The yield would be regulated with other reservation proposals containing similar utilisation classes. There was also interest from the wildlife department due to the presence of wild animals and proximity to other wildlife protected areas.

2.4 Physical & Biophysical Environment

Topography, Geology & Soils

The Forest lies on a flat and gently undulating with low ridges in the west and east. The area has large streams flow north to the Rukuzie and west to the Luangwa River. During the dry weather the area is waterless, though water is obtainable in the Rukuzie to the north, just outside the proposal, and of course, from the Luangwa. The pattern which seems to obtain here is of a sheet of residual sedimentary soils, which have been broken up and out into by the water-courses which drain the area. Thus one finds numerous small blocks of thickest remaining on higher grounds separated by lower areas which are in the process of wash and accumulation and on which Mopane forest is found. The type *Pterocarpus/Combretum*) which occurs in the north-east is really different in character to that which is commonly found on the sandy loams of the Upper Valley soils and is here growing on similar residual sands as the thickest bush. It is probable that the soils in “Njovu” have a common origin in the sandstones of the Karoo system.

Rainfall & Temperature

The rainfall usually lasts for 5 to 6 months starting from November to March and the peak months are December and February. The rainfall amount ranges from 900 to 1000mm.

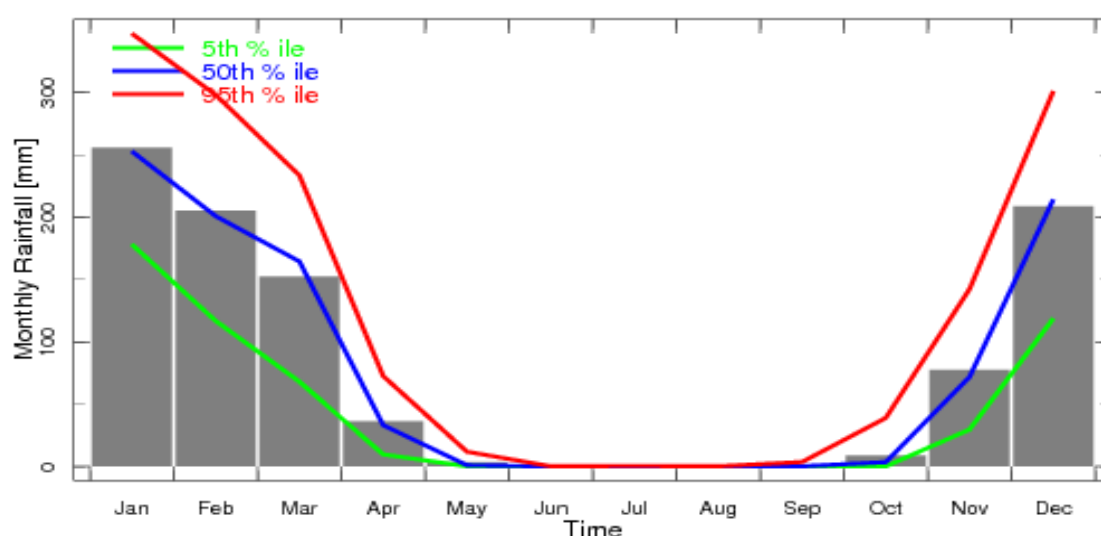


Figure 2: Monthly rainfall (Eastern Province) Source: The Zambia Meteorological Department

Normally, Eastern Province temperatures are very high, especially during the dry months which occurs between August and December. The maximum average monthly temperature is between 27°C and 34°C. The highest maximum temperature occurs in October. The lowest average temperature is between 21°C and 23°C during the cool dry season occurring especially between May and June

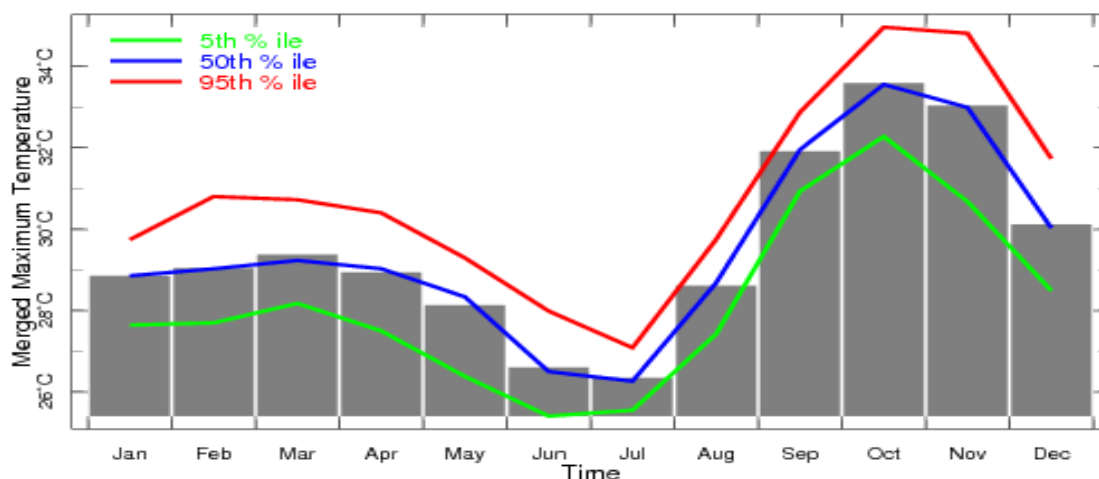


Figure 3: Monthly temperature (Eastern Province) Source: The Zambia Meteorological Department

Vegetation Type

Njovu Local Forest contains a number of valuable timber. The valuable species contained therein would be exploited and when the demand dictates would do for specialised market for furniture and possibly veneer logs including *Julbernardia paniculata*, *Isobertinia angolensis*, *Brachystegia boehimii*, *Brachystegia floribunda*, *Parinari curatellifolia* and many other species with *Brachystegia speciformis* being the dominant species. The yield would be regulated with other reservation proposals containing similar utilisation classes.

Fauna

The forest lies in the corridor of the season migration of game animals to and from Nsefu on the Luangwa and the Lukusuzi game reserve. The reserves serves as a summer feeding and breeding ground. However, an indication of their presence was recorded through observations such as footprints and droppings as well as through oral interviews with some community members. Animals such as Elephants, Buffalos, Velvet Monkeys, Warthog, Bush pigs, Antelopes, Guinea fowls and common Duikers are present.

3 PAST MANAGEMENT

The Njovu Local Forest was declared and gazetted in 1968. The management of the reserve has been guided by the objectives of reservation proposal as stated in the proposal at the time the forest was gazetted as a protected forest area under notice 24 of 1953 and subsequently under Statutory Instrument No.268 of 1970, 158 of 1975 and 148 of 1978. The reservation aimed at protecting stream catchment area, conservation of indigenous tree species and securing the supply of timber forest products for present and future generation. The Forest is relatively intact as it is heavily stocked with animals like buffalos and Elephants.

The Public Service Reform Programme (PSRP) in 1997 which impacted the Forestry Department reducing the level of personnel as well as the economic downturn of the same period, had an adverse impact on the management of the Forest.

Some steps towards developing joint forest management with neighbouring communities was conducted in 2014, however, although there was interest from the community, no initiative was developed. The Mwanya Community Resources Board lodged a request in 2016 to manage the Local Forest as a community forest area with the main objective of conservation. It is believed that the request did not proceed as the regulations for Community Forestry as required by the Forests Act, 2015, were not in place at that point in time.

The Local Forest falls within the Lumimba Game Management Area as protected by the Wildlife Act, 2015. The GMA has a Game Management Plan, approved in 2020. The purpose of Lumimba Game Management Area is:-

To act as a buffer to the four (4) surrounding National Parks (North Luangwa, South Luangwa, Luambe, Lukusuzi) for conservation and protection of the natural, cultural and heritage resources for the benefit of the local community and nation at large for the present and future generations through sustainable utilization.

The GMP includes a Zoning Scheme for Lumimba GMA, designed to harmonize and reconcile the different land-use options of the GMA. It identifies geographical areas within which similar land-uses shall be practised. Importantly, it defines what can and cannot take place in different zones with regards to conservation and development effort. Njovu Local Forest fall within Zone I - Forest Reserve Zone, whose purpose is to provide for conservation and development of forests with a view to securing the biodiversity and ecosystem of the Luangwa River.

The GMP Forest Reserve Zone includes a range of permissible activities including:-

- Management and Operations Research and Education, Recreation. Educational Touring
- Honey collection (Bee hives/apiaries), Wild fruit collecting, Grass Cutting
- Game Viewing, Walking Safaris, Birding, Photographing, Filming and Sound Recording, Lodging
- Fish Farming, Regulated Timber cutting Fuel wood Collecting, Bird Hunting.

Permissible Developments:-

- Management and Operations & Infrastructure, Bush Camps, Camp Sites, Picnic Sites, Recreation Facilities;
- Telecommunication Infrastructure, Repeater Stations, Bridges and Culverts, Water point Roads

Prohibited Activities:-

- Pollution, Illegal Logging, Cultivation, Settlements, Domesticated Livestock Grazing
- Entry without permit, Removal of beacons, Uncontrolled Fires, Use of Fire to collect forest produce (firewood), Deforestation (Illegal Charcoal production)

Prohibited Developments:-

- Resettlement Scheme, Saw mills, Settlement, Hotels, Farm blocks

4 GROWING STOCK

Assessing the growing stock of the forest is important in terms of ensuring Sustainable Forest Management. In basic terms, assessment is needed to ensure that the removal of trees and forest products does not exceed the rate of replacement in terms of growth and abundance. This is the basic principle of sustainable forestry otherwise the forest will be depleted and degraded.

A forest inventory was conducted by the Forestry Department in 2021 with financial support from the Zambia Integrated Forest Landscape Project. The following section provides the results and analysis from the data collected. A map of the location of the sample plots measured for Njovu is provided in Annex I. Measurement of trees and soils following the Department's Guidelines and the software *forestcalc* (version 6.4.1) used to process the data to provide the summary information contained in this chapter. The information collected allows assessment of the condition of the forest, the value of the forest both economic as well as biodiversity value in terms of species diversity and abundance. Past management, exploitation as well as current management and pressures on the forest can be seen in the species abundance and size distribution in the areas assessed. These as well as the current Policies and development priorities can guide the short, medium- and long-term management of Njovu Local Forest.

The following table presents the summary information from the forest inventory:

Total by D/Class	0-4	5-9	10-14	15-19	20-29	30-39	40+	Total
Volume	0.01	5.39	8.84	4.54	3.96	4.40	34.11	61.24
Bole Vol	0.00	2.11	3.19	1.46	1.07	1.56	11.36	20.73
Density/SPH	1.77	270.40	136.86	28.40	11.76	4.66	10.43	464.27
Basal area	0.00	1.16	1.49	0.63	0.50	0.44	2.96	7.16
Biomass, Total	0.01	8.61	14.00	7.47	6.57	7.70	66.54	110.91
Carbon, Total	0.00	4.31	7.00	3.74	3.29	3.84	33.27	55.46
Sawlogs	0.00	0.07	0.06	0.07	0.06	1.73	17.83	19.81
Pole	0.00	1.87	2.43	1.36	1.33	1.24	8.77	17.00
Fruits	0.00	0.06	0.11	0.00	0.06	0.00	0.44	0.69
Medicinal	0.00	1.76	2.94	1.50	1.31	0.33	2.27	10.13
Firewood	0.00	0.74	1.36	0.41	0.84	0.96	4.47	8.79
Other	0.00	0.87	1.94	1.20	0.36	0.14	0.31	4.83
Seedlings								1661.4

Table 1: Stratum total by all species

4.1 Tree species abundance

The inventory data indicates that there are over 48 different types' tree species that include tree seedlings in the forest. However, the ten most frequent species are shown below.

S/no.	Species	Local Names(Nyanja)	Species codes
1	<i>Bauhinia petersiana</i>	Mupondo	34
2	<i>Brachystegia boehmii</i>	Mufendaluzi	46
3	<i>Brachystegia bussei</i>	Mukongolo	47
4	<i>Brachystegia longifolia</i>	Bovu	49
5	<i>Bridelia cathartica</i>	Mkuvandola	57
6	<i>Combretum molle</i>	Kalama	86
7	<i>Combretum zeyheri</i>	Kalamafupa	89
8	<i>Diospyros mespiliformis</i>	Mchenja	112
9	<i>Diplorhynchus condylocarpon</i>	Mtowa	114
10	<i>Lannea discolor</i>	Shaumbu	194

Table 2: Top ten abundant species in the forest reserve

4.2 Tree and Sampling Distribution by Size Classes

Size Class Distribution is a way to describe the structure of a forest by categorizing the tree population by size of the tree through measurement of each tree, its diameter-at-breast-height (DBH) in centimetres and allocating each measured tree into a size range as means to assess the tree population. Trees below 5cm are counted, not measured. The actual distribution of measured trees into various classes is then compared to a suggested "ideal" benchmark as an indicator of forest health and sustainability. The presence or absence of trees in various size classes informs the manager of past management, current stocking and the future growth potential of the forest.



Figure 4 Size class distribution graphic

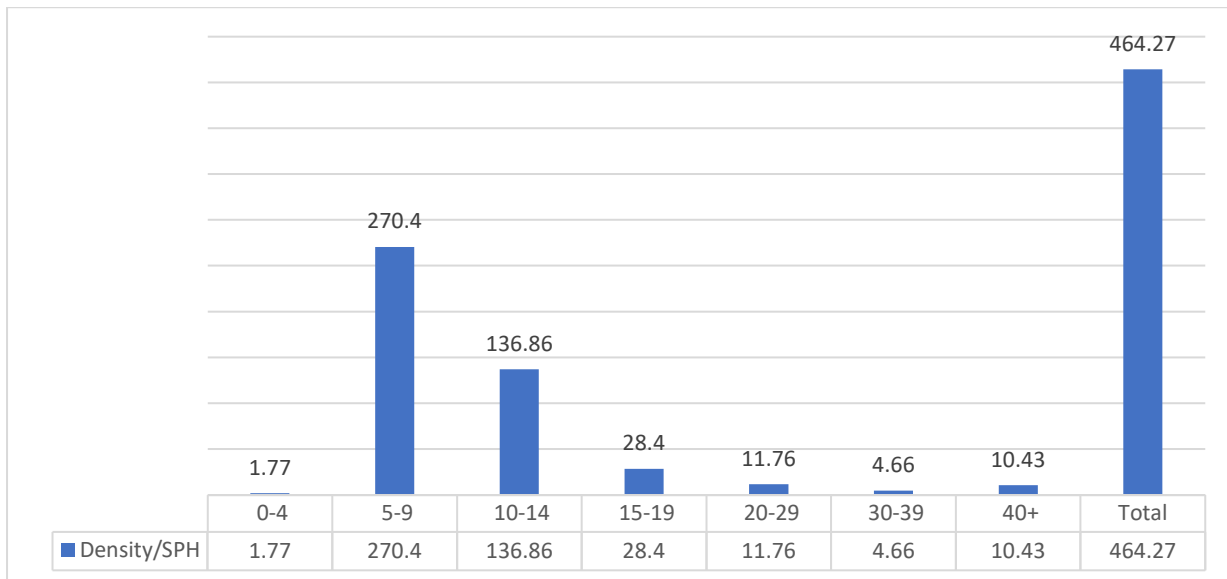


Figure 5: Density by diameter class/ha for all species

In Njovu Local Forest, a stocking density for trees ≥ 5 cm DBH was estimated as 464.27 stems per hectare.

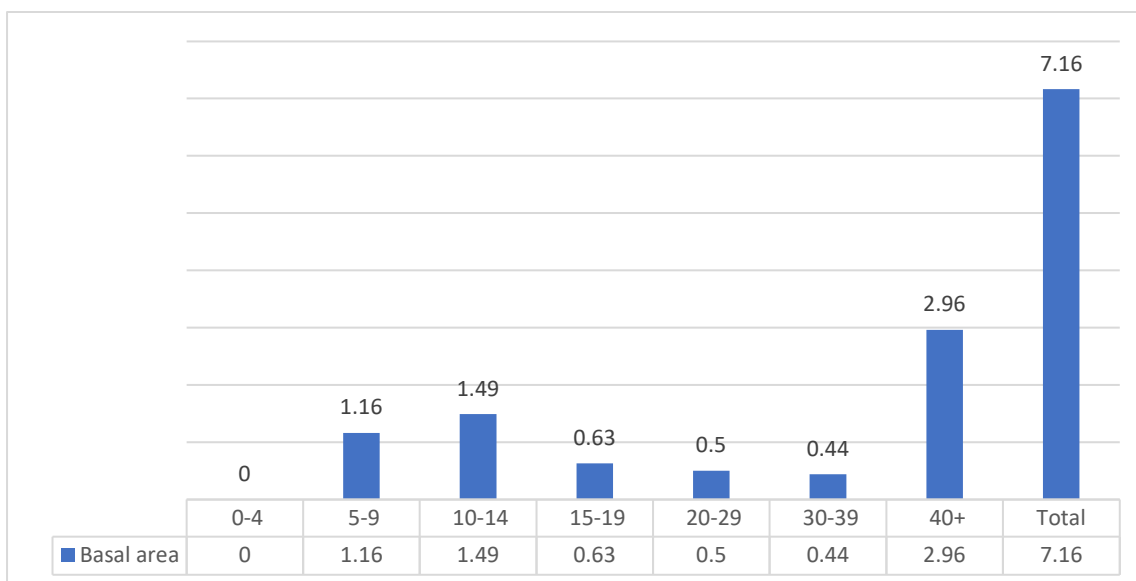


Figure 6: Basal area (m^2) by diameter class/ha for all species

The stocking by diameter class basal area per hectare is more in 10 –14cm class. The data indicates that there has been much tree harvesting resulting in high coppicing and regeneration. This indicates that the forest in terms of growth potential is in a relatively healthy condition allowing succession from one size class to the next higher one. The data also indicates this is a Primary forest.

Forest condition is further assessed by the amount of area occupied by the stems of trees, termed basal area. This is measured by determining the cross-sectional area of a tree at breast height (1.3m), summing all the measurements and expressing

this as a figure of square metre, either in their size class categories or as a total per hectare.

A figure of 7.16 m² per hectare is a moderate figure for basal area in a similar type of forest type. This indicates past incidences of wild fires and most likely current high levels of grazing pressure of animals like elephants and therefore confirms the need to improve management of Njovu Local Forest.

4.3 Total Volume, Biomass and Carbon estimate of all Species

Calculating volume of the standing trees of DBH > 5cm is a further measure of the condition of the forest, site quality and previous management and exploitation. Tree volume to different heights is measured and calculated by individual trees and summed to give a total volume estimate per hectare. An estimate of the volume in a stand or plot is important for forests quantification and management decision making. The amount of merchantable wood in cubic metre (m³) in a tree, as well as across the forest, was estimated while the trees are still standing using the methods of forest mensuration. Tree bole volume is based on the timber height relating to the parts of the tree that could be cut and sawn. Stand volume based on tree height is important for providing an estimate of total wood biomass resource. An assessment of carbon stocks was then estimated using the methodological framework developed by the IPCC.

The total standing volume per hectare for all species in Njovu Local Forest is estimated at 61.24m³/Ha., with a total bole volume estimated at 20.73m³/Ha. Total Biomass for trees ≥5cm DBH is estimated at 110.91 tonnes/ha, and it has carbon estimated at 55.46 tonnes/ha.

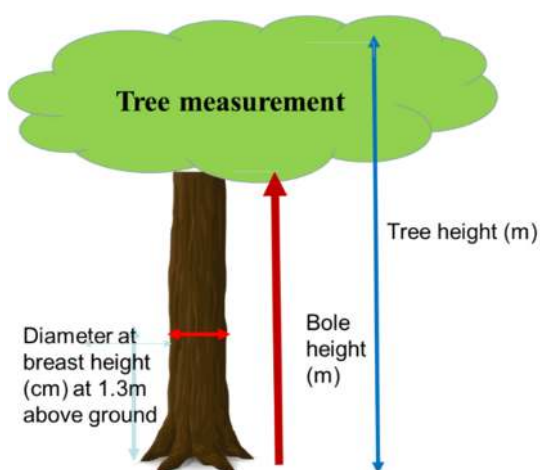


Figure 7 Tree measurement graphic

Technical characteristics

The volume of other technical characteristics or use are computed per hectare as follow: Saw-log 19.81m³, Pole 17m³, Firewood/charcoal 8.79m³, Fruit 0.69m³ and others 4.83m³. The poles are evenly distributed mainly in diameter class 5 to 19 and above 20.

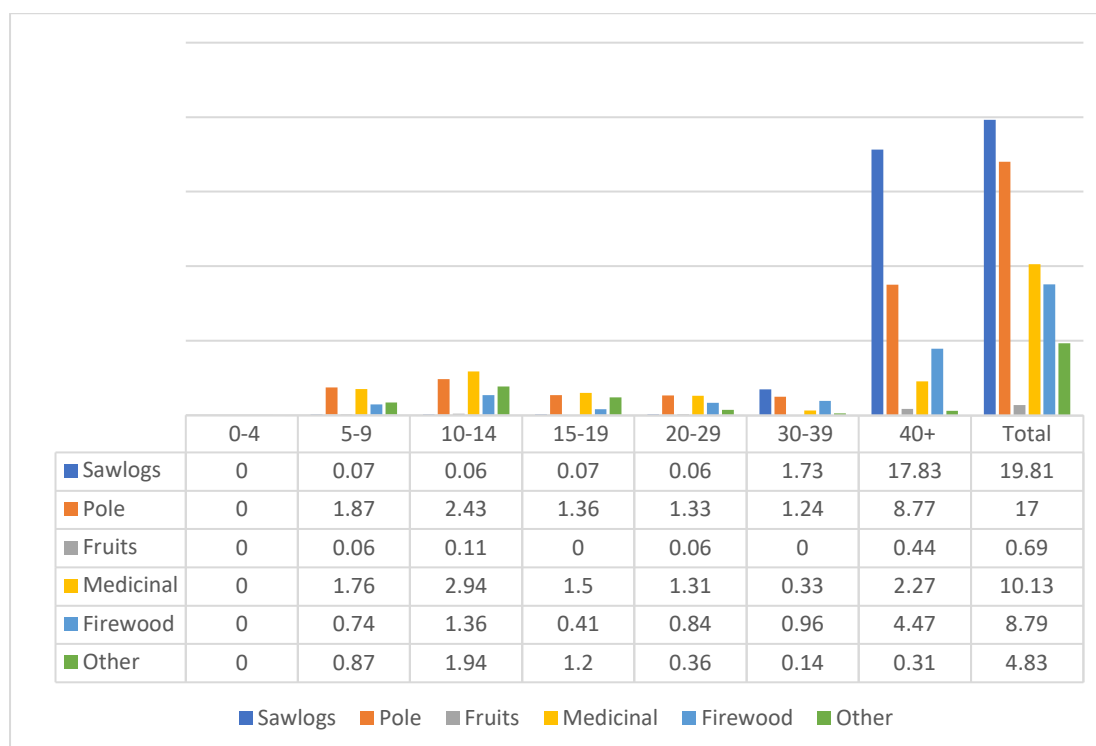


Figure 8: Volume (m^3) by diameter class/ha for all species by use

4.4 Bole volume total by diameter class/ha for all species

The total bole volume by diameter class per hectare is 9.71 cubic meters with higher in diameter class 05 – 29 and less from 30 and above. The outcome indicates that there is a lot of tree harvesting resulting in high coppicing and regeneration mainly agriculture activities.

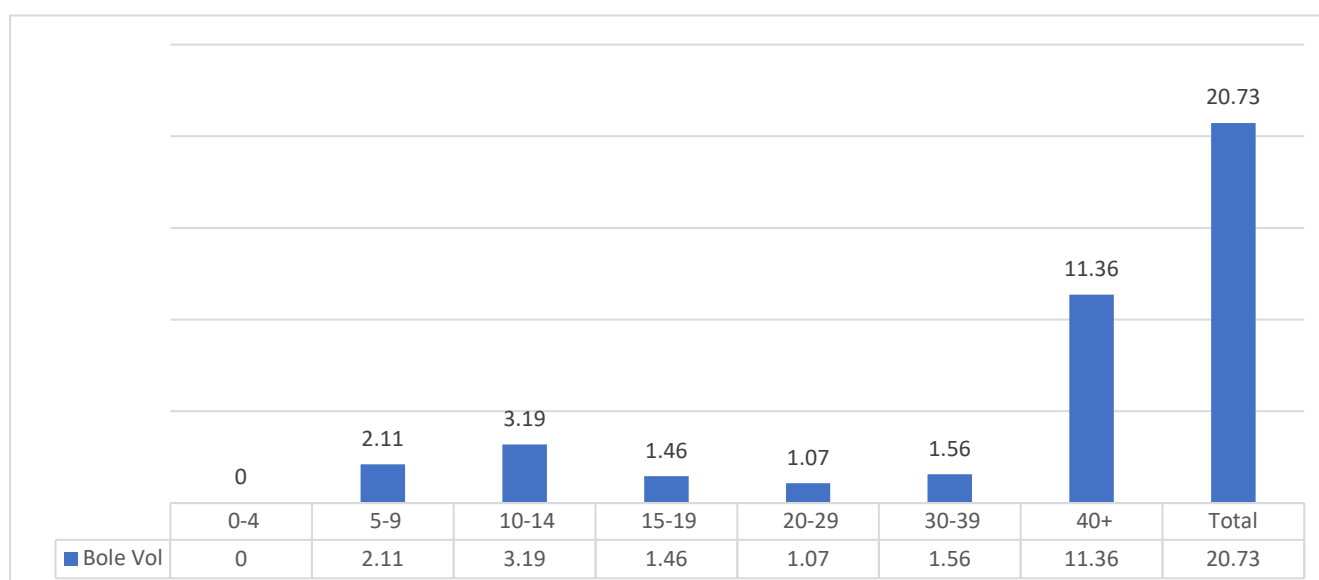


Figure 9: Bole volume (m^3) by quality diameter class for all species

4.5 Presence of Commercial Tree Species

Based on the inventory data, species used for high valued sawlogs such *Pterocarpus angolensis*, *Colophospermum mopane*, *Swartzia madagascariensis*, *Pterocarpus chrysothrix* and the medium valued are *Brachystegia speciformis* and *Julbenadia globiflora*, are not abundant in the forest. The harvestable volume for commercial species is low, therefore, Njovu Local Forest in its current condition cannot sustain large scale logging operations or timber concession.

Volume of all species by use

No	Description	Volume(m ³ /ha)	Explanation
1	Sawlogs	19.81	These are merchantable trees with the average diameter of 40cm dbh and above and are of exceptionally high value suitable for timber production
2	Poles	17.00	These are tree species with relative straight bole length with the average diameter at breast height of 5cm to 14cm
3	Fruits	0.69	The tree species include all fruit bearing either edible or not edible
4	Medicinal	10.13	All medicinal plants
5	Firewood	8.79	These include all dead and or diseased trees which can be used for firewood
6	Others	4.83	These include all tree species which are not classified in any of the above categories

Table 3: Trees in Njovu Local Forest in terms of forest product categories.

Biomass and carbon above ground

Based on the inventory data, the biomass and carbon figures by size class and total are summarized. Note, the standing carbon and not the amount of carbon that may be traded under carbon trading schemes which are based on measured reduction of carbon emissions.

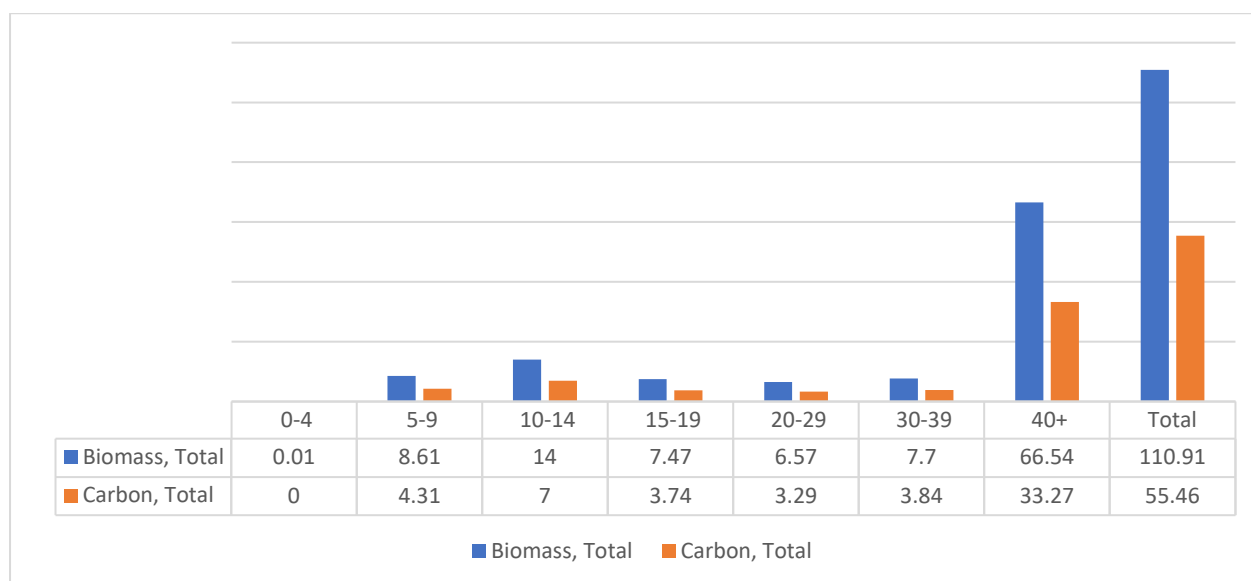


Figure 10: Biomass and Carbon above ground by diameter class/ha for all species

The total biomass and carbon stocks per hectare respectively of 110.91 and 55.46 estimates methodological framework applied is that developed by the IPCC documented in the 2006 guidelines for national greenhouse inventories volume 4, chapter 2 and 4. The correlation of total biomass and carbon both above and underground is in the figure above is within the IPCC requirement of half of biomass constitute carbon stock.

4.6 Forest Condition and restoration assessment

To supplement the forest inventory data, a land cover assessment was conducted using Sentinel-2 2025 images (date filtered: 2024-01-01 - 2025-07-01) at a resolution of 30 meters. The area of different land classes was calculated using Compute Geometry in ArcMap. The results indicated the following:

<i>Landcover category</i>	<i>Area (ha)</i>	<i>Percentage</i>
Forest	11,531.7	78.2
Cropland	3175.4	21.5
Degraded (scrub)	10	0.06
Water bodies	23.5	0.2
Degraded forest (open)	0.73	0.01
Total	14,741.19	100.0

Table 4: Forest condition and cover

While the current levels of forest loss and degradation is relatively low, the pressure on the forest is expected to increase and risk of further loss and degradation will expand. The management approach for Njovu Local Forest is to secure areas with forest cover and restore areas of lost forest cover with people's participation in order to improve environmental, social and economic impacts. The land cover analysis allows for identification of restoration strategies. These are outlined in the chapter on proposed management options.

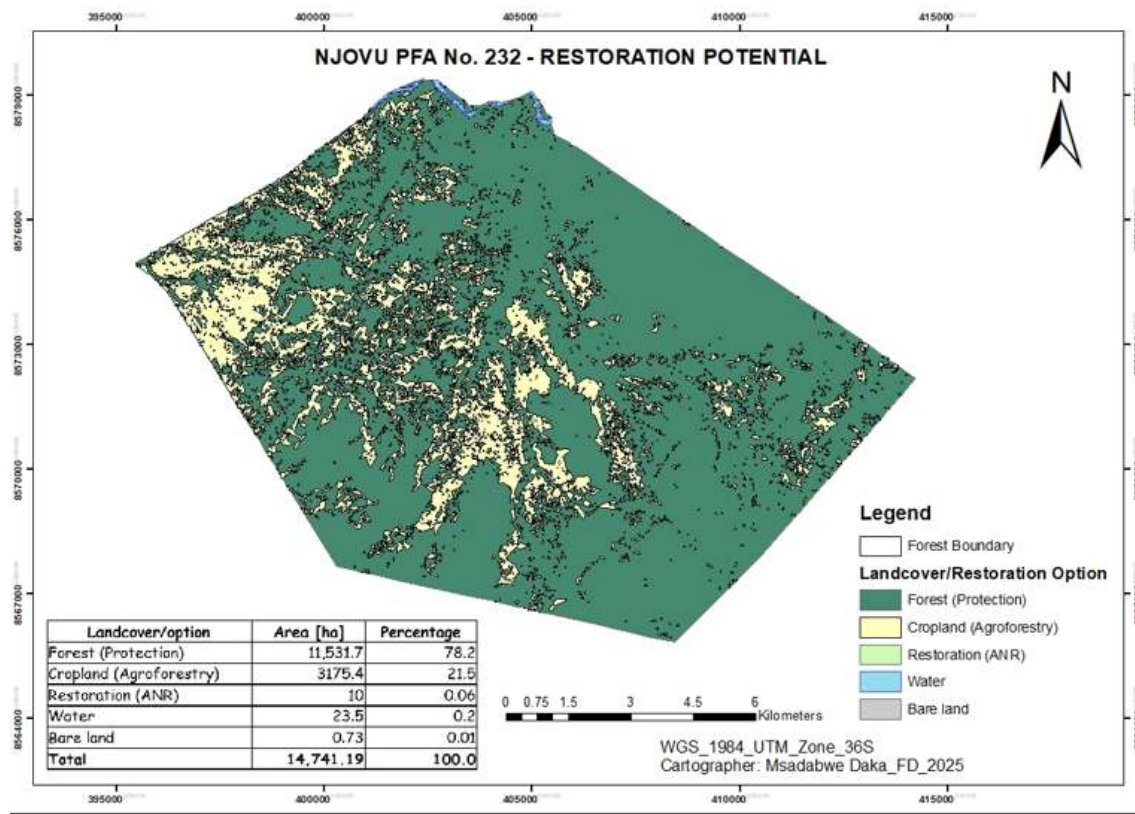


Figure 11: Njovu restoration map

5 SOCIO-ECONOMIC CONDITIONS

5.1 Household and Population dynamics

Forestry livelihood survey was conducted by the Zambia Statistics Agency (ZAMSTATS) Eastern Regional office, in November 2021. The main objective of the Forestry livelihood Survey was to measure the well-being of the communities dependent on Njovu local Forest and the utilization and management of trees resources. Also, to determine the benefits the surrounding communities derive from forest reserve.

The demographic characteristics of any area are important in understanding the living conditions of the people through the impact they have on the prevailing situations. Furthermore, data on the demographic characteristics provide background information and the necessary framework for the understanding of other aspects of the population, including economic activities, poverty, and food security.

Considering the household population distribution of Njovu local Forest can be translated as having an average size of the household membership of about 5 per household.

Methodology

The systematic sampling method was used to select households from each Enumeration Area (EA). The method assumes that households are arranged in a straight line and the following relationship applies.

Let $K = N/n$ Where:

N = total number of households assigned sampling serial numbers

n = total desired sample size to be drawn from an EA

K = Sampling interval in each EA calculated as $K = N/n$

Livelihood data analysis

The 2021 forest livelihood survey was collected using Computer Assisted Personal interview (CAPI), using Tablets android Ver9. The CAPI system allows quality check of the data at the server (HQ) as it is collected. It also minimizes data entry errors after data collection, the data were subjected to extensive checks on their validity and consistency as it was synched to the server. Analysis was done using statistical package SPSS version 24, which was done by Mully Phiri.

Njovu Local Forest reserve as at 2021 livelihood survey was surrounded by approximately 5 villages and farm blocks with a total population of about 279. The main ethnic groups in the area are the Chewa's and Biza's. The forest adjacent population are mostly small-scale farmers who utilize the forest for some of their livelihood requirements. The main crops grown are Maize, cotton, Soya beans and groundnuts. The land tenure of the population surrounding the Njovu Local Forest is mostly under customary land tenure system. Those households within have formal no title deeds or letter of allotment.

Level of Education.

Education is one of the fundamental factors that enhance the well-being and quality of life for persons and for entire society. Education, therefore, has profound effect on the population's welfare in terms of health, employment earnings, poverty levels and nutrition.

Education levels of the head of households in the Villages/Localities surrounding the Njovu Local Forest was found to be mainly primary level that contributed 80.0 **percent**, while secondary school contributed about 20 **percent**.

Level of education	Percent
Primary	80.0
Secondary	20.0
Total	100.0

Table 5: education levels attained.

Economic activity

The results showed that 80.0 percent of the household population surrounding Njovu Local Forest reserve had farming as their main occupation, while the rest of economic activities contributed 5 percent those in paid employment and 15.0 percent in small businesses.

Main economic activity	Percent
Business	15.0
Employment	5.0
Farming	80.0
Total	100.0

Table 6: percentage distribution of main economic activity

Types of energy used for cooking

Almost all households in the localities surrounding Njovu Local Forest use firewood as their energy for cooking. The livelihood survey revealed a percentage of about 95.0 percent using firewood as energy for cooking while 5 percent use gas as energy for cooking. It shows how threatened the forest is as most household depends on the forest for cooking energy.

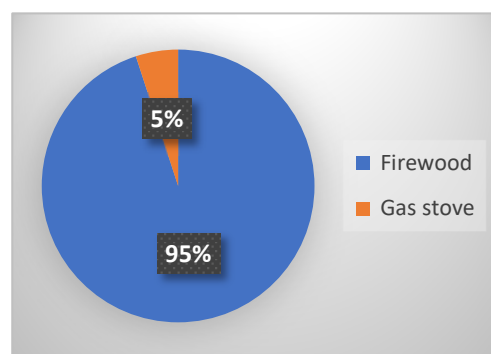


Figure 12: Type of energy used for cooking

Main tree species used for firewood

The main tree resources used for firewood by households in the localities surrounding the Njovu Local Forest are as shown in the table below.

S/no.	Species	Local Names(Nyanja)	Species codes
1	<i>Bauhinia petersiana</i>	Mupondo	34
2	<i>Brachystegia boehmii</i>	Mufendaluzi	46
3	<i>Brachystegia bussei</i>	Mukongolo	47
4	<i>Brachystegia longifolia</i>	Bovu	49
6	<i>Combretum molle</i>	Kalama	86
7	<i>Combretum zeyheri</i>	Kalamafupa	89
8	<i>Diospyros mespiliformis</i>	Mchenja	112
9	<i>Diplorhynchus condylocarpon</i>	Mtowa	114

Table 7: shows the main tree species used for firewood.

Note: these species are therefore under serious threat for wood energy as the statistics can show and mitigation measures are required in the management plan.

Non wood forest products

The main Non wood forest products used by households surrounding the Njovu Local F are as shown in the table below.

Non wood Forest products
<ul style="list-style-type: none"> • Mushroom • Caterpillars • Fruits • Honey

Table 8: Non-Wood Forest Products used by households surrounding the Njovu Local F Reserve

Willingness of community to participate when called upon

The livelihood survey revealed that 95 percent of all the households interviewed were willing if called upon to voluntarily support management of the forest reserve with the Forest Department and other stake holders in the community. This is a lower percentage than found around other Forest Reserves in the Province.

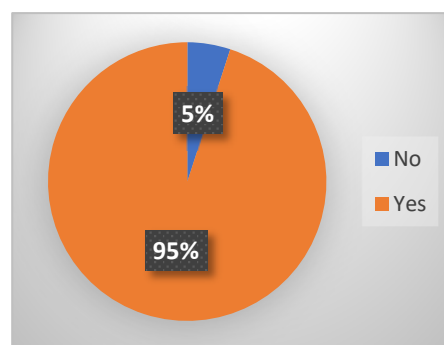


Figure 13: Distribution of willingness to participate when called upon to support FM

Land Occupation

The livelihood survey conducted around the Njovu Local Forest revealed that most of the land is occupied by households that showed 90 percent, compared to those who don't own at 10 percent. All land occupied by households is mainly used for agriculture purpose.

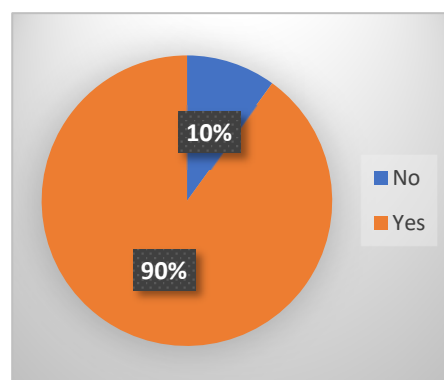


Figure 14: Distribution of land ownership of the population around the forest

Willingness to plant trees on own land

The survey revealed the willingness to planting trees by the households owning land. Those willing to plant trees on their land contributed 70 percent, while those not willing to plant trees had 30 percent contribution as shown in the figure below.

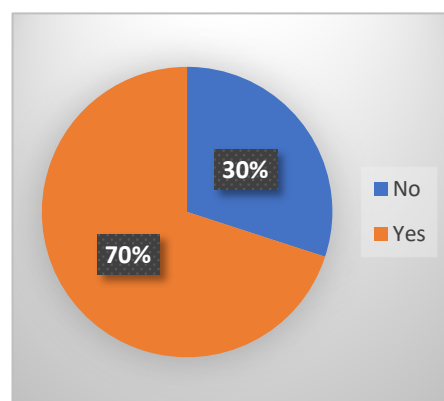


Figure 15: Percentage distribution of willingness to planting trees

5.2 Utilization, issues and solutions

The survey also revealed that 100 percent of Njovu Local forest utilize the forest, though the forest is still intact due to fear of wild animals as it is a wildlife habitat. Njovu Local Forest consultative meeting held on 22nd December 2023, the stake holders identified the uses and users of the forest reserve.

The uses were identified as:-

1. Firewood
2. Charcoal
3. Fruits, Mushroom, Caterpillars, honey
4. Medicine

The Users of the forest are:-

1. The community
2. Animals
3. Hunting and safari operators

5. Poles
6. Fishing

Issues and solutions identified

Issues	Solutions
- Deforestation	- Reforestation
- Late burning - degradation	- Early burning/fire break
- Illegal settlement	- Eviction
- Loss of forest land to agriculture	- No expansion of farm land
- Illegal allocation of land by some tradition leaders	- Sensitization management among the leaders/coordination
- Limited local economic opportunities	- Investments and partnerships

5.3 Enterprise Opportunities

A healthy forest ecosystem provides a strong foundation for income generation through forest products by maintaining biodiversity, soil fertility, and water resources essential for their sustainable production. When forests are in good ecological condition, they support the growth of high-value timber and Non-Timber Forest Products (NTFPs) which local communities and others can harvest and commercialize in a regulated manner. A well-managed forest ensures a continuous supply of these resources without depleting them, allowing for long-term economic benefits.

Njovu Local Forest provides a number of income generation/enterprise opportunities based on the current forest condition, the interests of local communities and other stakeholders. The foundations for community-based forest enterprises can be built on the elements of forest resource condition and associated forest product availability, access to markets, but requires an identified enterprise group and importantly, overall governance arrangements to regulate access, use and protection of the forest.

Further, Njovu represents an opportunity for developing one or more nature based enterprises through a Public, Private Community Partnership arrangement as a means to safeguard the environment, attract investment and protection measures while offering potential and innovative benefit sharing arrangements as envisaged by the National Forestry Policy, 2014. Potential opportunities are presented by the location next to a world class wildlife tourism area of South Luangwa National Park and the safari-tourism industry. The Game management Plan for Lumimba GMA provides for a range of conservation and nature-based tourism development activities to take place.

Through the resource assessment and mapping exercise, combined with the socio-economic survey, stakeholder consultation as well as the community forestry management planning process, the following enterprise opportunities have been identified:

Potential Forest product/ nature-based enterprises

- Wood biomass energy production;
- Wild fruit and mushroom harvesting;
- Nature based tourism through public, private, community partnership.

The development of the above identified opportunities would be subject to conduct specific forest product value chain analysis and enterprise development assessment to ensure a viable and financially feasible forest-based enterprise could be promoted in line with the Forestry Department Forestry Enterprise Strategy for 2025-2030. This strategy seeks to promote sustainable forest management while enhancing value addition in forestry value chains through empowering local communities.

5.4 Encroachment- illegal settlements and cropping

Njovu Local Forest is currently experiencing a dynamic state influenced by various external pressure factors. While the drivers of encroachment into forest reserves vary across the country differing from one province or district to another several common underlying causes can generally be identified, including the following:

- High poverty levels Visa-Vi Low household incomes and dependency on agricultural cropping for income;
- Illegal harvesting of forest products (both wood and non-wood);
- Land demand and clearing for agriculture and settlement expansion combined with poor recognition of protected forest area boundaries;
- Inadequate land use planning (not comprehensive and integrated);
- Inadequate extension services through Government resource and staffing restrictions.

In Njovu Local Forest, several key factors contribute to ongoing pressure and encroachment. These include high poverty levels coupled with low household incomes, illegal harvesting of both timber and non-timber forest products, and increasing demand for land driven by agricultural expansion and settlement growth. Over the years, various measures have been undertaken to address these challenges, including engagement with traditional leaders, stakeholder meetings, and the issuance of notices to individuals illegally settled within the reserve. Despite these efforts, several cropping areas have continued to expand within the gazetted forest area.

In 2023, a stakeholder consultative meeting resulted in a strong consensus and unified commitment among participants. This engagement generated significant interest from both community members and traditional authorities in adopting Community Forest Management (CFM). Their involvement is guided by Zambia's legal framework for sustainable forest management, including the Forests Act, 2015, the National Forestry Policy, 2014, and Statutory Instrument No. 11 of 2018 on Community Forest Management.

6 Proposed Management Actions

In view of the current condition and increasing rate of deforestation and forest degradation being experienced across this Local Forest, the overall objective is to secure the ecological functions of the forest through engaging local stakeholders and surrounding communities and agree new strategies for management, resource protection and in places, restoration of the Local Forest. Further, the Local Forest falls between two National Parks and is therefore part of a wider network of protected areas of high conservation value and therefore the management of Njovu Local Forest will recognize this and include the appropriate agencies. All approaches will conform to the stated purpose of a Local Forest as described in section 19 of the Forests Act, 2015:

<p>19. Subject to the other provisions of this Act and any other written law, all land comprised in a Local Forest shall be used for the conservation and development of forests for—</p> <p>(a) the security of forest resources;</p> <p>(b) the protection of ecosystems, particularly the protection of land and water supplies of local strategic importance;</p> <p>(c) the utilisation of forest resources at the local level; and</p> <p>(d) meeting the social, cultural and economic needs of the local community.</p>	<p>Purpose of Local Forest</p>
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The emphasis will be on Forest Landscape Protection and Restoration (FLPR) as a process for sustaining ecological functionality, increasing availability of resources and therefore enhancing values across the forest landscape of NLF. The approach will be to secure areas with forest cover and restore areas of lost forest cover with people's participation in order to improve environmental, social and economic impacts. In order to achieve these impacts, the main management strategies identified focus on steps to protect, restore and replant, as follows:

- **Protect** - areas where the forest is intact with local stakeholder involvement.
- **Restore** - the forest where it is degraded by promoting regeneration encouraging regrowth of local species or reforestation with people's participation.
- **Replant** - increase forest cover through planting tree species in fields where cropping is taking place. This aims to increase tree cover, soil fertility, provide fodder and small biomass for energy needs. Further, reforestation through planting of indigenous or exotic species in abandoned fields in a plantation environment where practical.

Opportunities for collaboration with partners as well as those providing investment and sustainable financing through climate change mitigation / emissions reduction trading will be explored to provide the investment, incentive and reward for sustainable land management in the forest. Sharing benefits from the anticipated Jurisdictional Sustainable Landscape Programme will be core to the process of incentivizing and rewarding good practices in mitigating the effects of climate

change and providing the mechanism for monetary benefits to accrue to local communities and other service providers from carbon trading by Government.

6.1 Zoning the forest for effective management of the forest

This management plan recognizes the stakeholder consultation of December 2023, which identified use of the forest, the main users of the forest, issues affecting Njovu Local Forest, local solutions and permitted activities. The immediate area surrounding the Njovu local Forest acts as a buffer and as such will focus on interventions which reduce pressure on the forest as well as emissions reductions related activities.



Figure 16: Zoning of Njovu forest by stakeholders

Forest Protection, Management and Conservation of Biodiversity

Njovu Local Forest is part of an important forest ecosystem containing different plant species and significant fauna. The Local Forest also falls within the Lumimba Game Management Area and between the National Parks of South Luangwa and Lukusuzi. Njovu LF therefore provides an important function as a wildlife corridor to safeguard movement of animals, strengthening the genetic diversity of resident populations. However, the level of deforestation and unsustainable use is anticipated to intensify with increasing human populations resulting in higher levels of resource exploitation and degradation. Protection of this forest and its role as a wildlife habitat is therefore essential to ensure the continued ecosystem services and local livelihood needs.

Without considering the needs of local stakeholders and communities, gaining their support, and working with them, rather than against them, forest protection and

management goals and objectives will not be reached. Consequently, the strategy will be to work together with communities to develop joint protection systems in return for agreed levels of utilization and or benefit share within the capacity of the forest whilst safeguarding the environmental aspects including conservation of biodiversity in this protection zone.

Development buffer area: This is the area immediately surrounding the reserved forest area where farming and settlements are located. These will be the focus for forest extension activities, creation of community and household woodlots, use of energy efficient stoves, promotion of agroforestry and other climate smart agricultural activities where appropriate. The buffer areas also include adjoining protected areas of Nsefu Sector of South Luangwa National Park and Community Forest Areas under Nsefu CFMG and Mwanya CFMG respectively, supported by BioCarbon Partners within the Luangwa Community Forestry Project.

These areas of action will be managed in partnership with the local community and other stakeholders including the Department of National Parks & Wildlife as the Local Forest falls within a Game Management Area (GMA). It is important therefore that the protection and management of Njovu LF is aligned with other protection systems and institutional arrangements and the General Management Plan for the GMA.

6.2 Forest landscape protection & restoration guiding principles.

Successful forest landscape protection and restoration (FLPR) integrates a number of guiding principles, including:

- *Focus on the entire landscape.* Consideration and restoration across the entire landscape of NLF as opposed to individual sites. This entails balancing a mosaic of land uses across the gazetted forest, such as securing intact forested areas, regenerating degraded forests, promoting agroforestry systems, climate smart agriculture, well-managed plantations where appropriate, as well as identifying ecological corridors and riparian strips to protect watercourses and waterways.
- *Sustaining and restoring ecological functions.* Sustain and restore the ecological functionality of the landscape, such as its richness as a habitat, its ability to contain erosion and floods, and its resilience to climate change and various disturbances. This can be done in many ways, one of which is to restore the landscape “back” to the “original” vegetation, but other strategies may also be used, ranging from natural regeneration to tree planting.
- *Allowing for multiple benefits.* Increasing tree cover across the landscape including existing cleared farmed areas, without necessarily forming a forest canopy, in order to enhance food production, reduce erosion, provide shade, and produce firewood. In other places, trees may be added to create a closed canopy forest capable of sequestering large amounts of carbon, protecting downstream water supplies, and providing rich wildlife habitat.

- *Promoting stakeholders involvement.* Actively engaging local stakeholders in decisions regarding restoration goals, implementation methods, and trade-offs for sustainable land management practices which provides incentives and performance benefits.
- *Adaptively managing* the restoration strategy over time as environmental, social and economic conditions evolve supported through continuous monitoring and learning through the restoration process.

Njovu local forest condition and landcover

<i>Landcover/options</i>	<i>Area (ha)</i>	<i>Percentage</i>
<i>Forest (protection)</i>	<i>11,531.7</i>	<i>78.2</i>
<i>Cropland (agroforestry)</i>	<i>3175.4</i>	<i>21.5</i>
<i>Restoration (ANR)</i>	<i>10</i>	<i>0.09</i>
<i>Water</i>	<i>23.5</i>	<i>0.2</i>
<i>Bare land</i>	<i>0.73</i>	<i>0.01</i>
<i>Total</i>	<i>14,741.33</i>	<i>100</i>

Table 9 Forest restoration analysis based on land use assessment

This information is derived from Sentinel-2 2025 satellite images (date filtered: 2024-01-01 - 2025-07-01) at a resolution of 30 meters and provides a guide for managers. Site specific interventions will be determined based on ground survey as part of the annual planning and implementation of restoration activities.

6.3 Core forest management actions

The identified management actions are described as follows:

Action 1: Forest Protection, Management & Conservation of Biodiversity

Njovu Local Forest is an important forest ecosystem containing a number of different plant species and major fauna. The forest is surrounded by an increasing population which is highly dependent on it for subsistence and increasingly economic needs like collection of mushroom, wild fruits, caterpillars, honey, firewood and poles. The level of unsustainable use is anticipated to intensify with increasing human populations resulting in higher levels of resource exploitation and degradation. Protection of this forest habitat is therefore essential to ensure the continued ecosystem services and local livelihood needs. However, the awareness of the importance of ecosystem services, conservation of biodiversity and climate change mitigation services of Njovu Local Forest as a protected area is low among the adjacent communities.

Forest protection is therefore key in the sustainable management of forest resources. Traditionally, patrolling by forest officers has been relied upon as the main protection activity but, despite these efforts and in view of the low staffing levels and poor access, it has not been possible to control the level of unregulated

use. Experience has shown that adequate levels of forest protection cannot be achieved through limited interaction, confrontation and conflict between the managers and forest-adjacent communities. In practice, both local people and the government have a mutual interest in conserving the forest, and utilizing forest products in a sustainable way. Without considering the needs of local communities, gaining their support, and working with them, rather than against them, forest protection and management goals and objectives will not be reached. Consequently, the strategy will be to work together with communities to develop joint protection systems in return for agreed levels of utilization and or benefit sharing within the capacity of the forest whilst safeguarding the environmental aspects including conservation of biodiversity.

Developing sustainable trusted partnerships as envisaged by the National Forestry Policy have been achieved through the Community Forestry approach following the 7 steps set out in the National Guidelines for Community Forestry in Zambia. This covers the following:

- Step 1. Stakeholder engagement, community awareness raising and mobilisation;
- Step 2. Stakeholder mapping including forest use, users and geographic area of interest.
- Step 3. Forming community level institutions to coordinate, manage and control local resource use in partnership with the Forestry Department.
- Step 4. Developing forest product and issues based operational management plans for areas of interest.
- Step 5. Agreeing roles, rights, responsibilities and obligations for shared management.
- Step 6. Implementing practical forest protection and management interventions that bring value and other environmental and social benefits.
- Step 7. Conducting joint monitoring and evaluation of management and benefit sharing measures to ensure a sustainable partnership.

These 7 steps to establishing shared management responsibilities and benefit sharing can incentivise and reward local stakeholder communities in the protection and management of Njovu Local Forest.

In order to achieve this the following activities will be undertaken;

- To develop a shared management approach to forest protection, management and utilisation.

This management action will be operationalized and results measured as follows:

No	Specific Objectives	Strategy	Actions	Responsible	Indicators
1	To develop a shared management approach to forest protection, management and utilisation.	1. Stakeholder engagement, community awareness raising and mobilisation;	Conduct awareness meetings with traditional leadership & communities	FD	Meetings conducted
		2 Stakeholder mapping including forest use, users and geographic interest.	Conduct meetings to determine effective span of management control across NLF	FD	FPIC Meetings conducted
		3. Forming community level institutions to coordinate, manage and control local resource use in partnership with the Forestry Department.	Through participatory processes, form local committee responsible to coordinate and assist management of the NLF	Community groups & FD	
		4. Developing forest product and issues based operational management plans for areas of interest.	For each Zone and area of shared management, development management plans and resource use rules		
		5. Agreeing roles, rights, responsibilities and obligations for shared management.			Signed CFM agreements. Annual work plan reports
		6. Conducting joint monitoring and evaluation of management and benefit sharing measures to ensure a sustainable partnership.	See monitoring section of NLFMP		
	To protect the Forest from late fires	Practice early burning within and outside the forest by involving local communities.	-Conduct prescribed and early burning. -Training the local communities on fire management techniques -Sensitizing the local community	FD/ Adjacent communities	Area in hectares of controlled burning

No	Specific Objectives	Strategy	Actions	Responsible	Indicators
			on the importance of early burning.		
2	To secure the boundary and define the extent of the boundary and prevent possible encroachment	Involve forest adjacent communities in Forest protection and management.	-Carry out annual Boundary maintenance. -Beacon maintenance -Erection of sign post on roads entering the Forest	FD/ Community	Distance in km of forest perimeter cleared
3	To conserve and enhance the biodiversity of the forest reserve through environmental awareness and education.	Enhance understanding of the forest ecosystem and its function and benefits to community groups and schools.	-Awareness on biodiversity with regard to indigenous knowledge. -Promote local participation and ownership through meetings.	FD/NGOs	
4	To ensure protection against pests and human damage	Frequent monitoring of forest resources	Inspections for diseases and pests and detection of possible illegalities.	FD/ Community	Hectarage of forest protected from pests and human damage
5	To significantly reduce levels of illegal forest product harvesting.	Involve the local communities in the management of forest resources in order to create a sense of ownership. Engage honorary forest Officers/guards	-Conduct sensitization meetings. -Conduct forest patrols.	FD/ community and other security wings	Number of illegal harvesters/activities reduced

Action 2: Forest Restoration through Community Participation & Livelihood Development

Community empowerment is central to participatory forest management for the effective coordination and sustainable management of forest resources. This Plan recognizes that communities surrounding and within Njovu Local forest are key stakeholders in the conservation of this forest as well as beneficiaries from its sustainable management. This action aims to meeting the social, cultural and economic needs and thereby improving the livelihoods of the communities around and within Njovu Local Forest. Within this management action, the following interventions will be undertaken in the Local Forest as well as extension services and activities in restoration areas, the areas surrounding Njovu Local Forest;

- Promotion of community forestry and the establishment of a community forest management group;
- Promote interventions with community groups to protect, restore and replant, as follows:
 - **Protect** - areas where the forest is intact with local stakeholder involvement;
 - **Restore** - the forest where it is degraded by promoting regeneration encouraging regrowth of local species or reforestation with people's participation.
 - **Replant** - increase forest cover through planting agroforestry species in fields where cropping is taking place. This aims to increase tree cover, soil fertility, provide fodder and small biomass for energy needs. Further, reforestation through planting of indigenous or exotic species in abandoned fields in a plantation environment where practical.
- Promote forest enterprise development (based on stakeholder consultations to be further developed through the CFM process). These may include:
 - Beekeeping using improved hives.
 - Mushroom collection and processing
 - Nature based /Ecotourism

This management action will be operationalized, and results measured as follows:

Specific Objectives	Strategy	Actions	Responsible	Indicator
1. Enter into partnership with clear roles and responsibilities with surrounding communities	Promote community forestry approach	Conduct CFM Steps 1-7	FD	Signed CFM agreement. Annual work plan reports from the CFMG
2. To protect, restore and replant forest cover in the	To Provide Forest extension services.	Training the communities in assisted natural	FD	Hectarage of forest in the fringe areas

Specific Objectives	Strategy	Actions	Responsible	Indicator
fragmented forest areas of the Local Forest		regeneration Promotion of agroforestry and Woodlot establishment for communities surrounding the forest.		increased year on year.
3. To reduce carbon emissions from agric soils and dependency on inorganic fertilizer	Promote CSA through Agroforestry	Partnership with MoA and others in training communities in CSA and agroforestry.	FD/ Agric/ CSO's/ community	Tonnage of GHG emissions in the forest reduced by 15% by mid year review.
4. To significantly reduce levels of tree cutting for wood energy.	Promotion of energy efficient Cook stoves and Alternative energy sources.	Training community members in construction of energy cook stoves. Provide incentives using improved cook stoves.	FD/ DoE/ community	Volume of wood cut for energy reduced by 30% by mid term review
5 Reduce forest dependency by local communities.	Promoting diversification of activities, particularly on-farm activities such as agroforestry and establishment of wood-lots, to create alternative Sources for forest products.	Involve local communities in woodlot establishment.	FD/ Adjacent communities	Number of people dependent on the forests reserve reduced by half at mid term review
6. To contribute towards meeting social, cultural and economic needs and improving the livelihoods of forest-adjacent communities.	Forest resource condition is improved through management actions emphasizing the use of best practices.	Training forest-adjacent communities in sustainable forest enterprises, beekeeping, and other non- wood enterprises	FD/ NGOs	Forest enterprise activities developed and producing income.
7. To reduce carbon emissions from deforestation and forest degradation by ensuring community benefit from carbon credits.	Establish an incentive benefit sharing mechanism through the carbon trading scheme to be established by Government in Eastern province	Stake holder participatory awareness meetings (Traditional leaders, Government, NGOs and the community)	FD/NGOs	Tonnage of GHG sequestered increased thereby income shared to community is improved year on year.

6.4 Promoting Forest Based Enterprise

Based on the condition of the forest including plant and animal species as well as information gathered during the socio-economic assessment and stakeholder consultation meetings, a number of enterprise opportunities were identified and described earlier. Therefore, through the proposed management actions where appropriate in the relevant zones, forest-based enterprises will be promoted within the context of the purpose of a Local Forests as described in the Forests Act, 2015. These relate to utilisation of forest resources at local level in order to meet the social, cultural and economic needs of the local community whilst ensuring the protection of ecosystems, particularly the protection of land and water supplies of local strategic importance. These reflect the importance of the principles of sustainable forest management. Therefore, the following enterprise initiatives are highlighted for promotion through local stakeholder involvement:

Forest product/enterprise	Beekeeping	Wood biomass energy production	Nature based eco-tourism
Market/demand	High, local & urban (Lundazi)	Medium potential local, supply Lundazi.	Local & international demand
Product supply	Patches of flowering trees with suitable pollen fodder, water restricted to certain areas	Through agroforestry & forest restoration activities	Wildlife availability in the forest and surrounding areas.
Potential entrepreneurs	Community groups plus individual beekeepers	Community groups plus individual households	Private sector /community groups/ individuals
Opportunities	Available, developed market. Local safari lodges.	Planned forest restoration works including agroforestry in cropped areas, potential bamboo sites.	The area is already a Game Management Area.
Challenges	Investment in sufficient hives, Honey bulking centre and water reticulation system investment, technical & business skills training	Seedlings, marketing	High initial capital to undertake the business. Also falls within a larger hunting concession, therefore coordination with photo-safari operations would be required.

In the case of Njovu Local Forest, the enterprise development process will form part of the community engagement and strengthening of community forestry practice with strong involvement in any public, private community partnerships in the Local Forest. This provides for monitoring and mentoring, development and review of annual work plans and periodic review of CF Management plans. These include a forest product importance, use and management matrix and forest enterprise development activities. Once there is consensus on developing an enterprise concept, an assessment of market and value chain issues will be formed into a bankable business opportunity. Importantly the support to business development and investment will primarily focus on four key areas of strengthening capacity for viable community based forest enterprises:

- Enhancing technical skills in production, harvesting, processing;
- Building business capacity, including business planning, marketing, financial management, reinvestment and profit sharing;
- Strengthening governance arrangements and membership, conflict resolution mechanisms;
- Improving forest protection, management and monitoring arrangements upon which the business depends on.

Based on the above, formulation of detailed bankable business and investment plans can be developed and supported through financing opportunities from development projects, private sector partners as well as through Community Development Funding through the local authority.

6.5 Fire management strategy

Fire has a critical impact on the forest environment, the condition of the forest and the services that it provides. While fire is frequently naturally occurring in the dryland forests of Eastern Province, it has been used as a management tool technically by foresters as well as by communities for different socio-economic and cultural needs. However, fire that occurs late in the year when the forest is dry causes the greatest harm to the health of the forest as well as the succession process influencing the future productivity, abundance of forest products and therefore its economic contribution locally and nationally. Further, forest fire is a key source of emissions of greenhouse gases (GHGs) in Eastern Province that affects weather patterns, locally, regionally and globally. Therefore if managed correctly as a management tool, prescribed fire can reduce these emissions and impacts, safeguarding the forest resources, its biodiversity while providing enhanced opportunities for local economic development.

Therefore a **fire management strategy and plan** is essential for the proper management of the forest incorporating elements of fire protection and fire suppression. Recognizing the important role the forest plays in support to surrounding communities, the fire management strategy for the Local Forest will be developed through stakeholder consultation and implementation participation with

clear roles and responsibilities. The **fire protection strategy** should indicate: priority areas for protection – valuable and fire sensitive species, newly planted areas, enrichment planting, areas of fire sensitive natural regeneration, as well as high risk areas based on access, use and past frequency of fires. Based on the participatory assessment, protection measures such as: firebreaks – both internal and boundary should be planned, areas for prescribed (early) burning identified as appropriate. An action/ activity plan with roles, responsibilities and timings should be discussed and agreed with stakeholders.

The **Fire suppression strategy** details the response should a wild-fire start which threatens the forest area. This will detail the pre-planned procedures along with roles and responsibilities. It will include the following:

- **A fire detection system:** The process and procedures to report the incidence of fire to promote prompt reaction and therefore protection.
- **Procedures in response to a fire alert:** How to alert stakeholders and local community members to assist with fire suppression including the availability and location of equipment to fight the fire.
- **Firefighting strategy:** This will include details of various approaches to tackling fires using the materials and equipment that are available locally.
- **Methods to fight fires:** This will cover different fire suppression methods depending on the nature of the fire (Frontal attack, Flank attack, Indirect attack – back burning). These will have been explained and key personnel trained in each of the approaches. This will also include risk assessment methods and requirements for personal protective equipment.

6.6 Law enforcement Strategy

This Law Enforcement Strategy aims to protect and sustainably manage Njovu Local Forest, through effective enforcement of legal provisions, regulations, and community participation. Ensuring compliance is essential to prevent illegal activities such as illegal logging, poaching, and forest encroachment.

Objectives

- To prevent illegal exploitation of forest resources.
- To promote community participation in enforcement.
- To ensure timely and fair response to violations.

Key Enforcement Strategies

Regulation of Forest Activities:

- Designating legal zones for access, logging, and charcoal production.
- Issuing permits and licenses for activities like harvesting, collection, and tourism.
- Enforcing restrictions on cutting, hunting, or collecting forest products outside authorized zones.

Monitoring and Surveillance

- Regular patrols by forest rangers and enforcement officers.
- Using technology such as drones, and GPS tracking.
- Engaging Honorary Forest Officers in reporting illegal activities.

Community Involvement in Law Enforcement

- Strengthening community forest groups' role in patrols and reporting.
- Providing incentives for communities that actively participate in enforcement.
- Publicizing penalties to serve as deterrents.

Collaboration with Stakeholders

- Coordinating with Zambia Police, Department of National Parks and Wildlife, Community Forest Management groups (CFMGs), NGOs, and traditional leaders.
- Promoting joint forest patrols and awareness campaigns.

6.7 Environmental and social safeguards and other crosscutting issues

The Forestry Department shall ensure that the management of Njovu Local Forest is carried out in accordance with the Environmental and Social Standards (ESSs) in relation to national policies as well as international standards and agreements, both multilateral and bilateral as appropriate. Existing requirements are set out in the National Strategy to Reduce Deforestation and Forest Degradation, 2016 as well as new requirements that may come into force through the Eastern Province Jurisdictional Sustainable Landscapes Programme. In implementing the indicated management actions, these safeguards and other cross cutting issues will be mainstreamed in all aspects of forest management. In view of the participatory approaches applied in the development of the FMP and follow-up actions to promote community forestry, it is expected that this FMP will have a positive impact upon local livelihoods and to provide support for the development of more sustainable or alternative livelihoods, where needed.

In brief, safeguards will ensure:

- Gender equity and empowerment including addressing issues of gender based violence. Women shall be integrated into all aspects of management of Njovu Local Forest and empowered through equal participation in decision making, governance and benefit sharing. Gender equity shall be pursued to ensure that both men and women have the full range of opportunities and benefits arising from the management of Njovu Local Forest. This aspect should be in line with the National Gender Policy and Climate Change Gender Action Plan. Further safeguards in relation to emissions reductions benefit sharing plan for Eastern Province should be adhered to.
- Environmental and social screening processes. Specific activities as well as the annual workplan and operational plans should include a process of social and environmental screening. These should be reviewed and updated in accordance with the type of activity being planned and general screening reviewed annually.
- A Grievance redress mechanism will be operational at the District and Provincial level to allow a mechanism for grievances to be raised, documented and addressed. Documentation and tracking is core to this issue.

Specific Objectives	Strategy	Activity	Responsible	Indicator
To ensure cross cutting issues are mainstreamed in all aspects of forest management for social equity wellbeing and empowerment through sustainable development	Ensure that all environmental and social impacts, risks and liabilities are identified and mitigated. Identify training needs. Promote ownership and access to forest products and services.	Awareness raising Short courses Exchange visits Refresher courses	FD/NGOs	All crosscutting issues mainstreamed in all forest management aspects. Zero grievances raised. Grievances addressed and closed within 3 months

Infrastructure Development

In order to achieve the forest management objectives for Njovu Local Forest, maintenance of road infrastructure is required. To date, the forest itself yields very little in terms of direct revenue, the maintenance of infrastructure is an ongoing problem for forest management, where funds are always scarce.

No	Specific Objectives	Strategy	Actions	Responsibility	Indicators
1	To maintain the infrastructure necessary to achieve objectives of forest management.	Maintain the existing infrastructure	1. Maintain the road network.	FD/Maintenance/Infrastructure	All infrastructure maintained to optimum standards

6.8 Sources of Revenue

i. Eco-Tourism and Recreation

- Revenue from concessions, or partnerships with tour operators
 - Visitor fees, guided forest tours, birdwatching
 - Camping/hiking permits

ii. Educational and Research Permits

- Universities or NGOs may pay for:
 - Research access
 - Biodiversity studies
 - Conservation training

iii. Licenses and Permits

- Issued by forest authorities (e.g., Forestry Department or authorized CFMG) for:
 - Timber harvesting
 - NTFP collection

iv. Climate change emissions reduction trading Carbon Credits / Environmental Services

The Government of the Republic of Zambia has identified climate financing as a potential source of revenue to support climate change mitigation and adaptation activities to safeguard the natural environment and importantly the ecosystem services that society as a whole and specifically rural communities depend on for their livelihoods and wellbeing. In the Eastern Province, the Ministry of Green Economy and Environment is implementing the Jurisdictional Sustainable Landscape Programme (EP-JSLP). The Programme Development Objective (PDO) is “to promote greenhouse gas (GHG) emissions reduction or removals in the Eastern Province, while simultaneously improving rural livelihoods including forest and wildlife conservation and management. These emissions reductions are being measured, verified, and traded and revenue distributed according to an agreed Benefit Sharing Plan. An estimate has been made of the potential revenue that might be generated through the GRZ emissions reduction trading under the JSLP benefit sharing mechanism. The GHG baseline inventory indicated that the major emissions in the Province are coming from forest land through degradation from forest fires. Implementing improved forest management, conducting fire management and protecting the integrity of the forest areas including from forest loss, degradation and encroachment can be measured and monetised.

In the case of Njovu Local Forest and based on the intact forest area of 78% may generate emissions reduction of 10,164 tonnes of carbon equivalent which may be monetised to generate around ZMW 762,325 annually. This may increase as

prescriptions of forest restoration may result in increased carbon sequestration that can be measured and monetised.

Environmental Education

Environmental education is the key to ensuring the future of Njovu Local Forest. With improved understanding and appreciation of its importance especially amongst the surrounding local communities, there will be less pressure on this forest with regard to destructive activities. In the long term, improved environmental education will lead to a better understanding of the importance of conserving Njovu Local Forest. The following interventions will be undertaken in order to create wider awareness of the forest, its importance, and the need for its conservation:

No	Specific Objectives	Strategy	Actions	Responsibility	Indicators
1	To create wider awareness of the forest, its importance, and the need for its conservation	1. To target a wider range of groups in the community through different actions including school children, and headmen.	-Conduct meetings and drama performances to assess community understanding on forest use and conservation. -Sensitization on Climate change through radio. - Produce pamphlets on the need for forest conservation. (Local language).	FD/MOE/ NGOs	Number of awareness raising activities undertaken
		2. To encourage the involvement of local clubs and schools to use the forest conservation Clubs as an educational resource.	-Facilitate the formation of forest conservation clubs in surrounding schools.	FD/MOE	Number of awareness raising activities undertaken
		3.Strengthen school environmental education programmes	-Conduct environmental talks in schools on forest conservation and climate change. Conduct study visits to other areas and projects to gather practical and potentially useful experiences from elsewhere.	FD/Other Partners	Number of awareness raising activities undertaken

6.9 Summary Budget of Forest Management Plan Implementation.

Based on the proposed management actions described above, a budget has been developed covering the period of the plan. The summary table is provided below with the detailed cost breakdown in the Annex VII.

Forestry Programme	Cost in ZMW for 10 years
1 Forest Conservation through Community Participation and Livelihood Development	4,023,364
2 Forest Protection, Restoration, Management and Conservation of Biodiversity	2,943,039
Grand Total (ZMW)	6,966,403
Potential revenue generation (10 years)	9,715,466
Funding surplus (ZMW)	2,749,063

Table 10: summary cost of forest management plan implementation

Budget breakdown is provided in Annex VII

7 STAKEHOLDERS ROLES AND RESPONSIBILITIES

Effective implementation of the Njovu Local Forest Management Plan (NLFMP) requires active participation and collaboration among all key stakeholders. Each stakeholder has specific roles and responsibilities to promote sustainable forest management, conservation, and community development.

District Forestry Office (DFO)

The District Forestry Office plays a pivotal role in on-the-ground forest management, enforcement, and community engagement. Its specific responsibilities include:

- **Conduct Regular Patrols:** Carrying out routine patrols within the Njovu Local Forest to prevent illegal activities such as unauthorized logging, poaching, and encroachment.
- **Maintain Boundaries and Beacons:** Ensuring all forest boundaries and beacons are clearly marked, visible, and maintained to prevent boundary disputes and illegal incursions.
- **Monitor Forest Recovery and Growth:** Tracking forest regeneration, health, and overall ecological status to inform management decisions and detect signs of degradation.
- **Develop and Implement Forest Fire Management Plans:** Establishing proactive fire prevention, detection, and suppression strategies, including community-based fire management initiatives.
- **Conduct Environmental Education (EE) Campaigns:** Raising awareness among local communities and stakeholders about sustainable forest use, conservation practices, and the importance of forest resources.
- **Train Communities in Sustainable Forest Management (SFM):** Providing capacity-building programs, workshops, and technical assistance to community members and forest management groups.
- **Report and Document Activities:** Preparing and submitting comprehensive reports on forest conditions, patrol outcomes, enforcement actions, and community engagement efforts to relevant authorities for oversight and planning.

Provincial Forestry Office (PFO)

The Provincial Forestry Office provides strategic oversight, governance, and support to ensure effective implementation of the Forest Management Plan. Its primary responsibilities include:

- **Monitoring and Evaluation:** Regularly assessing the implementation of the FMP at district and community levels using predefined performance indicators to measure progress and identify gaps.
- **Disbursement of Funds:** Managing financial resources allocated for forest management activities, community support programs, capacity-building, and infrastructure development.

- **Facilitation of Audits:** Overseeing and supporting the auditing process of District Forest Offices and community initiatives to ensure transparency, accountability, and proper use of resources.
- **Coordination and Support:** Offering technical guidance, resources, and capacity-building support to District Forest Offices, community groups, and other stakeholders involved in forest management.
- **Policy and legal framework:** Ensuring that the FMP aligns with national forestry policies and legal frameworks, particularly the Forests Act, 2015.
- **Stakeholder Engagement:** Facilitating communication and collaboration among government agencies, communities, NGOs, private sector partners, and other relevant entities.

Role of Local Authorities

Local authorities are vital for integrating sustainable forest management into broader development initiatives at the district and community levels. Their responsibilities include:

- Incorporating the FMP into local development plans, ensuring that forest management considerations are mainstreamed into land use, infrastructure, and ecosystem planning.
- Facilitating alignment between forest management activities and other sectors such as agriculture, water, and health.
- Supporting the enforcement of forest laws and regulations within their jurisdictions.
- Promoting rural development projects that leverage forest resources to enhance community livelihoods and economic resilience.

Role of Traditional Authority

Traditional leaders play an influential role based on customary authority, community trust, and cultural management systems. Their roles encompass:

- Providing mentorship and guidance to community members on sustainable resource use.
- Helping resolve conflicts related to forest access, use, and rights according to customary laws.
- Providing formal consent for community-based forest management processes, including recognition and signing of community forest management agreements with the Director of Forestry.
- Supervising the community forest management groups, ensuring their activities conform to customary norms and legal provisions.
- Overseeing access control, management of natural resources, and the conduct of community elections for forest management committees.
- Ensuring that enforcement of rules and resolutions reflects community values and customary laws.

Role of communities

Communities are the primary custodians of the forest and hold the rights to sustainably manage and benefit from forest resources. Their responsibilities include:

- Controlling access to forest resources to prevent illegal activities and overexploitation.
- Actively participating in decision-making processes related to forest management.
- Implementing community-based sustainable forest practices as outlined in the management plan.
- Protecting the forest from illegal activities such as logging, poaching, and encroachment.
- Ensuring equitable sharing of benefits derived from forest resources, including income, employment, and social services.
- Reporting violations and participating in community-led enforcement efforts.
- Maintaining the community forest management groups and ensuring transparency and accountability in their operations.

Role of Honorary Forestry Officers (HFO)

Honorary Forest Officers are community members appointed based on peer nominations and official approval by the Minister. Their roles include:

- Facilitating community compliance with forest laws, bylaws, and resolutions.
- Supporting enforcement of sustainable harvesting and access regulations.
- Acting as mediators in conflict resolution within the community regarding forest use.
- Reporting infractions and assisting in investigations related to illegal activities.
- Collaborating with District Forest Officials to ensure harmonized enforcement efforts.

Role of Private Sector and Civil Society Organization (CSOs)

Private sector entities and civil society organizations are crucial for fostering economic development and social empowerment through forests. Their roles include:

- Providing technical and financial services to support community enterprises, such as training, capacity building, and infrastructure development.
- Developing market linkages for forest-based products, ensuring fair trade and sustainable value chains.
- Promoting innovative approaches and investments that enhance forest conservation while generating income.
- Supporting additional services such as environmental education, capacity building, and advocacy for policy reforms.
- Facilitating the development of non-timber forest products (NTFP) enterprises, eco-tourism, and other sustainable livelihood opportunities.
- Monitoring social and environmental impacts of forest-based activities to ensure compliance with sustainability standards.

8 MONITORING AND EVALUATING IMPLEMENTATION

Monitoring and evaluation (M&E) of the management plan is essential since it provides a basis for observation, adjustment and improvement of the targeted activities and assessment of the achievements. The Forest Management Plan will be implemented by Forestry Department by involving local communities around the forest reserve. The Department will provide a forum for dialogue, consensus building, priority setting and balancing of the various interests involved. Monitoring and evaluation of this management plan will also be based on annual work plans that will be prepared for Njovu Local Forest which will operationalize the management actions.

Monitoring

To ensure that implementation of the management plan is on course, FD will facilitate monitoring of activities and programmes in coordination with partners, stakeholders and community representatives in the NLF including the impact of the FMP on the wellbeing of the communities on the forest fringes. Implementation of the FMP will be monitored through a number of identifiable indicators as described in the management actions in Chapter 6. These will be subject to regular review during the plan period. Continuous monitoring during the implementation period will be maintained through preparation and submission of monthly, quarterly and annual progress reports.

Evaluation

The NLF implementation and impact will be evaluated at two points. Mid-term (5 years) and at end of term (10 years). Evaluation will involve analysis of both activities and impact generated to sustainable management of the forest and the fringe communities as this will generate evidence to inform the development, focus and implementation of future management plans. Evaluation carried out will assess progress in the implementation of planned activities and achievement of objectives. The evaluation report will also provide essential information to revise the management plan.

Monitoring responsibilities

The Provincial Forestry Office will undertake monitoring and evaluation of the implementation of the plan. The District Forestry Office will be responsible for submitting annual plans of operations, as well as monthly, quarterly, and annual progress reports to the Provincial Forestry Office.

Strategic monitoring indicators

Strategic monitoring indicators provide a measure of assessing whether set targets are progressively being achieved as described in the management actions Chapter. The lead implementing agencies represented by the Forestry Department will undertake monitoring and evaluation of the implementation of the plan.

Programme	Indicator of Success	Means of Verification	Assumptions
Forest Protection	Reduced incidences of forest crimes Reported. Performance of the local communities and honorary forest officers.	Records and reports.	The Plan is successfully completed and implemented with Cooperation from community Members
Biodiversity Conservation	Increase in species biodiversity.	Surveys on biodiversity, records, photographs and reports.	The Plan is successfully implemented Good working relationship between stakeholders Availability of resources
Community Conservation and Livelihood development	-Number of people - trained and practicing sustainable forest enterprises. -No. of woodlots established -Number and types of IGAs. -Crop and livestock yields.	Records, reports and photographs. -Community Visits.	The Plan is successfully implemented Availability of funds
Environmental Education	Number of school conservation clubs formed. No. of awareness meetings and attendance. -No of trainings held/exposure visits	Records, monitoring & Evaluation reports and photographs.	The plan is successfully implemented with funds made available.
Infrastructure Development	Number and type of infrastructure Developed/ maintained	Records Monitoring and evaluation reports	The Plan is successfully implemented Availability of funds
Human Resource Development	Number of people employed Number of people trained. Number of community members involved in forest activities	records Monitoring and evaluation report	The Plan is successfully implemented Availability of funds

9 ANNEXES

Annex I: Declaration Order, Topo Map & Inventory Map

SECTIONS 5 AND 6-THE LOCAL FOREST NO. P232:

NJOVU LOCAL FOREST (DECLARATION) ORDER

Order by the Minister

SECTIONS 5 AND 6-NATIONAL AND LOCAL FORESTS

Declarations by the Minister

NATIONAL AND LOCAL FORESTS NOS. 1, 6 AND 8

The areas described in the Schedule are hereby declared to be National and Local Forests, and the following acts are hereby prohibited within the said areas except under licence: (a) felling, cutting, taking, working, burning, injuring or removal of any forest produce; (b) squatting, residing, building any hut or livestock enclosure, constructing or reopening any saw-pit or road; (c) firing any grass or undergrowth; (d) grazing livestock; (e) clearing, cultivating or breaking up land for cultivation or other purposes; (f) entering or being in or upon the said areas in any manner or for any purpose contrary to any statutory order made by the Chief Forest Officer: Provided that, notwithstanding the foregoing prohibitions, any bona fide picnic or camping party may without licence camp and light fires in any portions of the said areas set apart for these purposes on condition that any fires so lighted shall be effectively prevented from spreading and shall be extinguished before being left by the person or persons who lighted them.

LOCAL FOREST NO. P232:

NJOVU Statutory Instruments

50 of 1970

66 of 1975

Starting at a beacon on the north bank of the Mwasauka Stream, some 1.15824 kilometres eastwards of the confluence of this stream and the Luangwa River, the boundary follows a demarcated line on a true bearing of 55 degrees 30 minutes approximately for a distance of 6,995.2 metres approximately to a beacon on the south bank of the Lukuzye River; thence along the south bank of this river in a generally easterly direction for a distance of 3,383.3 metres approximately to a beacon; thence on a demarcated line on a true bearing of 99 degrees 30 minutes approximately for a distance of 2,084.8 metres approximately to a beacon on the south bank of the Lukuzye River; thence on a demarcated line on a true bearing of 122 degrees approximately for a distance of 11,064.2 metres approximately to a beacon on the west bank of the Lukuzye River; thence on a demarcated line on a true bearing of 219 degrees approximately for a distance of 10,817.35 metres approximately to a beacon on the Chipata District/Lundazi District boundary; thence along this boundary on a demarcated line on a true bearing of 286 degrees 30 minutes approximately for a distance of 7,900.4 metres approximately to a beacon at the junction of the Chipata District/Lundazi District boundary and the eastern boundary of the Nsefu Game Reserve; thence along the eastern boundary of the Nsefu Game Reserve on a demarcated line on a true bearing of 326 degrees approximately for a distance of 10,268.7 metres approximately to a beacon on the Mwasauka Stream, the point of starting. The area described above, in extent 14,020.8 hectares approximately, is shown bordered green on Plan No. FR300 deposited in the office of the Surveyor-General, signed by him and dated 28th September, 1968.

1. Map of Njovu Local Forest in green in relation to Chiefdom boundaries (1958 map)

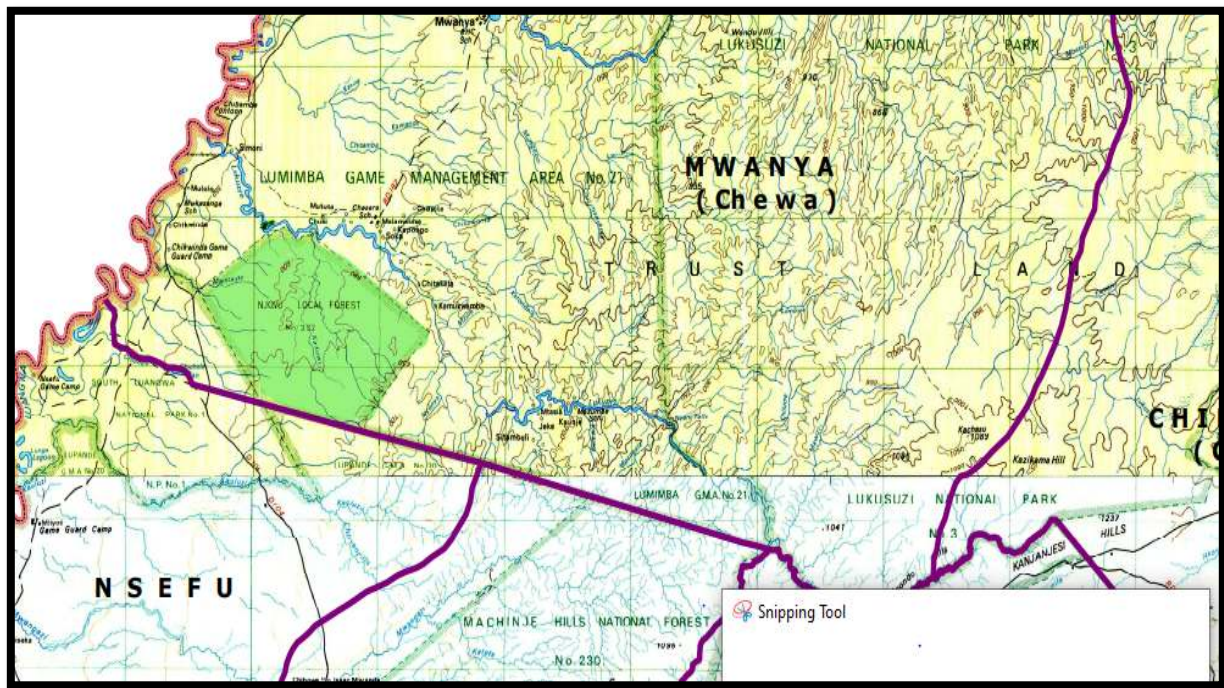
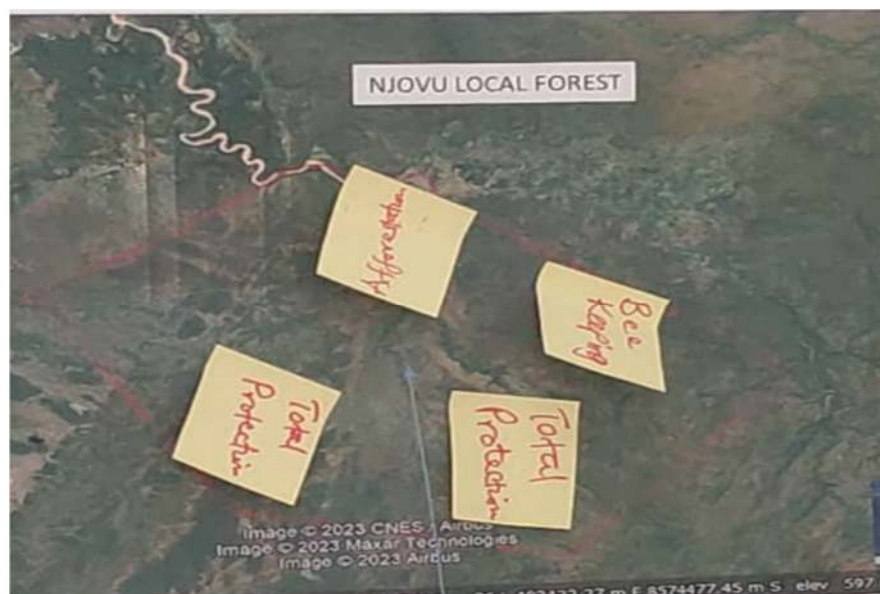


Figure 17: Map of Njovu Local F relating to forest condition



Map indicating systematic sample points within the inventory squares.

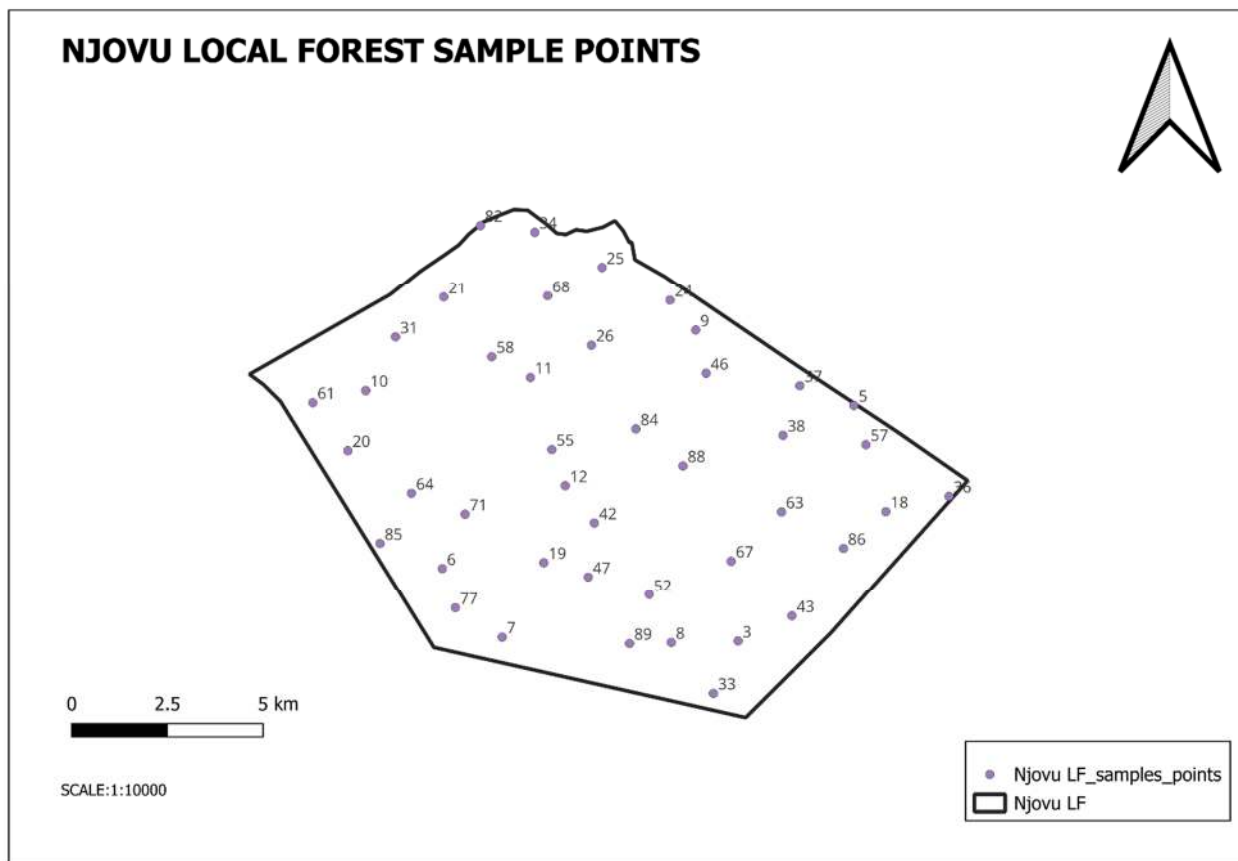


Figure 18: Map indicating systematic sample points within the inventory squares

Annex II: Inventory Data

Species	Code	0-4	5-9	10-14	15-19	20-29	30-39	40+	Total
Density	Total	1.77	270.40	136.86	28.39	11.76	4.66	10.43	464.27
Acacia albida	1	0.00	0.22	0.00	0.00	0.00	0.00	0.00	0.22
Acacia sieberiana	7	0.00	0.00	0.00	0.00	0.44	0.00	0.00	0.44
Acacia erubescens	9	0.00	0.67	0.00	0.00	0.00	0.00	0.00	0.67
Adina microcephala	11	0.00	3.11	1.55	0.44	0.00	0.00	0.22	5.32
Afzelia quanzensis	13	0.00	0.00	0.44	0.00	0.00	0.00	0.00	0.44
Albizia adianthifolia	15	0.00	0.22	0.00	0.00	0.00	0.00	0.00	0.22
Albizia antunesiana	17	0.00	0.67	0.00	0.00	0.00	0.00	0.00	0.67
Albizia gummifera	18	0.00	0.22	0.00	0.00	0.00	0.00	0.00	0.22
Anisophyllea boehmii	23	0.00	0.44	0.22	0.00	0.00	0.00	0.00	0.67
Annona senegalensis	25	0.00	0.00	0.22	0.00	0.00	0.00	0.00	0.22
Berchemia discolor	37	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.22
Brachystegia boehmii	46	0.00	1.77	1.55	0.00	0.00	0.00	0.00	3.33
Brachystegia bussei	47	0.00	7.99	2.22	0.67	0.67	0.00	0.00	11.53
Brachystegia floribunda	48	0.00	0.89	0.00	0.00	0.00	0.22	0.00	1.11
Brachystegia longifolia	49	0.00	0.89	0.44	0.22	0.00	0.00	0.00	1.55
Brachystegia spiciformis	52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Byrsocarpus orientalis	62	0.00	0.89	0.00	0.00	0.00	0.00	0.00	0.89
Canthium lactescens	65	0.00	0.67	0.67	0.00	0.00	0.00	0.00	1.33
Cassia abbreviata	68	0.00	0.22	0.44	0.67	0.00	0.00	0.00	1.33
Cassia siamea	71	0.00	0.22	0.00	0.00	0.00	0.00	0.00	0.22
Colophospermum mopane	81	0.44	57.89	11.31	3.99	1.11	1.33	6.21	82.29
Combretum celastroides	82	0.00	3.99	2.44	0.22	0.22	0.00	0.22	7.10
Combretum collinum	83	0.00	0.67	0.00	0.44	0.00	0.00	0.00	1.11
Combretum molle	86	0.67	52.57	41.48	8.65	3.11	0.67	0.44	107.58
Combretum psidioides	88	0.00	0.22	0.00	0.00	0.00	0.00	0.00	0.22
Combretum zeyheri	89	0.00	62.33	29.72	4.21	2.00	0.44	0.22	98.93
Commiphora mollis	90	0.00	4.21	0.67	0.44	0.00	0.00	0.00	5.32
Cryptosepalum maraviense	96	0.00	0.22	0.00	0.00	0.00	0.00	0.00	0.22
Cussonia spicata	99	0.00	0.22	0.00	0.00	0.00	0.00	0.22	0.44
Dalbergia nitidula	102	0.00	2.22	2.88	0.67	0.00	0.00	0.00	5.77
Diospyros batocana	109	0.00	0.22	0.00	0.00	0.00	0.00	0.22	0.44
Diospyros kirkii	111	0.22	1.77	0.67	0.00	0.22	0.44	0.00	3.33
Diospyros mespiliformis	112	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.22
Diplorhynchus condylocarpon	114	0.00	12.42	3.55	0.22	0.00	0.00	0.00	16.19
Erythrina abyssinica	125	0.00	0.22	0.00	0.00	0.00	0.00	0.00	0.22
Hexalobus monopetalus	178	0.00	0.22	0.00	0.00	0.00	0.00	0.00	0.22
Hymenocardia acida	181	0.00	0.44	1.11	0.44	0.89	0.22	0.00	3.11
Julbernardia globiflora	188	0.00	0.22	0.00	0.00	0.00	0.00	0.00	0.22

<i>Kigelia africana</i>	191	0.00	0.00	0.22	0.22	0.00	0.00	0.00	0.44
<i>Landolphia kirkii</i>	193	0.00	0.44	0.22	0.00	0.00	0.00	0.00	0.67
<i>Lanea discolor</i>	194	0.00	4.44	2.88	0.22	0.00	0.00	0.00	7.54
<i>Lanea stuhlmannii</i>	199	0.00	1.55	0.67	0.22	0.00	0.00	0.00	2.44
<i>Lonchocarpus capassa</i>	200	0.00	5.32	2.66	0.22	0.22	0.00	0.00	8.43
<i>Markhamia obtusifolia</i>	211	0.22	9.54	9.76	3.55	0.67	0.22	0.22	24.18
<i>Monotes africanus</i>	221	0.00	0.67	0.44	0.44	0.44	0.22	0.22	2.44
<i>Oncoba spinosa</i>	228	0.00	0.22	0.22	0.00	0.00	0.00	0.00	0.44
<i>Phyllocomus lemaireanus</i>	243	0.00	0.22	0.00	0.00	0.00	0.00	0.00	0.22
<i>Pseudolachnostylis maprouneifolia</i>	258	0.22	3.33	3.77	0.00	0.22	0.00	0.00	7.54
<i>Pterocarpus angolensis</i>	262	0.00	0.22	0.22	0.00	0.00	0.00	0.00	0.44
<i>Pterocarpus rotundifolius</i>	265	0.00	2.22	0.67	0.00	0.00	0.00	0.00	2.88
<i>Rhus longipes</i>	268	0.00	0.44	0.89	0.44	0.22	0.00	0.00	2.00
<i>Rothmannia fischeri</i>	271	0.00	2.88	0.44	0.00	0.00	0.00	0.00	3.33
<i>Sterculia quinqueloba</i>	285	0.00	0.44	0.22	0.00	0.00	0.00	0.00	0.67
<i>Stereospermum kunthianum</i>	287	0.00	0.22	0.00	0.00	0.00	0.00	0.00	0.22
<i>Strychnos cocculoides</i>	288	0.00	0.00	0.22	0.00	0.00	0.00	0.00	0.22
<i>Strychnos innocua</i>	289	0.00	0.22	0.22	0.00	0.00	0.00	0.00	0.44
<i>Swartzia madagascariensis</i>	295	0.00	0.22	0.00	0.00	0.00	0.00	0.00	0.22
<i>Terminalia mollis</i>	303	0.00	1.55	0.44	0.00	0.00	0.00	0.00	2.00
<i>Terminalia sericea</i>	304	0.00	0.22	0.00	0.00	0.00	0.00	0.00	0.22
<i>Terminalia stenostachya</i>	305	0.00	2.00	2.88	0.00	0.89	0.22	0.00	5.99
Unknown	999	0.00	14.86	8.21	1.77	0.44	0.67	1.77	27.73

Annex III: Demographics of major forest fringe communities

Demographics of major forest fringe communities of Njovu Local Forest

	Sex of household head		
Village/Locality	Female	Male	Total
Catholic church	0	1	1
Chusi	5	20	25
Mukwela	8	21	29
Mwanya p.school	0	2	2
Old palace	1	0	1
Total	14	44	58

Table 11: Population Distribution of major forest fringe localities of the Reserve by sex

Annex IV: Stakeholder consultations

The Forestry Department in Eastern Province initiated a process to prepare forest management plans for 24 forest reserves with support from Zambia Integrated Forest Landscape Project (ZIFLP). In accordance with section 41 of the Forests Act, 2015, a process of engagement with traditional leaders was conducted in order to gain support from the Chiefs in the preparation of the Forest Management plans before the proposed data collection activities and later local validation meetings. It was planned to meet their Royal Highnesses to gain consent and have an input in these Forest Management Plans.

Therefore, the Chiefs under which Njovu Local Forest reserves fall were targeted with the following objectives.

- To provide a platform of getting the views of the concerned Chiefs, in relation to the respective developed forest management plans for forest reserves in their Chiefdoms.
- To collect and incorporate the agreed views from the Chiefs in the message pack for the local validation meeting.

Visitations to Chiefs on FMP consultations

During the courtesy call the team gave the background of forest inventories conducted in Njovu Local F and the interventions that ZIFLP is helping, the importance of the Luangwa landscape and the areas of interventions including climate smart agriculture, support to Forestry Department to continue protecting existing forest estates, support to nurseries, assisted natural regeneration and also support to establishment and management of community forests. The specifics of the visit were also made clear as to have an input from the Royal Highnesses in the development of the forest management plans.

1. Meeting Chief Mwanya on Njovu Local Forest

Forest Management plan to be written effectively, his Royal Highnesses Chief Mwanya was visited for consultation over Njovu Local Forest of Lumezi Districts.

OBJECTIVES

- To get views from Royal Highnesses and incorporate those views in the development of forest Management plans.
- To engage local authorities, local communities and other stakeholders to give their valuable input in the management plan.

Annex V: Stakeholder validation meeting

REPORT FOR THE MANAGEMENT PLAN STAKEHOLDERS' VALIDATION MEETING HELD AT CATHOLIC SISTERS HALL IN LUNDAZI



Figure 19: Stakeholders validation meeting participants

1.0 Introduction:

The Forestry Department in 2021 undertook a forest inventory exercise to take stock of the forest resources in Njovu Local F (NLF) among others with the view of collecting data to inform the preparation of Forest Management Plans (FMPs). The FMPs are prepared to guide the community-government partnership in the management of protected forest areas (FPAs) in the Eastern Province. Following the forest inventory exercise, draft FMPs were prepared for all the FPAs in Eastern Province. The Stakeholders Validation Meeting for NLF in Njovu LF was organized to validate the FMP for the NLF which was developed by the Forestry Department.

The meeting brought together 37 participants: (7 females and 30 males) drawn from government departments, civic leaders, CSOs, private sector, community groups and traditional leaders.

2.0 Official Opening

The District Commissioner for Lumezi officiated at the NLFMP validation meeting. The District Commissioner informed the participants that the formulation of Forestry Management Plans (FMPs) was required by law (Forestry Act No. 4 of 2015) to be validated by stakeholders as it has been done today. Hence the meeting was very important. The meeting was called to facilitate sustainable management of the NLF which has no current FMP. In this regard the District Commissioner implored the stakeholders for constructively engaging and contributing actively in the meeting. The District commissioner reiterated that FMP formulation is a legal

obligation and needed to be formulated and validated in a consultative and participatory way the way we have done.

4.0 Meeting Objectives

As the meeting objectives were highlighted by the DC's in their speech.

5.0 Structure of Meeting

The meeting had three main components, presentations, group work and plenary discussions.

5.1 Presentations

Three main context setting presentations were made by the workshop facilitators:

- i) Policy and legal context;
- ii) Natural Resources profiles; and
- iii) Socio-economic profile

5.1.1 Policy and Legal Context

The presentation on Policy and legal context was done by Mr. Christopher Gondwe,. The presentation covered the roles and functions of protected forest areas (PFAs); and why they are established. To enhance comprehension of the information in the presentation imagery was also used. Also highlighted in the presentation was a brief overview of the Zambia Integrated Forest Landscape Project (ZIFLP) and its significance in the sustainable forest management. The major highlights from the presentation were:

The imagery showing the negative effects of major on-going deforestation, rapid deforestation for farming and unsustainable livelihood activities.

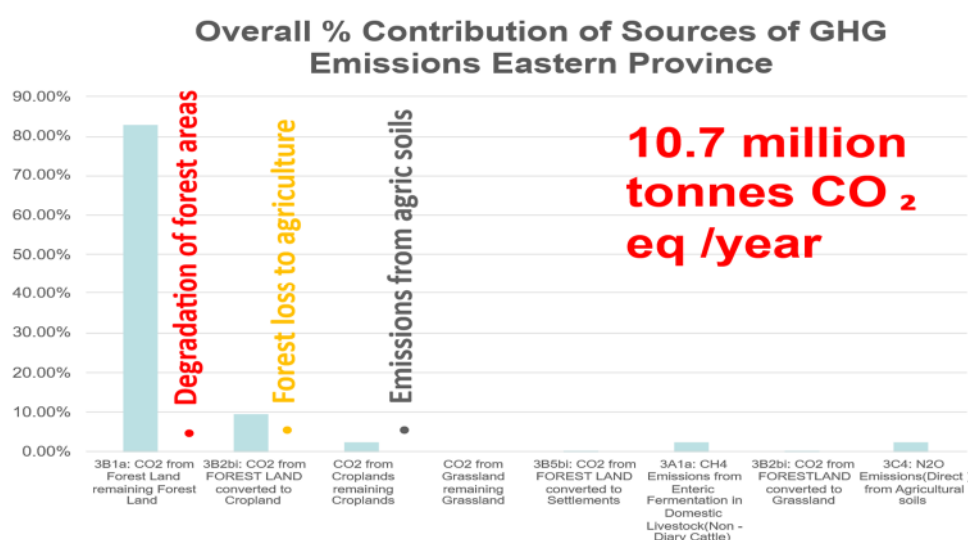


Figure 20: imagery showing the negative effects of major on-going deforestation

- The objectives of ZIFLP that is “To improve the landscape management and increase environmental and economic benefits for the targeted rural communities in the Eastern Province” was highlighted;
- The ZIFLP as a GRZ project provided the Forestry Department with resources to enable it to fulfil its mandate and functions;
- Also highlighted in the presentation were the reasons that prompted government to implement the ZIFLP in Eastern Province which include the following on-going degradation, deforestation, unsustainable livelihood activities, low crop yields, increased adverse effects of climate change, and low community participation in forest management;
- The importance of forests in line with the legal framework were highlighted in the presentation such as soil conservation, carbon sequestration, water cycle and habitat protection;
- The ZIFLP was a REDD+ Project, to determine where Green House Gases (GHG) were being emitted and the sources of these emission, Green House Gases (GHG) baseline survey was conducted which revealed 3 main sources of GHG emissions in Zambia: degradation 46%, forestry loss to agriculture 16% and emissions from agriculture soils at 14 %. The underlying causes of the 3 main source of GHG emissions were also highlighted;
- Through ZIFLP government was not only intervening to arrest the situation but also to make the communities aware of the imminent consequences if no action was taken at national and subnational levels;
- An overview of selected of existing pieces of Forest legislation were shared such as the Local Forest Policy 2014, National Strategy to Reduce Deforestation and Forest Degradation, Local Forestry Act No 4 of 2015 among others. Contents such as vision, objectives and measures were also shared;
- Also presented were the policy and pieces of legal documents pertaining to NLF. It was highlighted that NLF was gazetted as a forest in 1968 a local supply of timber. Forest protection was important for both the present and future generation as provided for in the legal documents;
- The meeting was being held because sustainable forest protection and management required concerted efforts and that FMPs formulation was a legal obligation that needed to be done in a consultative and participatory manner;

Situation Analysis

The presentation on situation analysis focused on the two surveys- Natural Resources Profiles and the other on the socio-economic profile that were undertaken in the local and national forests in 2021.

a) Natural Resources Profiles- Forestry Inventory Results including Change Analysis

Mr Christopher Gondwe presented the situation analysis highlighting the natural resources profiles and inventory results and change analysis. Major highlights from the presentation included:

- Total number Protected Forest Reserves in Eastern Province was 73: 11 NFs and 62 LFs covering 469,142 ha which translates to 9.2% of the total surface area of the eastern province. the total boundary area covers 2,042.7 km;
- NLF was gazetted in 1968 with total Hectarage of 14,020.8
- How volume was calculated/measured was demonstrated
- The sampling design used to select the sample plots in the survey was systematic sampling design through which sample plots were created and data was accordingly collected from all the sample plots.
- Parameters that were considered in the survey were highlighted and explained.
- The proposed programmes as contained in the draft FMP were also presented.

b) Socio-Economic Profile.

Mr Mully Phiri from Zambia Statistics Agency made the presentation on Social-Economic Profile. Noteworthy highlights from the presentation included the following:

- The Province undertook the Socio-Economic Survey in NLF in 2021 alongside the Forest Inventory.
- At the time of the survey, the total population for the 5 villages surrounding NLF included in the survey that derived benefits from the forest was 279 out of which 141 were male and 138 were female. The sample comprised 58 households, out of which 44 were male headed households and 14 were female headed households;
- Farming (80.0) was the main source of livelihood for the people surrounding the Forest, while (5.0%) are in paid employment and (15.0%) in business as main income generating activities.
- Almost (95.0%) all the people sampled Majority depended on firewood for cooking while only 5.0% use gas
- Traditional housing units comprise of 65.0% of the population living in this type of housing units, while 15.0 are in Improved traditional housing units, 20.0 are detached housing units
- As much as 95.0% of the total sample population expressed willingness to protect and manage the NLF and only 5.0% expressed lack of willingness;

Clarifications raised by participants included: -

The villages surrounding NLF had been willing to co-manage the forest since 2014 when the Forestry Department engaged pertaining joint management. Through the same process the community management plan was even developed. However, the Department went quiet; there had been no follow up.

Group Work



Figure 21: Group work of stakeholders on issues and threats

Group work on issues and threats affecting the Protected Forest Area (PFA) and identification of hot spots of concern was facilitated by Mr. Gondwe. Two groups were formed to: -

- ✚ Identify issues and suggest possible solutions;
- ✚ Identify priorities and strategies;
- ✚ Identify uses of the forest and map where they were most prevalent
- ✚ The PFA and identification of practices which should be allowed or not allowed in the respective areas
- ✚ Who should be involved in the management of NLF.

Group Presentations

The Groups made presentations to facilitate agreement of the strategies and partnership for management. The following is a synopsis of the group work and write up from flipcharts and other materials:

GROUP WORK - 1

1. Identify in Njovu Local Forest

What- Uses of the forest	Who- Uses the forest?
<ul style="list-style-type: none">• Firewood, charcoal• Fruits, Mushroom, Caterpillar• Medicine• Habitant for animals	<ul style="list-style-type: none">• Local Community• Wild Animals• Investors

Where- it is used/harvested

ISSUES	SOLUTIONS
Deforestation	Reforestation
Late burning - degradation	Early burning/fire break
Illegal settlement	Eviction
Loss of forest land to agriculture	No expansion of farm land
Illegal allocation of land by some tradition leaders	Sensitization management among the leaders/coordination
Limited local economic opportunities	Investments and partnerships

Njovu local Forest

Permitted practices.	Prohibited practices.
<ul style="list-style-type: none">• Grass harvesting• Hunting routes• Caterpillars• Dry firewood• Fruits• Early burning• Honey	<ul style="list-style-type: none">• No Charcoal Production• No fresh Timber cutting• No Late fires• No poaching• Illegal allocation of land• Illegal construction of infrastructure

List Suggestions/strategies to improve productivity/management of the forest.

- What should be the priority?
 - Sensitization meeting – Chiefs, Traditional Leaders and Communities
 - Reforestation on deforested areas
 - Recruitment of honorary rangers.
- Who should be involved?
 - Government Departments – Forestry, Agriculture, Dept. of National Parks , NGOs, Traditional Leaders, Communities inside and around the forest. Private sector.
- How do we work together
 - Stake holders' engagement meetings
 - Formation of committees , involving communities leaders, government departments, NGOs etc

GROUP 2

2. Identify in Njovu Local Forest

What- Uses of the forest	Who- Uses the forest?
<ul style="list-style-type: none">• Medicine• Firewood• Hunting• Fruits collection• Poles	<ul style="list-style-type: none">• Local Community• Outsiders

<ul style="list-style-type: none"> • Timber • Charcoal 	
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3. List suggestions/strategies to improve productivity/management of the forest.

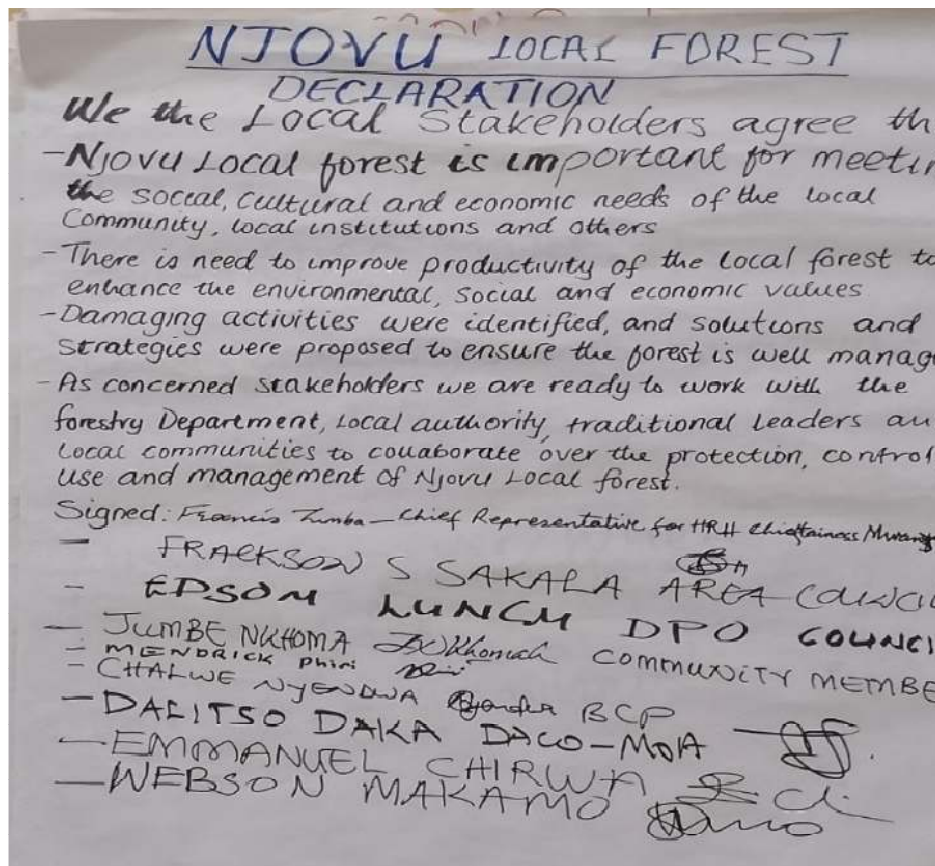
- What should be the priority?
 - Approach the chief and discuss on forest degradation of the forest.
 - Intensify By laws at community level.
 - Sensitisation of the communities
 - Replanting of trees to degraded areas
 - Investments & partnerships.
- Who should be involved?
 - Traditional Leaders
 - Local Communities
 - Technical groups (stakeholders)
 - Investors
- How do we work together?
 - Formation of Community Forestry Groups (CFMGs)

Collaboration Declaration Pledge

The stakeholders signed a joint declaration pledging to collaborate in the sustainable management of NLF. Below are the contents of the Declaration Pledge:

“We the interested stakeholders of NLF agree the need to increase the productivity of the NLF to enhance the environmental, social, cultural and economic values. Damaging activities were identified, and solutions and strategies put forward to ensure the forest is well managed and protected. Permitted practices were identified as well as those which should be controlled.

“As concerned stakeholders we are ready to work in partnership with the Forestry Department, Local Authority, traditional leaders to collaborate over the protection, control, use and management of NLF”.



Next steps

The team facilitated the session on next steps. Below were the agreed next steps/way forward

- Forestry Department team to capture discussions, issues, strategies, and recommendations from the meeting and report the opportunities to the Provincial Forestry Office and the Forestry Department Headquarters
- The chiefs' representative should report to their Royal Highnesses the proceedings of the meeting
- Forestry Department Team to:
 - Support follow up activities
 - Develop proposal to secure funding for development of NLF with stakeholders' involvement
 - Subject to Project extension, check for opportunities for supporting enterprise development

Annex VI: References

References that were used in the collection of information for this Forest Management Plan included the following:

- Fanshawe D.B (1971), The Vegetation of Zambia, Forest Research Bulletin No. 7 Ministry of Rural Development, Republic of Zambia, Government Printer, Lusaka, Zambia
- Government of Zambia, Department of National Parks & Wildlife, (2020), Game Management Plan for Lumimba Game Management Area, Lusaka, Zambia
- Government of Zambia, (2018) The National Guidelines for Community Forestry in Zambia, Forestry Department, Lusaka, Zambia. <https://ziflp.org.zm/cfm/>
- Hollingworth, L.T D. Johnson, G. Sikaundi, S. Siame, (2015) Fire Management Assessment of Eastern Province, Zambia. Washington. DC: USDA Forest Service.
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- ILUA II (2016) Integrated Land Use Assessment Phase II- Report for Zambia.
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- ILUA II (2016) Integrated Land Use Assessment Phase II- Technical Report for Eastern Province.

Annex VII: Budget for implementing management actions

Action 1: Forest Protection, Management & Conservation of Biodiversity		Unit of Measure	Quantity	Frequency	Unit Cost	Total Cost Year 1	Total Cost Year 2	Total Cost Year 3	Total Cost Year 4	Total Cost Year 5	Total Cost Year 6	Total Cost Year 7	Total Cost Year 8	Total Cost Year 9	Total Cost Year 10	Total cost
1. To develop a shared management approach to forest protection, management and utilisation.	1a. Stakeholder engagement.	Community meetings	2	2	3,000	12,000		-	-	17,569	-	-	-	-	-	29,569
	1.b.community awareness raising and mobilisation;	Community meetings	1	2	5,000	10,000		-	-	14,641	-	-	-	-	-	24,641
	2. Stakeholder mapping including forest use, users and geographic interest.	Community meetings	2	1	6,000	12,000									-	12,000
	3. Forming community level institutions to coordinate, manage and control local resource use in partnership with the Forestry Department.	Community meetings	1	1	5,000	5,000										5,000
	4. Developing forest product and issues based operational management plans for areas of interest.	Community meetings	2	2	4,500	18,000				26,354					42,443	86,797
	5. Agreeing roles, rights, responsibilities and obligations for shared management.	Community meetings	1	1	5,000	5,000		-	-	-	-	-	-	-	-	5,000
	6. Conduct training in control functions: Permits, rules, financial management, law enforcement	Community meetings	1	2	6,000	12,000				17,569						29,569
	7. Conducting joint monitoring and evaluation of management and benefit sharing measures to ensure a sustainable partnership.	Community meetings	1	10	6,000	60,000	66,000	72,600	79,860	87,846	96,631	106,294	116,923	128,615	141,477	956,245
	Practice early burning within and outside the forest by involving local communities.	18,616 ha.	1	10	3000	30,000	33,000	36,300	39,930	43,923	48,315	53,147	58,462	64,308	70,738	478,123
2. To protect the Forest from late fires																
3. To secure the boundary and define the extent of the boundary and prevent possible encroachment		48.8km	1	1												
	1. Carry out annual Boundary maintenance.				70,000	70,000	77,000	84,700	93,170	102,487	112,736	124,009	136,410	150,051	165,056	1,115,620
	2. Beacon maintenance	No.	20	2	800	32,000				46,851					75,454	154,306
To conserve and enhance the biodiversity of the forest reserve through environmental awareness and education.	3. Erection of sign posts	No.	15	1	300	4,500										4,500
	Enhance understanding of the forest ecosystem and its function and benefits to community groups and schools.	School visits	4	10	300	12,000	13,200	14,520	15,972	17,569	19,326	21,259	23,385	25,723	28,295	191,249
To significantly reduce levels of illegal forest product harvesting & other damage.	Engage honorary forest Officers/guards	coord meetings	1	10	2,000	20,000	22,000	24,200	26,620	29,282	32,210	35,431	38,974	42,872	47,159	318,748
	Conduct patrols	No	1	48	800	38,400	42,240	46,464	51,110	56,221	61,844	68,028	74,831	82,314	90,545	611,957
SUB-TOTAL						340,900	253,440	278,784	306,662	460,313	371,062	408,168	448,984	493,883	661,169	4,023,364



REPUBLIC OF ZAMBIA

Ministry of Green Economy & Environment

The Zambia Integrated Forest Landscape Project (ZIFLP) is a Government initiative which provides support to rural communities in the Eastern Province to allow them to better manage the resources of their landscapes so as to reduce deforestation and unsustainable agricultural expansion; enhance benefits they receive from forestry, agriculture, and wildlife; and reduce their vulnerability to climate change.

Simultaneously the project is creating the enabling environment for emission reduction purchases to be done through the subsequent phase - the Zambia Eastern Province Jurisdictional Sustainable Landscape Programme (EP-JSLP).

The ZIFLP and EP-JSLP are a cooperation between the Government of Zambia, the World Bank & partners.



Forestry Department

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